Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

Eat Like a Local:

A Culture Cuisine Guide for the English-Speaking Visitor in a Non-Major City in China

A thesis presented in partial fulfilment of the requirements for

a Master in Design at

Massey University, Wellington, New Zealand

Danjng Lin 2019





Eat Like a Local in China



ACKNOWLEDGEMENTS

From crawling to running, every step of growth is inseparable from all support. I sincerely thank those who have given me guidance, support, and encouragement in my research, and let me better approach my goals.

Supervisors

Andre Mūrnieks and Tristam Sparks.

Questionnaire and focus group volunteers

Centre for Teaching and Learning (Wellington campus)

Massey Staff

Caroline Campbell, Jackie Naismith, Mark Bradford, Jo Bailey, Paula Andrade

MFSS

The Masters cohort

Friends

Syamim Shari, Jinyan Cui, Xinyue Dai, Catherine Ang, Aidan Ang, Alan Abramovitch, Arden Etoile Driver-Burgess, Vrinda Verma, Ross Patel, Penny Ronald, Nora Kou, Michael O, Catherine's friend Stephanie Martell

Family

My parents Hua Lin and Ling Peng.



ABSTRACT

Cuisine and dining traditions are emblematic of local culture (Sutton, 2010), and tourism food consumption is an important way for travellers to experience the local culture (Chang, Kivela, & Mak, 2010; Germann Molz, 2007). As we know, China is not an English-speaking country, which has become a barrier for non-Chinese speaking travellers to travel independently. However, China is gradually perfecting multilingual translations of urban road signs and attractions, but there are still large gaps when it comes to food translations. In China, authentic food is usually hidden in the lives of local people. Due to many of these restaurants are family-owned inheritance of old stores with no commercial propaganda and gimmicks, and all rely on the reputation of customers. This project aims to design interactive media to help the English-speaking traveller to break the language barrier and experience Chinese food like a local. By focusing on authentic Chinese local food located in non-major cities that receive less attention from travellers. Most of the non-major cities are not well-known because there is not much tourist information available. Using the city of Changsha as a model, the function of interactive media will cover the basic functions of existing food apps, such as restaurant introductions, locations, recommendations, and menus and prices. Includes new features that differ from the general food app, such as food stories and dining traditions; food ingredients, with possible allergens; and diet habits. The goal is to design a digital guide for the English-speaking travellers in China.v

Keywords: Authentic food, independent travellers, eating experience, language barrier, non-major city, interactive media.

TABLE OF CONTENTS

BACKGROUND About Me	10
Introduction Defining the Traveller (User)	10 12
RESEARCH AIM, RESEARCH QUESTION, AND IMPORTANCE	13
CONNECTING THE FOOD, DINING TRADITION, LOCAL CULTURE, A	AND 14
Local Food with Local Culture	14
The Meaning Behind Dining Traditions	14
Local Culture in a Trip	15
The Local Food and The Traveller	19
METHODOLOGY	22
Human-centred Design Design Thinking	22 22
STARTING THE 4 STAGE DESIGN THINKING PROCESS EMPATHY	23 23
'I'm The Traveller'	23
The Traditional Media (Food Books & Travel Guide Books)	24
The New Media (Blogs, Videos, Websites, & Apps)	25
Questionnaire of 60 People	31
DEFINE	33
Key observations from interviews Focus Group	33 37
rocus Group	37
PROPOSE	39
Why an App	40
My Object and Design Direction	41
The Name - 'Chī' App Logo	43 43
, AL3-	70
PRECEDENTS	44
Zomato App	44
Airbnb App	46

TripAdvisor App	50
DESIGN PROCESS	52
PROTOTYPE	52
Persona(s)	52
Journey Maps	58
Tasks and creen Sequences	62
Use Cases	69
TESTING	71
Paper prototyping: Wireframes (test session one)	71
'Language Switching'	73
Paper prototyping: Wireframes (test session two)	74
User Interface Design	81
High Definition Prototype	84
Simulate Again: App as Tour Guide	86
New Humanistic Functionality	88
REFINED DESIGN PROPOSAL (KEY SCREENS)	90
'What Chī provide'	90
'On Boarding'	92
'Conversation tips' and 'Translation'	94
'Text translate'	95
'Dining etiquette'	96
'Enable GPS location' Popup Dialog Box- Notifications	97
'Dish information'	98
SUMMARY	100
REFERENCES	102
LIST OF IMAGES/FIGURES	106
APPENDIX	108

BACKGROUND

About Me

Ni hao, hello, kia ora. I am Danjing, 100 percent made in China. I studied in China for two years, then came to the Nelson Marlborough Institute of Technology (NMIT) to complete my undergraduate study in Nelson. I am a foodie, and I like to experience different foods. When I was a child, I never thought about going to study in an overseas city. Most of my memories of Western food came from KFC, McDonald's, and some Chinese-style Western restaurants, and the style was monotonous and the taste uniform. Even though I believed the food would be bland, I seized an opportunity to study in New Zealand. In these four years of study, my perception of Western food has been completely subverted. It turns out that not every meal is a steak, the staple food is not just bread, and the burger is not everyone's love. I began to feel the charm of some unique New Zealand flavours, like the fish and chips that I chose to bring out for a picnic, the indispensable cheese in the pasta, and the unique pumpkin soup from my homestay mother every winter. These flavours are completely different from the Chinese-style Western restaurants that I had in China-this is the local flavour of this country. From my experience, I began to like the local eating traditions and eating habits through New Zealand food and felt the local food culture. These are memories that are profound and will never be forgotten.

Introduction

In New Zealand, there are actually quite a few Chinese restaurants, which are popular with locals. I have been working part time in a Chinese restaurant in Nelson, and, sometimes, I will chat with the guests when I am not very busy. Many guests have a strong interest in Chinese food. They want to know why dumplings should be eaten with vinegar and soy sauce or why Beijing ducks are wrapped with vegetables. For some special names like Ho Fan (a kind of noodle made from rice, but the shape is flat), they want to know what this is made from and what it tastes like. When I have meals with my foreign friends in a Chinese restaurant, I usually explain to them the practices of some dishes, what ingredients are used, and the taste. My foreign friends always say that when they travel to China, I must travel with them and introduce food to them. I felt very strange at the time and asked them why they could not travel on their own. What if I cannot take time off from work? They told to me that they will travel to China when I am on vacation, and I must go with them because I have to translate for them and explain all the questions that they do not understand. From these conversations with my friends, I started to have an idea. Could there be a 'thing' that helps those foreigners who do not speak Chinese when they travel in China? Because not every foreigner will have a Chinese friend, this 'thing' would be like an invisible local tour guide, introducing local specialties, explaining the ingredients of food, translating food information, and sharing some local dietary traditions and eating habits. It would also be trustworthy, confidence inspiring, and encourage adventure.

After I got this idea, I started some preliminary research. More and more foreigners are starting to travel to China. According to statistics from the United Nations World

Tourism Organization (UNWTO, 2017), China ranks among the top ten of the world's tourist destinations (UNWTO, 2017). In 2017, 29.1 million foreigners travelled to China, an increase of 8.3% over 2016 (Peng, 2018). China is becoming more popular, and, at the same time, Chinese culture is getting more well-liked abroad. More foreign cities and Chinese cities have become sister cities. For example, New Zealand's Nelson and Yangjiang City in the Guangdong Province of China became sister cities in 2014 (Consulate-General of The People's Republic of China in Christchurch, 2018), and a Chinese garden has been built in the Queen's Garden in Nelson; in addition, the year 2019 is called the China-New Zealand Year of Tourism (Cropp, 2018). However, most foreigners still only know China's major cities and modern cities because when using the keywords "China Tourism" and "China City" to search on Google, the videos, webpages, or blogs will most likely show major cities like Beijing or Shanghai. The website for a travel agency called Imagine Asia has information for planned travel to China but is only available for six common cities: Beijing, Shanghai, Hong Kong, Chengdu, Guilin, and Xi'an. As we all know, China is not a country that speaks English. The current situation in China is that there are some English translations of information about attractions and roads covering most cities, but, in terms of food, English translation information is rare (Sun, 2009). In 2015, there were 5,744,852 restaurants in China and, of these, only 800 restaurants offer English translation menus. This is 0.014% of all restaurants with English-translated menus, and these restaurants are mostly located in major modern cities (Canyin, 2015). Sutton (2010) noted that cuisine and dining traditions are emblematic of local culture. So, how can foreign travellers find and taste local specialties and experience the local food culture in a city without any English-translated menus in smaller and less modern cities in China?

If one cannot know the ingredients in the food, there will be safety hazards for some people with special eating requirements. For example, some people are very sensitive to allergens in food. According to healthnavigator.org.nz, the body produces food allergies because the body lacks a certain protein in the immune system. Symptoms of allergies include hives, itching, swelling, vomiting, diarrhea, and nausea, and even lifethreatening conditions. In New Zealand, 6% to 8% of children have food allergies, 4% of adults have food allergies, and 40% to 50% of infant eczema is caused by food allergies (www.bka.co.nz, n.d.). Therefore, these groups with special dietary requirements need to know more about their food ingredients and choose food more carefully. When there is no English translation menu available, they will not know what ingredients make up their dishes. Another thing foreign travellers may seek is "fast food protection" (Cohen & Avieli, 2004). This is because everyone knows fast food brands like McDonald's and KFC and can safely order familiar fast food instead of trying food they do not know. All of this happens are start language barriers, and different languages make foreign travellers miss out on more opportunities to gain more knowledge about China.

The translated information for major attractions is easy to find online, but the availability of information for food translation is sparse. This means there is an opportunity for a

medium that can guide foreign travellers to accurately find local specialty foods in a non-major city in China. This medium can introduce and explain to foreign travellers the ingredients in food and also can share some local dietary traditions and eating habits with them. It can help foreign travellers experience and learn more about local specialties and have more deeper cultural connection travel experiences.

Defining the Traveller (User)

For any outing, food is an essential part. This form of tourism can generally be divided into two types: one is to participate in a tour group where there will be a special tour guide to follow, and the other is to travel with friends, family or independently. According to the market research organization Ipsos, the study of foreign tourists travelling in China and attitudes toward Chinese cities shows that in 2017 the independent travellers outnumbered the travellers with tour groups (53%:47%), which could mean travellers would prefer to freely look around rather than follow a guide. Because independent travellers do not have a local guide to follow, all the information about the destination is usually from their own online search, asking friends who have been there, or engaging directly with the locals. No one will be following independent travellers to translate when they need guidance. And what about someone who might be staying a bit longer for work or study—not just the tourist 'passing through'? The independent traveller who might be staying a bit longer is the target audience of this research.

RESEARCH AIM, RESEARCH QUESTION, AND IMPORTANCE

Research Aim:

This research aims to aid in the design of a communication medium used by independent foreign travellers in non-major cities in China that focuses on traditional foods. This communication concept will be built into a website or application, and the language used will be English, the most widely used official language in the world.

Research Question:

How can the application of interactive visual communication design best practices and human-centered design principles improve foreign travellers' experience with Chinese food and food culture?

Importance:

This medium will act as a local tour guide to assist foreign travellers to accurately find authentic local specialty foods; introduce and explain the ingredients in food; give foreign travellers accuracy, and trust and transparency; and also share with foreign travellers some local dietary traditions and familiar eating habits. This will help foreign travellers understand cultural conventions from the local cuisine and make more informed choices. If travellers can feel more like locals—at least in terms of the dining experience—perhaps they can forget, for a time, they are in a foreign land.

CONNECTING THE FOOD, DINING TRADITION, LOCAL CULTURE, AND TRAVELLER

No matter which country is being discussed, local traditions and local culture will affect local cuisine (Peštek & Činjarević, 2014). Food is a must for humans. On a journey, local cuisine, local food culture, and local culture are inextricably linked to tourists.

Local Food with Local Culture

Food is an indispensable part of our daily lives. Nowadays, food is not only a source of human nutrition but food also has many different symbolic meanings. It also reflects the interpersonal relationships, religious beliefs, and living habits of human life. In human sociology, food can establish connections between people and the environment and strengthen established relationships (Ma, 2015). Local food is considered a 'signature' item of a place (Urry, 1990), and the local specialty food itself has the cultural meaning with local characteristics. In other words, local specialty foods are one way to showcase local culture. This local culture is not automatically generated accidently but is based on local history, and socio-economic and environmental conditions-it forms a unique local culture. This unique local culture makes different regions have different food types and dietary preferences (Lin & Mao, 2015). Food is a carrier of culture, and some countries have their special foods that become tourism 'propaganda' and represent a specific place. It is evident that local speciality foods are associated with destinations, regions, or countries (Gyimóthy & Mykletun, 2009) so that local food is understood as a local symbol that represents the local image (Lin & Mao, 2015). Some foods can be immediately thought of as national symbols, such as Italian pizza and pasta, Belgian chocolate, and British fish and chips. There are also Greek souvlaki and moussaka. Using these local special foods as a tourism resource will encourage the development of stories of local speciality foods. Telling the traveller about the development of these local food stories will also help spread the local food culture to other travellers (Mitchell & Hall, 2003; Sims, 2009). A traditional food that represents a place is a longterm cooking experience and an inherited recipe. In order to maintain the original taste, these traditional foods are hand-made as much as possible rather than mass produced (Lin & Mao, 2015).

The Meaning Behind Dining Traditions

In a particular social group (from the country, nation, tribe, village, and even the family), people's eating behaviours are under the influence of specific natural and social environments and form relatively stable characteristics belonging to the group. These characteristics become the cultural identity of this group; the food culture refers to the relatively stable eating habits formed in a certain natural and social environment (Tan, 2013). For example, people will eat certain foods to express the meaning of a particular festival, such as the Mid-Autumn Festival, and they will eat moon cakes, which represent reunion. Because of the differences between regions and cultures, the traditional food culture of different ethnic groups varies from region to region. Various foods in different areas have different cooking methods; different cooking methods will make foods have different tastes; and different tastes will form different eating habits (Sutton, 2010). The

traditional Chinese food culture has been a strong expression of people's lifestyles for thousands of years; it represents the spirit and temperament of a nation. Chinese traditional diets contain rich cultural connotations, and, from the upper classes to

ordinary people, the concept of food culture with varying characteristics has been formed. Even today, Chinese traditional diets still follow ancient and traditional dietary practices and rules. For example, the Confucian pursuit of 'the more refined, the finer, the better' diet etiquette means a combination of the five flavours of eating concept: sweet, bitter, sour, spicy, and salty (Yao, 2014). The passed-down dietary beliefs and cultural concepts in Chinese life have laid the foundation for traditional and lasting Chinese food culture.

China has one of the earliest origins of agricultural practices in the world. As early as 7,000 years ago, Chinese people gradually separated from the hunting and gathering method as the primary way of life and entered the agricultural age with the introduction of planting and breeding practices (Yao, 2014). Due to China's vast area, influenced by geography, climate, products, cultural traditions, ethnic customs, and other factors, different dietary habits have formed with the Yangtze River as the boundary: the northern direction is dominated by wheat, and the southern direction is based on rice as the staple food. Unique cuisine formed in each region. The cuisine has a strong relationship with the customs and people's sentiments influenced by the environment and climate of each place. It is self-contained and relatively stable. The emergence of these cultures and the variety of the cuisine have continued until today (Chen, 2018). More recently, China's social development has progressed, and the food has become an important aspect of people enjoying life and seeking fun. Eating has evolved from first filling of the stomach to the pursuit of taste and the enjoyment of life. With these higher expectations for food, the expansion of differentiated cuisine has been continuously developing to hundreds of kinds of dishes and unique cooking techniques.

There is a proverb in China: 'An empty sack cannot stand upright,' and an, 'empty sack' refers to an empty stomach (Wang, 2015). It can be surmised from this saying that food is important in daily life for Chinese people. With the emergence of agriculture, the variety of food became more abundant, and Chinese people no longer had to worry about going hungry as they started to find more ways to make and store food. Fermentation, pickling, and other methods were gradually discovered and used in traditional food preservation. As people passed down these techniques from generation to generation, a cultural tradition was formed (Yao, 2014). The inheritance of food culture serves to continuously impart the knowledge and experience of its own food culture to the next generation. Food culture can only be continued through inheritance (Wang, 2015).

Local Culture in a Trip

'Culture' is a broad-based concept, and there are hundreds of definitions of culture in

academia. However, on the whole, culture is roughly divided into a broad interpretation and a narrow interpretation. The broad interpretation emphasises that culture is the sum of all material and spiritual wealth created by human beings in the practice of social history. The concept of culture in the sense of anthropology is broad; it mainly refers to the lifestyle of certain groups of people, including almost all aspects of human activities (Cui, 2009). The British anthropologist, Taylor, known as the originator of anthropology, pointed out in the book Primitive Culture, published in 1871, that culture is "that complex whole which includes knowledge, belief, art, law, morals, custom, and any other capabilities and habits acquired by man as a member of society" (Taylor, 1871). This is a classic definition, although some scholars disagree with this statement. Also, in 2017, the United Nations Educational, Scientific, and Cultural Organization (UNESCO) hosted a 'World Cultural Policy Conference' in Mexico City. The Mexico City Declaration on Cultural Policies (1982) unanimously adopted a definition of 'culture.' It said:

that in its widest sense, culture may now be said to be the whole complex of distinctive spiritual, material, intellectual and emotional features that characterize a society or social group. It includes not only the arts and letters, but also modes of life, the fundamental rights of the human being, value systems, traditions and beliefs. (p. 1)

This is a newer definition recognized by many countries, but the basic content of this definition is similar to the definition from Taylor above. Micropædia's (1999) latest definition of culture basically uses Taylor's definition of culture: "the whole of human knowledge, beliefs and behaviour. In a certain sense, culture includes language, thoughts, beliefs, customs, habits, taboos, regulations, tools, technology, art, etiquette, ceremonies and other related ingredients." To summarise, culture exists related to nature, and all various regional and ethnic groups in the history of human social development also produce different cultures.

Culture is an abstract thing that needs to be presented and expressed through a carrier. Culture is divided into 'dominant culture' and 'hidden culture.' 'Dynamic culture' means being exposed, closely related to specific substances, and having a clear physical form, which can be directly perceived by people, such as real objects, housing, clothing, transportation facilities, production tools, monasteries, languages, words, and customs. 'Recessive culture' refers to a culture consisting of knowledge, attitudes, and values that do not manifest themselves in physical objects but mainly affects people's spiritual life. It is not expressed in a specific material form and is not easily perceived by people (Pan, 1997). Also, culture also permeates the six elements of "eat, live, travel, purchase, entertainment" (Li, n.d., p. 8). Travellers can experience and observe the overall cultural landscape of the area by participating in these local cultural tourism activities (Y. Cui, 2009). Some local characteristics have formed an 'ideal symbol' of a city's image, and some even become world-famous regional brands (Deng, 2007). For example, when talking about Vienna, people will think of 'the hometown of music in

the world.' When it comes to Denmark, we think of Andersen's 'mermaid' story. When mentioning the terracotta warriors, we think of Xi'an, which has the distinction of being "the ancient capital of the millennium." (Deng, 2007, p. 13) The local traditional culture is a manifestation of the collective consciousness for the local residents. It enables a historical memory that lasts for generations and has the function of maintaining ethnic relations and stabilising social development. For tourists, it is an object of learning and experience, with specific historical value, educational value, and appreciation value. Travellers entering a region, in addition to showing a unique interest in the natural and cultural environment of a region, also bring their own culture to the countryside, forming an interactive relationship with the locals through tourism (Zhu, 2008). Moreover, tourism is a kind of culturally transmitted activity as a representative of 'popular culture.' Today, in modernizing China, travel is an excellent cultural carrier and communication channel (Yang, 2017). The memory of culture can be visual and objective, but it can also be stored in the form of symbols. Unlike sound or gestures, cultural memory is stable. Cultural memory moves from one situation to another, moving from one generation to the next (Assmann, 2008). Tourism activities are temporary escapes where people leave everyday life in order to relax, enjoy, and be entertained (Zhang, 2004). Therefore, tourism itself is a process of cultural communication. Because tourism involves a wide variety of people and a variety of cultures, tourism can promote the spread of culture.

The main way for tourists to come into contact with various cultural experiences is visiting. Specifically, when tourists arrive at their destinations, they will be exposed to a variety of cultural curiosities. The traveller can understand the cultural connotation of these cultural resources by seeing them in context. Moreover, there will be some visible explanation in signs or landmarks at the location, which will help the tourists to understand the meaning contained in these cultural marvels (D. Cui, 2016). Tourists are determined how to maximize their leisure time. From natural scenery to historical sites, everything brings comfort to the travellers and achieve the expectation of? fulfilment and relaxation. It can be said that the curiosity of the tourists to the destination can enable them have the desire to for the destination's tourism activities. This is because the idea of wanting to travel encourages tourists to travel, ultimately achieving the purpose of recreation, education, and cultural exchange (Mo, 2017). As Mo mentioned in his research report on the cultural literacy and cultural communication, 2017, when the tourist experience has not yet begun, people will get as much information as possible about the destinations through various channels, such as newspapers, television, travel agencies, and the Internet. In Figure 1, G0 is used to indicate the extent to which tourists understand the culture of the tourist destination for now, namely cultural knowledge or cultural literacy. In the process of the tourism experience, through the tour, the tourists have a deeper understanding of the local culture and cultural literacy, and knowledge reserves have been improved; the cultural knowledge reserves at this time are expressed by G1. In the G2 cultural knowledge reservation stage, tourists will come in contact with tourism practitioners or other tourists, so interpersonal communication has enriched their knowledge reserves, and they have a clearer

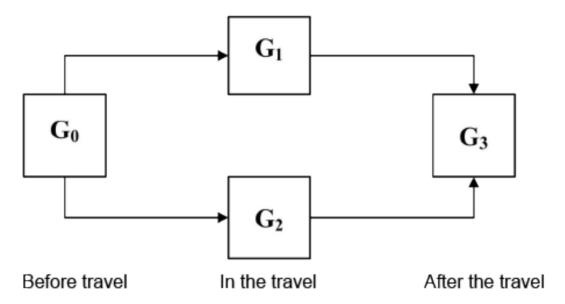


Figure 1. Cultural knowledge reserve process. Source: Mo (2017, p. 45).

understanding of the culture of the destination. After the accumulation of knowledge at the end of the tourism experience, the cultural knowledge of the tourist changes from the original G0 to G3 (the sum of G0, G1 and G2, and G3). By the end of the tourism experience, the cultural knowledge reserve G3 is much larger than the cultural knowledge reserve G0 and, in this way, through the tourism experience, tourists have mastered the cultural connotations of the objects of tourism, their cultural awareness can be heightened, and cultural literacy will be improved accordingly. Therefore, the tourism experience promotes the spread of culture among tourists. When the tourism experience is over, cultural communication will continue. At this time, travellers enter the second stage of cultural transfer. Mo (2017) also states that travellers are the recipients, carriers, and communicators of culture throughout the journey. After the end of the tourism experience, most of the tourists will spread the experience and the sentiment of the experience in a verbal or nonverbal way and influence the people around them, thus forming a personal circle of communication within their own cohort. People who embrace culture will become cultural re-transmitters and continue to spread the cultural learning. In this way, the cycle is repeated, extending the reach of the culture's unique attributes (see Figure 2).

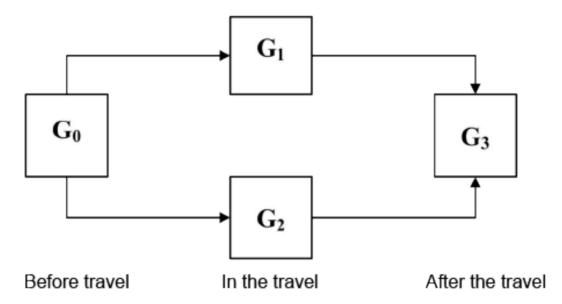


Figure 2. Tourism culture communication process. Source: Mo (2017, p. 47).

When travellers return home, they will recall the travel experience, analyse and synthesize the cultural information obtained in the travel experience, and then take the initiative to spread cultural awareness through such channels as face-to-face oral communication, text messaging, and social media, spreading it to family, friends, and colleagues alike. Although these recipients of information are not directly involved in the process of the tourism experience, the relevant cultural curiosities acquired through these means of communication still help to enhance their cultural literacy and increase cultural knowledge. Through this process, recipients will spread the acquired cultural knowledge to their own social groups in the same way. Through such a communication path, cultural knowledge can be spread to a broader audience, and more and more people will become aware of this cultural knowledge.

In summary, throughout the journey of the traveller, it is not just local culture that is absorbed and felt. It could be said that the local culture has formed an indirect positive influence on the tourists. In addition, the tourism experience allows visitors to have access to a culture different from their own and increases the amount of cultural knowledge and improves cultural literacy.

The Local Food and The Traveller

Food and travel are intertwined, and food will appear on any journey. Most tourists want to experience the lifestyle of the destination when they are travelling, and the most intuitive and effective way is to taste the local food (Cohen & Avieli, 2004). On a trip, food is an essential attraction that enhances the travel experience for travellers (Henderson, 2009). Experienc ing local cuisine is a unique way of interacting with local culture. Using local eating habits to taste local foods can help tourists to better understand local cultural customs and tastes (Bessiere & Tibere, 2013).

For a country known for its traditional cuisine, China and its food have become a significant part of the journey. Behind each speciality food is a story about the food itself, and some foods even have a special a special character to represent them. Speciality food is the medium that connects visitors with local culture and the unique local lifestyle (Harrington & Ottenbacher, 2013). During a trip, the most relaxed state for the traveller is 'eating.' Experiencing local traditional cuisine by using local traditional eating methods will help visitors to enjoy the traditional local life more deeply (Bessiere & Tibere, 2013). When travellers taste the local food, it is the real experience of that place. As Chang, Kivela, and Mak (2010) state, tasting local food can help travellers better understand the local culture. Local dining habits, food preparation techniques, and the tasting of the food-this is the real travel experience. Also, the same ingredients in different places using different cooking methods and eating habits will result in a different taste; even some dining ways are not the same (Kim, Eves, & Scarles, 2009). For example, the Mapo tofu in its place of origin is spicier than the Mapo tofu in a Chinese restaurant in New Zealand. In India, curry is eaten with the hands, but in China, a spoon is used. Discovering and tasting local delicacies can also increase the chances of interacting with locals to learn more about local culture and share life experiences among people from different places (Meladze, 2015).

When tasting unforgettable local food, this experience becomes a memorable 'souvenir to take home'—souvenirs that can be shared with family or friends (Chang et al., 2010). They are a memory that is made up of taste, touch, sight, sound, and smell. Often the addition of tastes and smells will form the strongest memories (Bondi, 2016). When the traveller eats a similar taste in another place or smells a similar smell, it instantly evokes memories of that journey (Cave & Jolliffe, 2013).

Local cuisine creates a different 'ambience' for local culture and landscape, which can be an unforgettable experience for travellers (Hjalager & Richards, 2002). The surrounding environment is also a critical factor in the formation of unique tourism experiencesfrom the look of the restaurant to the showcasing of traditional cooking techniques to family heritage. A traditional food that becomes emblematic of a place is one that history dates back more than 60 years and is an inherited recipe. In order to maintain the original taste, these traditional foods are hand-made as much as possible rather than mass produced (Lin & Mao, 2015). These place-based factors all allow travellers to have unique experiences with local food. Essentially, food is a cultural tourism product. Because food is not affected by the weather, geography, and natural resources, it can increase the value of the experience for visitors and generate satisfaction (Kivela & Crotts, 2006). For travellers, tasting local food is an opportunity to learn. The taste, type, and form of local food all impact the knowledge gained (Chang et al., 2010). Moreover, every traveller can become a foodie as they are also customers who consume these local delicacies (Lacy & Douglass, 2002). In order to showcase the delicacy's distinctive features, many specialty foods use traditional cooking techniques that are performed for the customers. For example, teppanyaki in Japan is cooked in front of customers as

are Chinese ramen noodles. While providing food for tourists, it also provides visitors with an education in proper cooking. Therefore, tasting local cuisine is a meaningful way to experience local culture. The local cuisine not only provides travellers with a local social and environmental experience but also allows travellers to experience a piece of the local culture through food (Meladze, 2015).

METHODOLOGY

Design practices are now moving from a focus on how to make things to focus on making things for people's needs (Sanders, 2013). As a designer, I used a human-centred design and a design thinking, five-stage design research process to address the issues. Using these methods can make me as a designer with a participatory mindset.

Human-centred Design

"It's a process that starts with the people you're designing for and ends with new solutions that are tailor made to suit their needs." ('Design Kit', n.d.). The human-centred design process is about developing a deep empathy with the end-users of a design. It involves generating a lot of ideas; building prototypes; sharing work with the subject; and, eventually, bringing the innovative solutions to the world.

Design Thinking

According to the five-stage design thinking model proposed by Stanford University's Haas Plattner School of Design (d.school), when the five stages of design thinking are understood, anyone can use the design thinking methods to address the complex problems around us. These stages are: Empathize, Define, Ideate, Prototype, and Test (see Figure 3; Dam & Siang, 2018). However, I replaced 'Ideate' with 'Propose' in my research because I think Propose is closer to what I want to say.

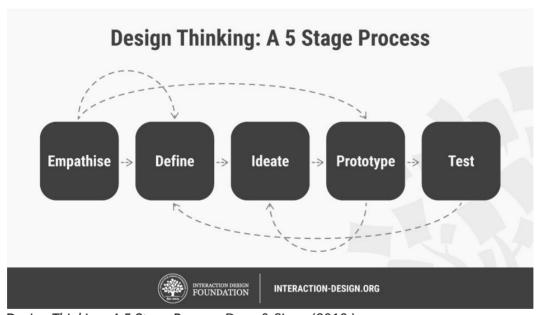


Figure 3. Design Thinking: A 5 Stage Process. Dam, & Siang (2018.).

STARTING THE 4 STAGE DESIGN THINKING PROCESS

EMPATHY

"The first stage of the Design Thinking process is to gain an empathic understanding of the problem you are trying to solve" (Dam & Siang, 2018). Designers need to understand their experiences and motivations by observing, participating, and empathizing with the user community to find out more about the areas of concern. This allows the designer to gain a deeper personal understanding of the issues involved. Empathy is critical to a people-centred design process, such as design thinking, and empathy allows design thinkers to abandon their assumptions about the world to gain insight into users and their needs (What is Design Thinking?, n.d.).

'I'm The Traveller'

When starting a new design, all research must be discovered and explored from the original direction (What is Design Thinking?, n.d.). New data need to be collected and analysed to avoid serious deviations. In the initial design study, after I built my design ideas, I started doing heuristic evaluations to improve the usability, practicability, and desirability of the design.

Every traveller with a travel plan will do some preparatory work before departure. I began to recall some of my preparations that I carried out when I was going to travel (see Figure 4). I first decide a place. When I have a destination, I start a data search about this destination. I get the the most basic information from books, travel guides, travel blogs, and videos about the destination. For example, I will look at the weather of the destination, the culture of the destination, the major attractions of the destination, and the food of the destination. When I want to get more accurate information about my destination, I will ask my friends who have been to the place and will let friends recommend some fun places and delicious local foods. Changsha is my hometown and is also a non-major city in China. So, I set my experimental destination as Changsha and started to prepare the information about the local food for the destination from the perspective of a Kiwi, English-speaking first-time visitor.

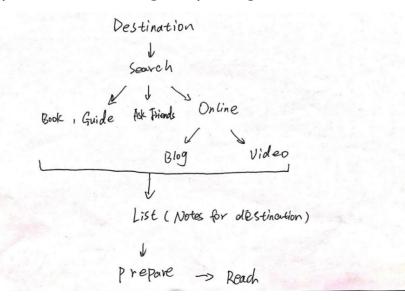


Figure 4. Preparation before the trip

The Traditional Media (Food Books & Travel Guide Books)

I start with some traditional media to find out about local cuisine in Changsha, China. In the Chinese food and Chinese tourism books (see Figure 5) from the Massey University Library on the Wellington campus and the Wellington City Libraries the contents are all about Chinese food recipes, and it is also general Chinese food, which can be found in some New Zealand Chinese restaurants. In the famous travel guide book, Lonely Planet (see Figure 6), an introduction about Changsha can be found, but there is very little useful information about local food and, in the category of 'Eating,' only two restaurants are listed (see Figure 7). However, from the experience of a Changsha native, the restaurants in Changsha that appear in the guide book are not recommended restaurants.



Figure 5. Chinese food books and travel guide books

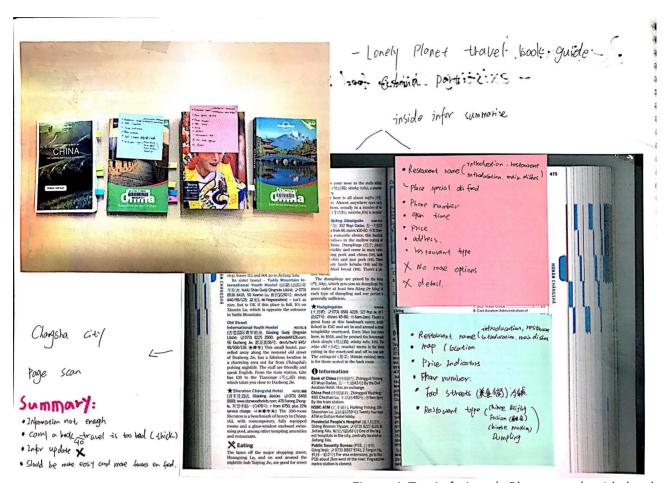
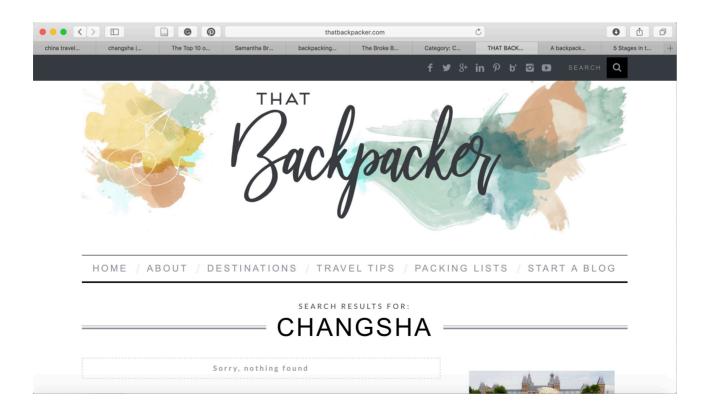


Figure 6. Top Left: Lonely Planet travel guide book Figure 7. Bottom right: Lonely Planet travel guide book page of Changsha

The New Media (Blogs, Videos, Websites, & Apps)

I moved from the traditional media search to some travel blogs because the traditional media search did not get the desired results. Nowadays, many backpackers like to upload their travel experiences to the Internet to provide a reference for other travellers. Inside the The Broke Backpacker, Goats on the Road, and The Backpacker travel blogs, I searched for blogs using "Changsha" as a keyword, but there were no related blogs (see Figure 8). In the Claire's Footsteps blog directory, there was a 'China' category option, but in this category option, no blog is about 'Changsha' (see Figure 9). Because the keywords are general, in order to get more accurate results, the keywords have been changed to "Backpacking to Changsha blog." The five blogs about Changsha's blog on the search page are more related (see Figure 10). However, these five blogs all used Changsha as a transit station. Because of the need to go to the next destination, people have to transfer in Changsha. So, these five blogs only gave a general introduction about Changsha.





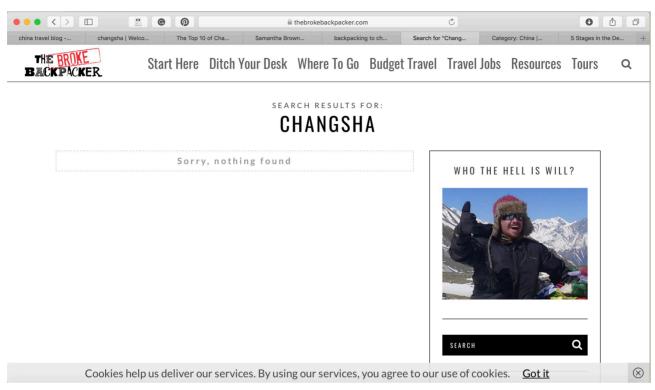


Figure 8. "The Broke Backpacker" "Goats on the Road "and "Backpacker" travel blog's' finding results

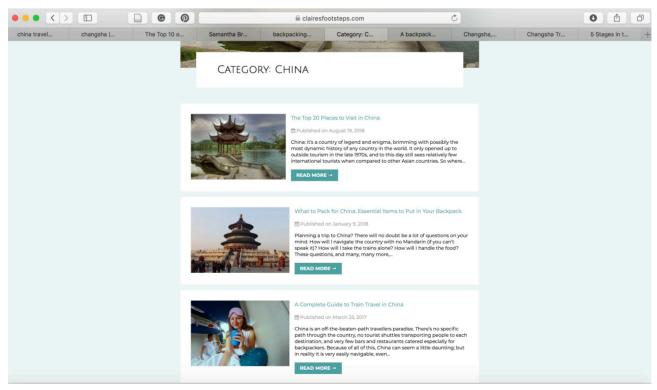


Figure 9. "Claire's footsteps" blog, 'China' category

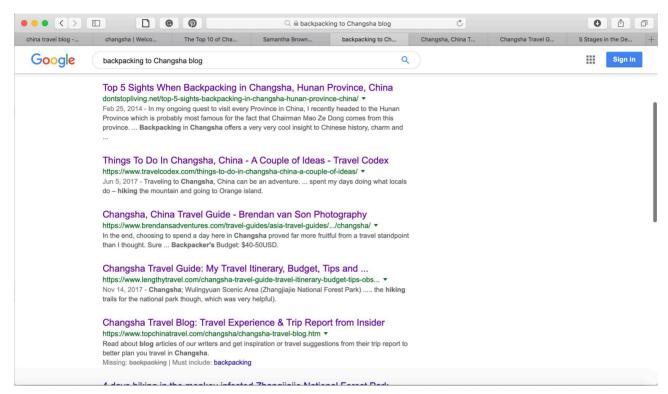


Figure 10. "Backpacking to Changsha blog" search results

When I was a child, I saw a lot of travel documentaries on TV. The most influential for me was Samantha Brown. Samantha Brown is a host of the Travel Channel. Her different observations and sense of humour on the trip made me particularly fond of watching her travel shows. In the LINAMADEUS blog, Samantha has two videos of the Chinese travel series; one series is Samantha Brown's Passport to China. In this series, Samantha only went to Beijing, Xi'an, and Chengdu-the three main tourist cities. The other series is Wild China is based on natural landscapes. In two videos from this series, you can also see the translators help Samantha. Unfortunately, Samantha has not been to the city of Changsha, to be blunt, the non-major city isn't worth the effort-it's not just China. There are many channels about travel on YouTube. Nowadays, a favourite way document experience is to record journeys and upload the videos to a public sharing platform like YouTube (see Figure 11). The videos are not very long-they are about five to 10 minutes long. However, most of the videos are Chinese videos, but some Chinese videos have English subtitles, and some local friends accompany the videographer to help foreign travellers with all translations and food orders. In the videos that can be found, there are no foreign travellers who can completely go to local areas and order food independently. In other words, it is impossible for an independent foreign traveller who does not speak Chinese at all and who wants to find local (and perhaps best) food in Changsha or have some simple dialog with locals to complete the food orders.

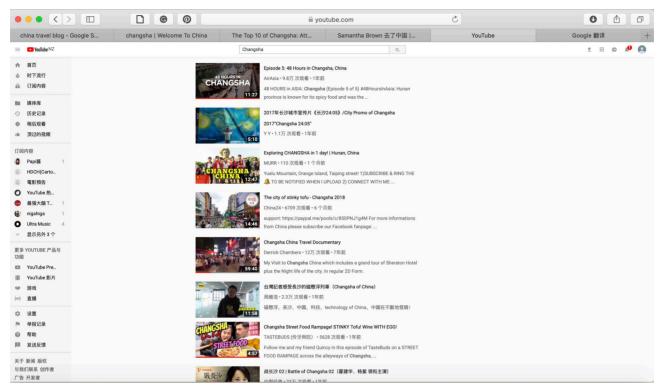


Figure 11. 'Changsha' search results on YouTube

There are some of travel websites on the Internet, such as TripAdvisor and Lonely Planet, and with the popularity of smartphones, much mobile phone software has come into being, including applications (apps) about travel. TripAdvisor and Lonely Planet are popular travel information products that nearly all travellers use. The content on the webpages is the same as the information in the mobile applications. The content on the web page will be more than the mobile app. For example, Lonely Planet has information about Changsha when searching for 'Changsha' on the webpage, but it is not on the mobile application (see Figure 12). Because books cannot be updated as frequently as websites or mobile applications, the Lonely Planet website introduces two more restaurants in Changsha than in its travel guide book (see Figure 13). However, from my perspective, those restaurants do not adequately represent local cuisine in Changsha. TripAdvisor is relatively simple, and the information on the web page is the same as in the mobile application. TripAdvisor only provides information on all categories of restaurants (see Figure 14), but does not give any clues about local dish in Changsha. From the search results of web pages and apps, I have some questions. Nowadays, is the traveller no longer paying attention to the traditional cuisine of a place? Do travellers only need to have something to eat and fill their stomachs, and not care if the food they eat is local traditional food? The information on 'eat' in TripAdvisor and Lonely Planet only provides information about destination restaurants, and there is no introduction to traditional dish. Because of these questions, I started a questionnaire survey to find out whether the traditional cuisine of a destination is important.

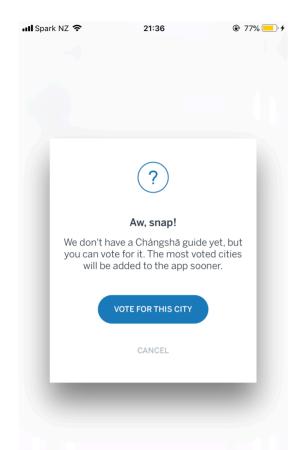


Figure 12. Lonely Planet app searching for 'Changsha' results

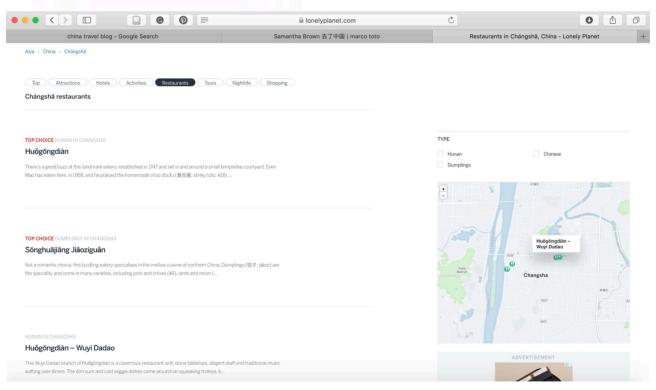


Figure 13. Lonely Planet website about Changsha restaurants

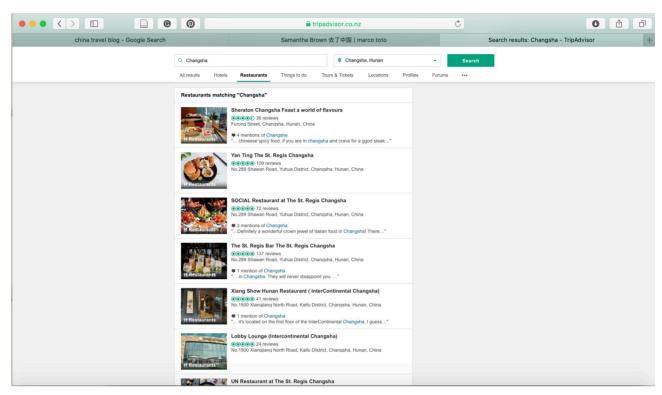
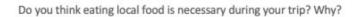


Figure 14. TripAdvisor website about Changsha restaurants

Questionnaire of 60 People

In the feedback from 60 questionnaires, most people still care about eating local traditional food at the destination because they can experience the local culture (see Figure 15). In the choice of destination restaurants, visitors will use online searches to select popular food according to their locations (see Figure 16). In addition, there are other issues: more requirements in the dining experience, such as the dining environment; whether it is a local speciality food; the quality of the food; and the choice of different eating habits (see Figure 17). Therefore, for travellers, going to a place is no longer based on just a look around—the local food has become very important. The results of this questionnaire suggest that the taste of the local cuisine, the experience of local culture, the environment, and the choice of different eating habits have become necessary considerations for travellers, and the quality of the food is also an essential factor in making the tour more enjoyable on a journey.



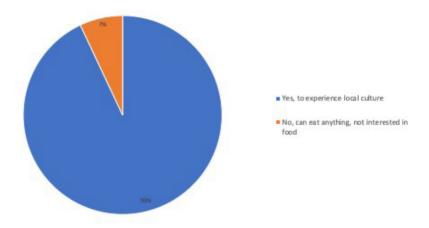
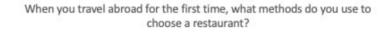


Figure 15. The local food is important on a trip



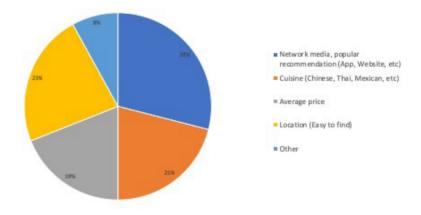


Figure 16. The methods of choosing local food at destinations

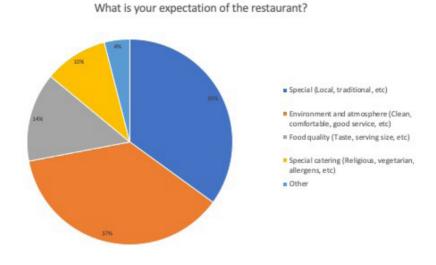


Figure 17. The expectation of restaurants

DEFINE

"During the Define stage, you put together the information you have created and gathered during the Empathise stage. This is where you will analyse your observations and synthesise them in order to define the core problems that you and your team have identified up to this point" (Dam & Siang, 2018.). Therefore, at this stage, the designer can determine the core issues of the research, and ensure that the core issue of the research is in a clear state and is fully known before the solution is formed.

Key observations from interviews

From the results of the general questionnaire, the needs of these people were summarised into five key points. Based on these five key points, five people related to these points were interviewed (see Figure 18).

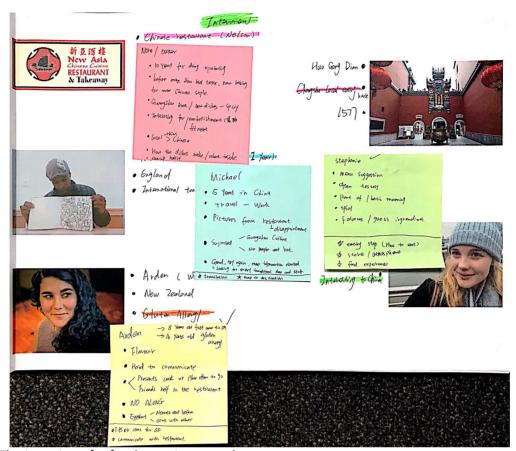


Figure 18. The interviews for five key points people

Person A had lived in China for 5 years but always felt it very difficult to try new food without the help of Chinese friends. He usually chose food through pictures on the walls in the restaurant. However, sometimes, the expectation of the food picture is not the same as the real food, and he felt very disappointed. For this point, this is a foreigner who has some basic understanding of China and has lived in China but still has problems with eating without the help of local friends. By understanding the needs of this group of people, I found that foreigners have more unique requirements for food in China.

Person B has gluten food allergies. When she was traveling in China, she could not talk to the locals and could not understand the ingredients on the food package. She was always afraid to try the food that she had not seen. This group of people has unusual eating habits, including food allergies or vegetarians. The food ingredient information and preparation methods are important.

Person C is very interested in going to China to travel and meet traditional Chinese food lovers. She likes food story and observe how the locals eating food. However, it is regrettable that she cannot communicate with the locals. This person loves Chinese culture and Chinese food and looks forward to traveling to China. For this type of

traveller, there should be a story about the food and dining traditions provided.

Person D is a Chinese restaurant owner in New Zealand. During business hours, more and more local people have begun to seek the original Chinese food taste and are more open to trying new food. This phenomenon reflects the fact that foreigners are pursuing the authentic taste of Chinese food and are willing to try different dishes. These people are interested in the story behind the food and the ingredients used, and they want to know more about authentic Chinese food culture.

Person E is a traditional food restaurant owner in China and hopes that the culture of specialty food can propagate beyond the locals to a wider audience (including tourists) because the cuisine and dining traditions are emblematic of local culture and a source of pride, also for business.

Through interviews with these five key people (see Figure 19), it was learned that when this type of foreigner tries local food in a strange place, they want to try the most authentic local cuisine in the local tradition that the locals would choose. They want to experience local eating habits, learn about local eating traditions, and try to integrate into the local environment. Also, they would like to get an accurate description of this food, not just imagine the food through the pictures, and they want to know the cultural background of some basic local food while tasting the local food. If they can and want to try some simple communication with the locals, this would increase the enjoyment of the journey. Foreign travellers with special dietary requirements, such as food allergies or vegetarians, prefer to know the ingredients used in the food to make safe and informed choices. Moreover, from the interviews can see some foreigners have also changed their tastes in Chinese cuisine. They are more interested in authentic Chinese food than localised Chinese food and begin to use Chinese eating habits to eat Chinese food to better understand the original Chinese food culture. For the owners of traditional food restaurants that I interviewed, it is also hoped that local traditional cuisine will be known to more and more foreign travellers. In addition, it is expected that through some simple publicity, we can exchange and convey the culture behind the traditional local food.



1, Could you introduce this eating house and your position? Local eating house (in China)

2. Did you meet some tourist during your employment? Chinese or foreigners? What kind of question do they usually ask? Have any of your customers ask you about the background of the food your making such as the history? Do your customers ask you about the ingredients in the dish? Do they ask about the ingredients just for curiosity

or is there a reason for it such as allergy?

3. Back to history of the food, do you know the background source of these transitional food? What are they?

4. Does this store appear in any food app? What information is provided? Why did

5. What is your opinion on the development of Chinese local traditional food? you choose to do this?

Foreigner (live in China)

1. How long have you been in China? Why do you come to China? What makes you choose to stay in China? Could you please introduce yoursel??

2. Do you remember how you chose food when you first arrived in China. What was

4. You have been in China for some time. Do you know all the local food? Do you understand their background?
5. Do you think the background of the food is important especially for foreigners, 6. If there is a media (guidebook, brochure, app, etc) that is about Chinese local traditional food, designed specifically for foreigners, what do you think of this media? What function would you want available in the media? . What are your thoughts when you are trying something that you have never eaten your first impression of our food? before?

Chinese restaurant owner (in New Zealand)

1, Please introduce this Chinese restauran? How long have you been operating this restauran? Which cuisine in China area? Please introduce this Chinese restauran?

2. How many tourists have you meet here? Where do they come from? Are they interested in the 6 food here? What questions are usually asked?

3. Based on your time here, do you get more Chinese customers or kiwis or others?

4. What questions is usually asked by customers who come to eat here?

5. Have you ever been asked about Chinese culture by your customers? What do they

5, The taste of your dishes is it original Chinese recipe or has it did some changes to match the local people taste? why?

>

Interesting for China (New Zealand citizen)

Introduce yourself and why you are interested in China?

2. Where did you learn about China and what is your impression of China? What is the most anticipating thing that you would look forward to in China?

3. How many Chinese dishes do you know? Why do you like these dishes?

4. When you go to a Chinese restaurant, what is your focus? why?
5. What do you think about the food culture?
6, If there is a media (guidebook, brochure, app, etc) that is about Chinese local traditional food, designed specifically for foreigners, what do you think of this media? What function would you want available in the media?

Allergy person (New Zealand citizen travelled to China)

Tell me about yourself. Why do you like Chinese food?
 What is your favorite foods when you are in China? Why? Do you know some backgrounds about the food?

3, When you found out that you have food allergy (i.e glutton), when you were in

China, how did you eat? What is the biggest problem?

4. If there is a media (guidebook, brochure, app, etc) that is about Chinese local traditional food, designed specifically for foreigners, what do you think of this media? What function would you want available in the media?

else you'd like to add

Thank you for all that valuable information, is there anything before we end?

Figure 19. Interview questions

Focus Group

Through interviews with five key point people, I determined the needs of my target group. In order to make the research question clearer, a focus group was organized. In the focus group, members can exchange ideas and share experiences. There are five people of different nationalities in this focus group: New Zealanders, Indians, Filipinos, New Zealand Indians, and Malaysians. Some participants had special dietary requirements, such as vegetarians; some have visited some Chinese cities; and some have plans to travel to China. To begin the focus group session, I provided a scenario that asked them to imagine that they had arrived in China and were already on the streets of Changsha (see Figure 20). When they formed a scene picture in their minds, I started asking questions and taking notes (see Figure 21).



Figure 20. Tai Ping Street, Changsha. Source: Linshideaiqing (2017.)

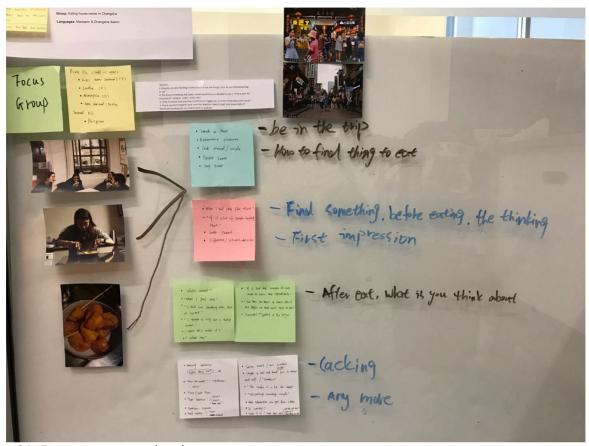


Figure 21. Focus group record and notes

My first question is, "Imagine, you are standing on this street and you are hungry, how do you find something to eat?" The answer given by the focus group is to conduct a mobile Internet search, see photos on the restaurant's wall, and look around to see if many people are waiting in line. Then I provided a plate of traditional local food in Changsha (see Figure 22). Before they tasted it, I asked the second question, "You found something that looks interesting before you decided to eat it, what is your first impression (shape, colour, odour, and more)?" For this question, the answer given by the focus group has much in-depth thinking and conversation. For example, 'What is the food made from?', 'How to eat it?,' 'It looks like something I have tasted before,' and 'It is very different from the usual food, I feel very curious.' The third question is, "Taste the food, how you feel now? Does it inspire you to know more about the food?" When the focus group tasted the food, they began to ask me if it was a dish or a snack. Unlike the imagination, focus group want to know what it is made from, what the name is, how the locals eat this, when they eat this, and if I have any questions, can I communicate with the chef. When the focus group finished eating the food I provided, I asked the last question, "Does it meet your expectation? What was lacking and what do you feel it needs to address?" Some of the answers were: 'I want to know how to eat it'; 'When do you eat? Snack or main meal?'; 'Where can you find it, is this a famous food in the area?'; 'What is the story behind this traditional food?'; 'Before eating, I want to know the description of the food, such as is it sweet, the outside is crisp, but the inside is very sticky'; 'Is the place where it is made clean?'; 'Can you see the information about this food in the restaurant? Is it English?; and many more.



Figure 22. Changsha local food, 'Tang You Baba'

PROPOSE

"The process's third stage finds you ready to start generating ideas. With the knowledge you have gathered in the first two phases, you can start to "think outside the box" to identify new solutions to the problem statement you've created, and you can start to look for alternative ways of viewing the problem." ('What is Design Thinking?', n.d.)

After clarifying the problem, the designer can begin to think about ways to address the problem and solve the viability of a solution through market research and market demand. After simulating the pre-tourism preparation and clarifying that travellers need information about local food during their travels, the next step is to think about how to provide information to travellers who need to know about local food during their trip (see Figure 23).

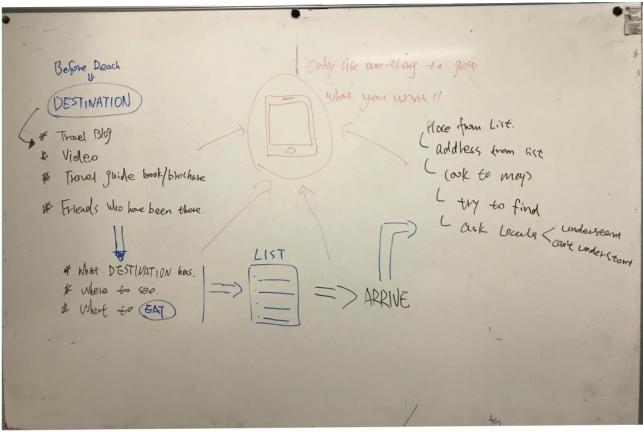
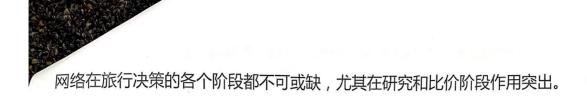


Figure 23. Brief brainstorm

Why an App?

According to the market research organization Ipsos, A research of foreign tourists' travels in China and attitudes toward Chinese cities in 2017 shows that 96% of travellers use the network-connected apps to search during travel (see Figure 24). Also, according to the 60 people questioned in the survey, travellers also use mobile phones to search for information at any time during the tour. Compared with computers, mobile phones are items that must be carried every day, so using mobile phone applications will make it more comfortable and more convenient for travellers.



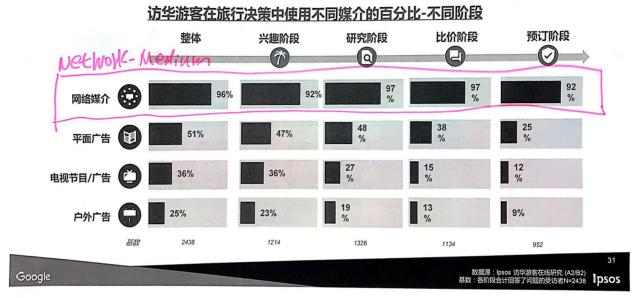


Figure 24. Percentage of visitors using different media in their travel decisions - different stages. Source: Ipsos (2017, p.31).

My Objective and Design Direction

Travellers between the ages of 18 and 35 years are among the top two groups concerning mobile phone use (see Figure 25; Yang, 2017). My research target group is an independent traveller 25-30 years old because my age is in this group and thinking is closer to them.

Portable mobile devices Ising 超过一半的访华游客在旅行决策中会使用手机收集信息。小年龄良以及亚洲访华游 客更多地使用手机收集旅游信息。 访华游客在旅行决策中使用手机的百分比-年龄 vs 大洲 25 30 整体 25 - 35 岁 使用手机的游客占 整体使用过互联网 的游客比例 1134 2345 857 453 910 425 773 237 Google

Figure 25. Percentage of travellers using mobile phones in travel decisions - age vs continent. Source: Ipsos (2017, p.34).

In an existing food recommendation application, such as Zomato, the restaurant's recommendation is first provided, and then the food information is obtained from the recommended restaurant menu. As I saw from the travel blog and Changsha travel channel are first to mention the local dish of the destination, and then there are the restaurants that offer this food. So, that means a traveller will first try to know the destination's food and then choose the restaurant. Thinking about the design from the perspective of the travellers can provide them with an app that has the food recommendations first and then restaurants mentioned next. The app should be like an invisible local tour guide to foreign travellers, introducing local specialties, explaining the food ingredients, translating food information, sharing some local dietary traditions and eating habits, and helping foreign travellers communicate simply with locals.

The Name - 'Chī'

After deciding to use a mobile application to solve the problem, the initial working title was 'Cater.' However, as the project got deeper, the name 'Cater' looks imprecise and does not have a strong meaning of 'eat like a local.' Using 'Chī' as the final name was an idea that suddenly came to me on my way home. 'Chī' means 'eat' in Chinese, and 'eat' is also one of the important social meanings for Chinese people. When friends and acquaintances meet each other, the first greeting is often: 'Have you eaten?' When a friend comes to the house as a guest, be sure to serve them with food to show the host's welcome and enthusiasm for the guests.

App Logo

The logo was created on the app's name 'Chī' (see Figure 26), and the last selected logo is still fully visible as 'Chī' (see Figure 27). The uppercase 'C' represents the restaurant's wall, 'h' is the restaurant's chair, 'i' uses chopsticks to express, and, finally, the Chinese phonetic tone on the 'i' letter uses a plate. At the top of the plate are noodles that can represent China.

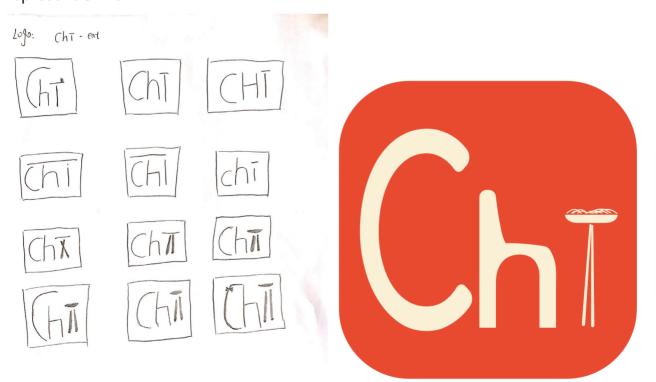


Figure 26. Logo sketch

Figure 27. App logo

PRECEDENTS

Through previous research, designers can quickly generate solutions concepts, help designers create valuable features, and allow designers to reflect or reject values and use existing designs that have existed in the past.

Zomato App

Zomato was selected as a case study because Zomato has been a very successful food recommendation app in recent years. It has a large customer base and is suitable for many cities. Zomato was launched online in 2008; the product type is restaurant recommendation. According to Zomato's page flow, page options and page icon analysis can be drawn (see Figure 28), and Zomato is a representative food recommendation app. It covers almost all the features of the food recommendation app, such as the selection options through collection, cuisines, and positioning. Every restaurant in Zomato covers the most basic information, including restaurant type, cuisine type, top dishes recommendation, per capita price, phone number, address, menu, hotel environment pictures, food pictures, and user reviews. Zomato provided the most basic information to user and in the latest update, the user can use Zomato to order dishes and book a table in a restaurant. In Zomato's interface is based on a large number of restaurant pictures, combined with the option icon and a small amount of text, in a more visual display of the restaurant to the user.

Comparing it to another popular food recommendation app, Yelp, the difference between the two is not very large–Zomato and Yelp have similar functions. Zomato's focus is on collecting restaurant information and user ratings for the restaurant. The menu is also used as an important mobile client service, allowing users to order food on their mobile phones while Yelp is focused on the activity between the users. Zomato's recommendations for local cuisine are not very clear because Zomato is more than just recommending local food, and its restaurant collection covers all the different cuisines in the area. Also, Zomato is not available for use in China for now.

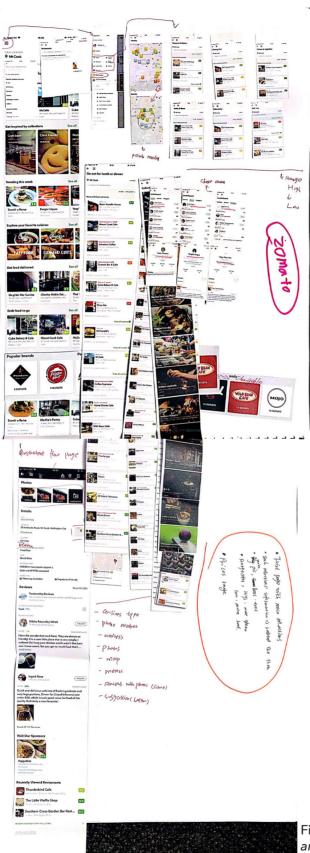


Figure 28. Zomato app analysis

Airbnb App

Airbnb is a product that offers accommodation during a journey. The app had nothing to do with food until 2017, focusing on the user experience and the communication between the user and the homeowner. After the 2017 app update, Airbnb added the user's 'story' feature where users can share the accommodation experience, travel experience, and recommended house selections, and began to recommend local cuisine. Airbnb's slogan is 'Belong Anywhere,' and its goal is to enable users to experience the local customs and in-depth understanding of the locals. Its target population is economically capable of travelling, and tourists who want to experience local cultural folklore. The type of house advertised through Airbnb is between the hotel and the youth hostel, providing a house, rooms or apartment that allows visitors to temporarily forget that they are tourists. The presentation of the house is similar to the introduction of a restaurant in a food recommendation app. The layout of the house and the equipment in the house are very detailed, telling the guests what they want to know.

The Airbnb interface is simple and beautiful, with green as the leading tone, pink as the accent colour, and white as the background; the font is black, and the interface consists of about four colours, which is visually simple (see Figure 29). In the design of the interactivity, the complicated and redundant buttons are removed, and only critical interactive buttons are left. Airbnb's registration process begins with a series of full-screen forms. The five sub-screens may look like a simple generic account creation, but since the screen contains only one question, each step is more comfortable to digest. Dialogue language also helps to alleviate the user's impatience: 'What is your name? What is your email?' This way the registration process is no longer as dull as the regular mode for getting started with an app (see Figure 30). After user for use sometimes, the 'For You' tab shows recommendations based on user browsing habits. Airbnb's app also recommends local popular tourist attractions, which is a great way to help users to explore new parts of the app (see Figure 31).



Figure 29. Airbnb app analysis

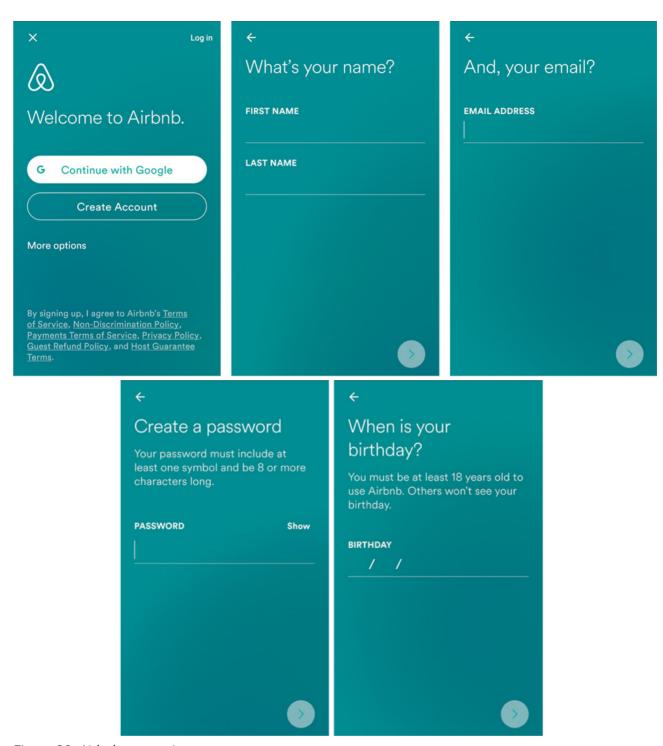


Figure 30. Airbnb app register page

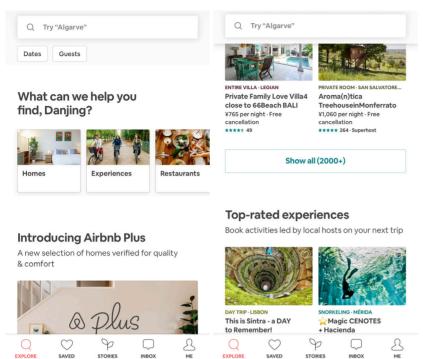


Figure 31. Airbnb app homepage

Regarding user experience and user information sharing, *Airbnb* is currently doing better than other. It can be fully used on the journey and can offer a good journey experience. However, it is a pity that the user 'story' and user sharing in Chinese cities in *Airbnb* are in Chinese characters, and users who do not understand Chinese cannot read this information.

TripAdvisor App

TripAdvisor is a must-have app for travellers around the world. It is a comprehensive travel app that allows users to comment on shared holiday experiences and upload photos. Users can also find everything they need to travel: book cheap flights and hotels, discover the best restaurants, and upload useful information from travel experiences for other users (see Figure 32). Also, travellers can see what is interesting near their current location. Sometimes their destination may not be able to access the Internet, and *TripAdvisor* can download maps, reviews, and other information from more than 300 cities worldwide to travellers' mobile devices for offline viewing (see Figure 33). *TripAdvisor* can help travellers complete their travel plans.

However, *TripAdvisor* has the same problems as *Zomato* and *Airbnb*. The recommendations of the restaurants cover all the cuisine in the area, and most of the reviews in China are almost all in Chinese, so they cannot help travellers take a tour to experience real local food.

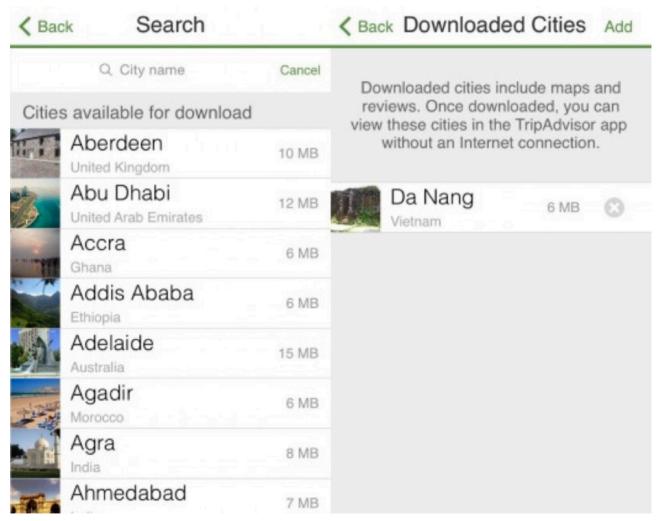
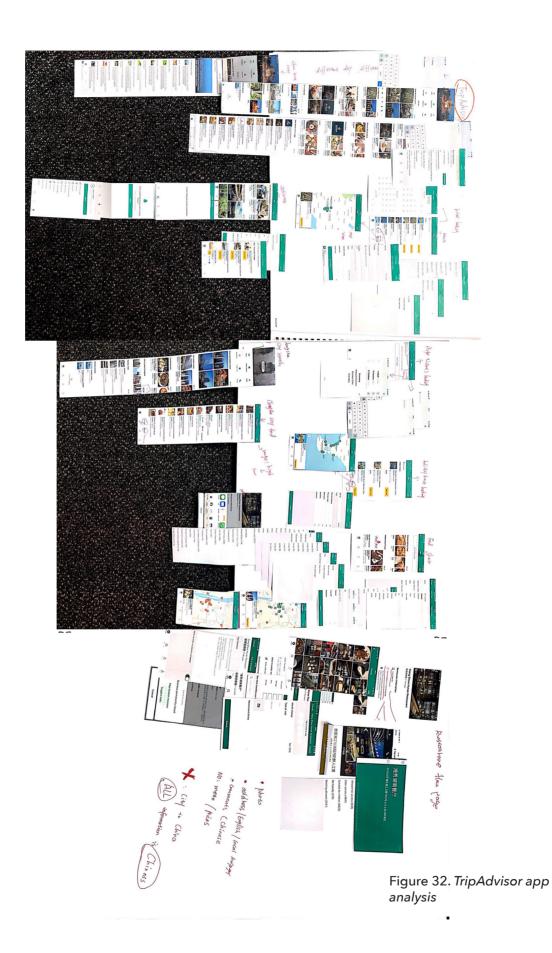


Figure 33. TripAdvisor app offline download page



DESIGN PROCESS

PROTOTYPE

"The design team will now produce a number of inexpensive, scaled down versions of the product or specific features found within the product, so they can investigate the problem solutions generated in the previous stage" (Dam & Siang, 2018). Designers can use prototypes to share and test within a small group of people outside the team, other departments, or design teams. This is an experimental phase where the best possible solution can be determined for each problem. Designers will have a better understanding of the issues with the product and a clearer understanding of the behaviour, thinking, and feelings of actual users interacting with the final product.

Persona(s)

Before creating the app architecture, I first established my personas. Personas will play a key role in design development and later testing because they are based on the interviews, focus groups, and informal conversations with friends and colleagues (see Figure 34). These different personas represent most aspects of the overall target audience. For example, one persona represents the Chinese food lover is a foreigner living in China for a time but still has apprehensions finding authentic local food; one person has a food allergy; one is vegetarian; one Chinese local food restaurant owner.



Name: Michael Wilson

Age: 30

Gender: M

Background: From U.K. A lecturer at International teacher in HUT (Hunan University of Technology), live in China almost 5 years.

Personal statement: "Is not hard travel to China now, because in most cities has English translate board. Unfortunately, if I want to have meal in outside it is hard for me without my Chinese friends, because of the language barrier. My food choices is usually base from the picture available on the menu. However, the result was different from my initial expectation.

Group: Foreigner who has been in China at least one year.

Access: Chinese friends recommendation & pictures from the restaurant leaflet

Languages: English



Name: Eveline Miller

Age: 23

Gender: F

Background: From New Zealand. Travel to China due to parents work.

Personal statement: "My parents is working in China, I used to eat all the Chinese food when I was child and fell in love with local food. However, when I grow up I got glutton allergy and now I can't eat Chinese food anymore without assistance to translate for me because I can't understand the ingredients from the food package/menu and I can't talk to the chef/waiter."

Group: A person with allergy

Access: Homemade & parents or friends assistance

Languages: English



Name: Adilson Abramovich

Age: 29

Gender: M

Background: From Brazil and interested to travel to China.

Personal statement: "I am a fish eater and vegetarian, I love to try Chinese food because they has a lots of way to cook the food, a same food can have thousand of the flavor! For sure I will travel to China but if I don't have any my Chinese friend help, I may choose to eat McDonald's during my whole trip. This is because they have fish burger and I trust their ingredients. Hence, my trip will be less enjoyable due to losing the change to know more about Chinese food."

Group: Vegetarian

Access: Friends recommendation & Online restaurant recommendation

Languages: English & Portuguese



Name: Penny Campbell

Age: 25 Gender: F Background: From America and like Chinese food.

Personal statement: "My love for Chinese food is very strong, whenever there is a new Chinese restaurant opens, I would definitely go and try their dishes. The reason for my interest was because my Chinese colleagues used to share their Chinese dishes with us. Because of them, I had a memorable experience in trying food that I won't go for, like chicken feet, duck wings and etc. The variety of Chinese dishes provide me an insight to manipulate a simple ingredient to taste differently depending on how you cook it. I would always ask my Chinese friends for restaurant and dishes recommendation because I believe they would provide me an authentic Chinese restaurant that are popular among them. When I am trying a new dish, I will ask the waiter, how do they usually eat or how do I dipped the sauce, this experience make me feel closer to the tradition way to have the dish, which allows me to appreciate the dish."

Group: Chinese food lover

Access: Friends recommendation & Restaurant recommendation

Languages: English

Name: Jianwu Liu

Age: 38

Gender: M

Background: Owns a deep fry stinky tofu eating house in Changsha, China.

Personal statement: "Deep fry stinky tofu is the most traditional local food in Changsha. In my eating house, everyday is a full house especially during the holidays and customers required to line up. I have met many tourists who travel because of their interest of unique local food. Their target is to visit the local food street and enjoy the culture while browsing and eating. Sometimes, a few tourists will ask me questions about the food background and I like to share the story with them. But I have never seen foreigners come alone, well, I don't know how to speak English and I don't know what they want. I hope that more and more international tourist come here to travel, our food is so delicious, our history is very rich, of course, it has to be spread out! Hahaha!"

Group: Eating house owner in Changsha

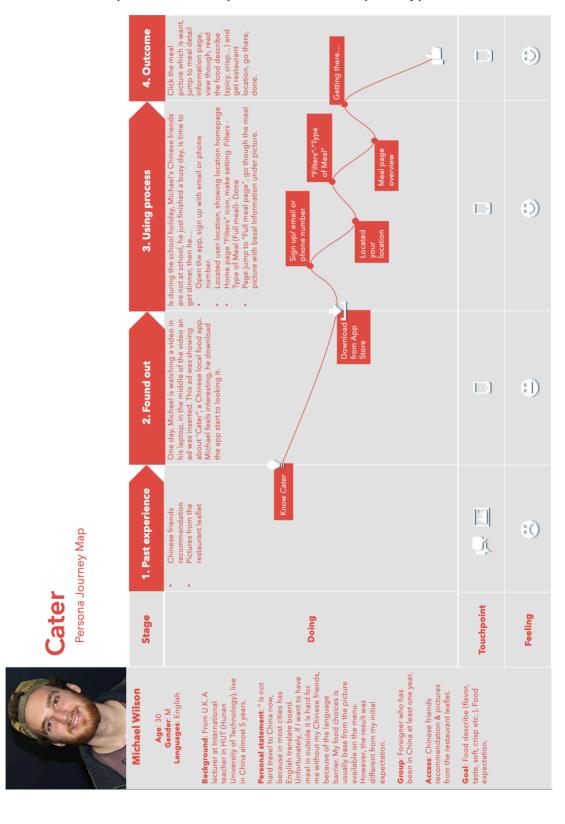
Languages: Mandarin & Changsha dialect

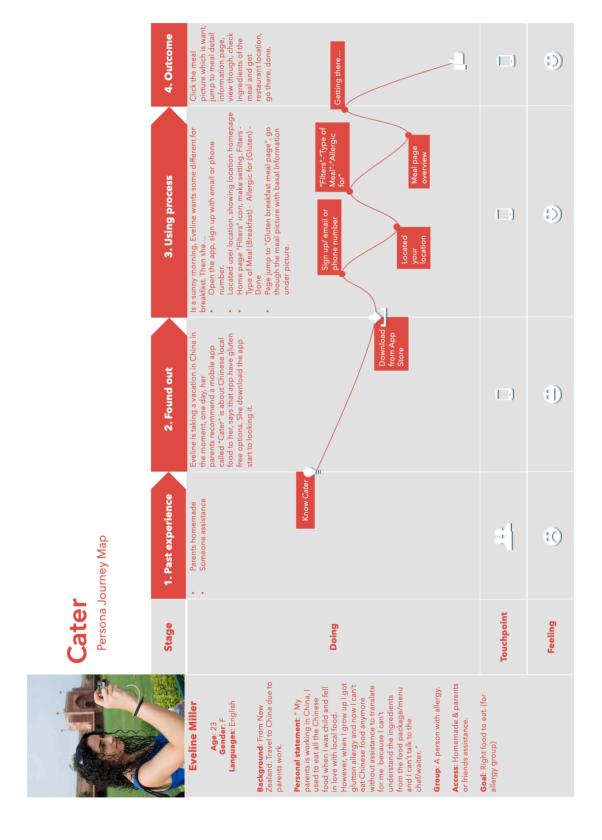


Figure 34. Five different personas

Journey Maps

After having representative personas, a journey map for each persona was created (see Figure 35). The user perspective is used when making the journey map, which better reflects the user flow, problems, and possibilities of the prototype.





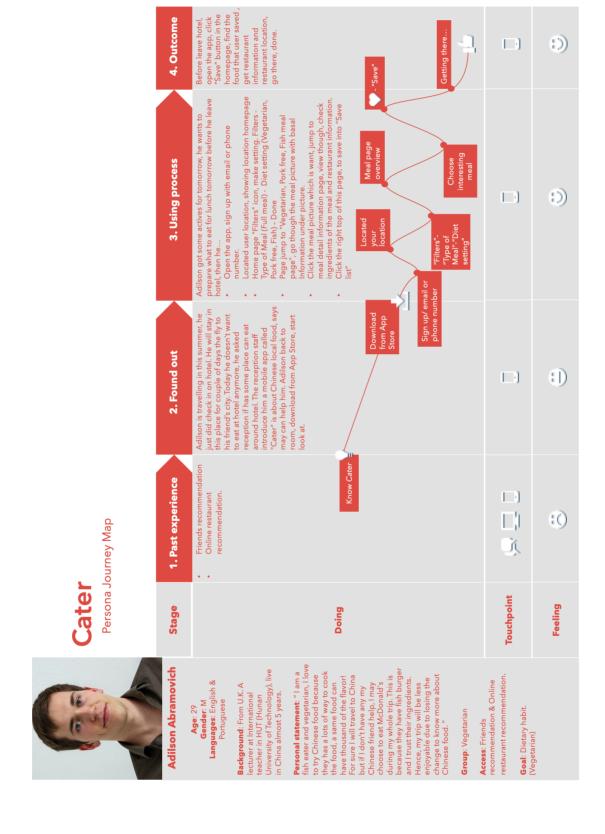
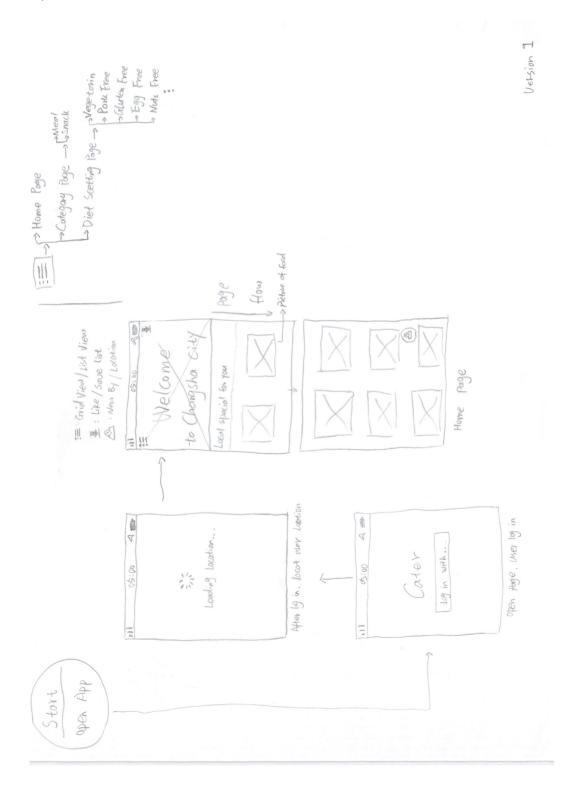


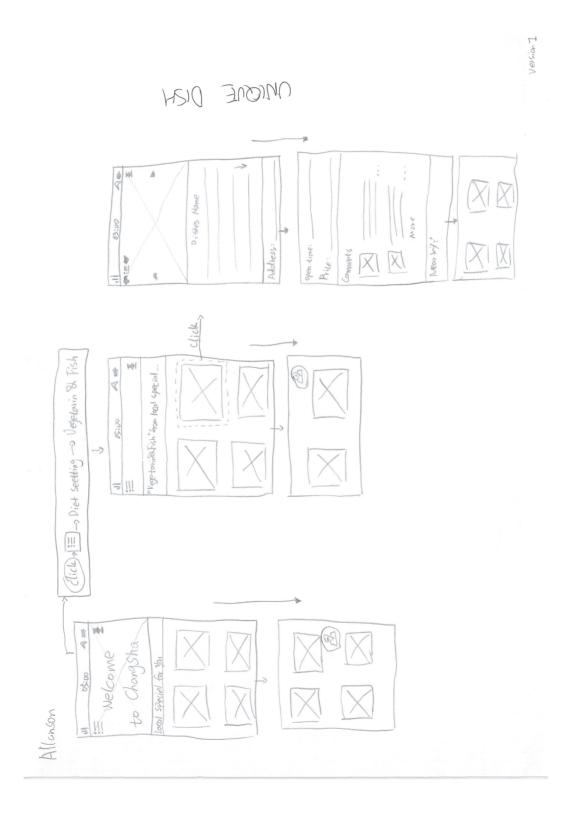


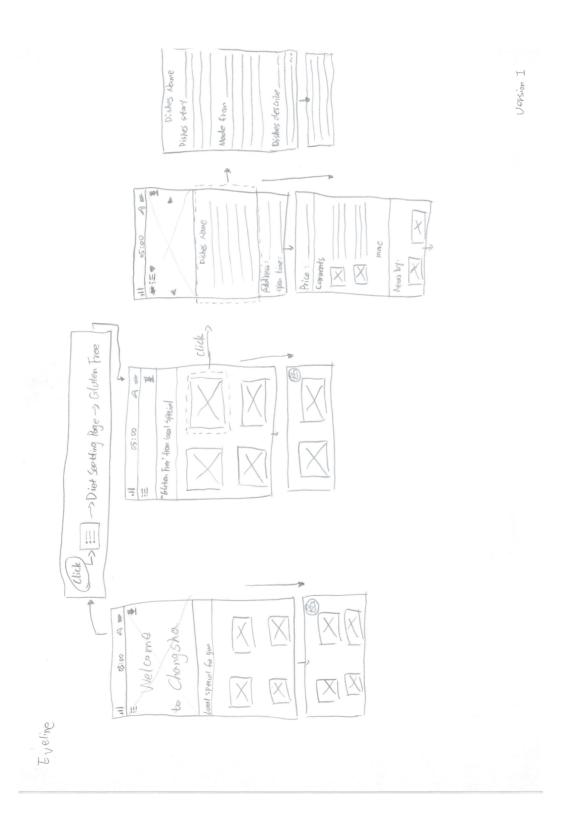
Figure 35. Personas' journey map

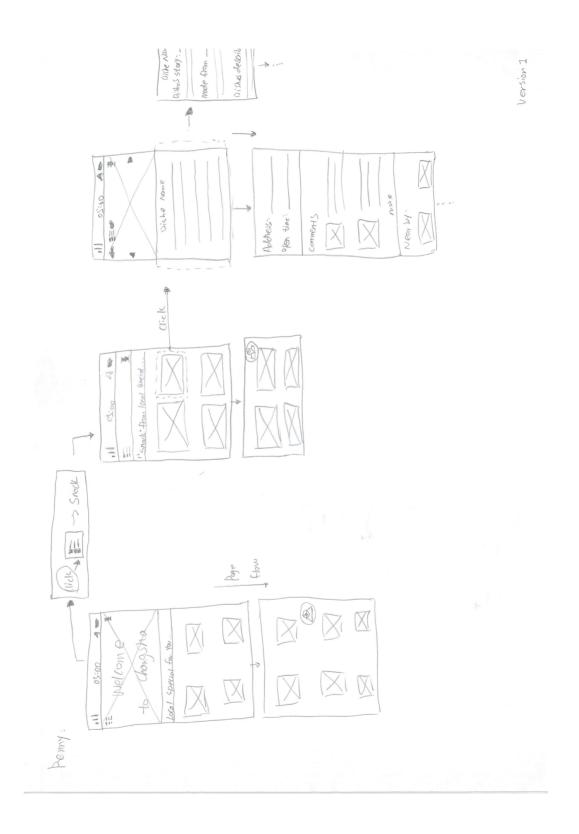
Tasks and screen Sequences

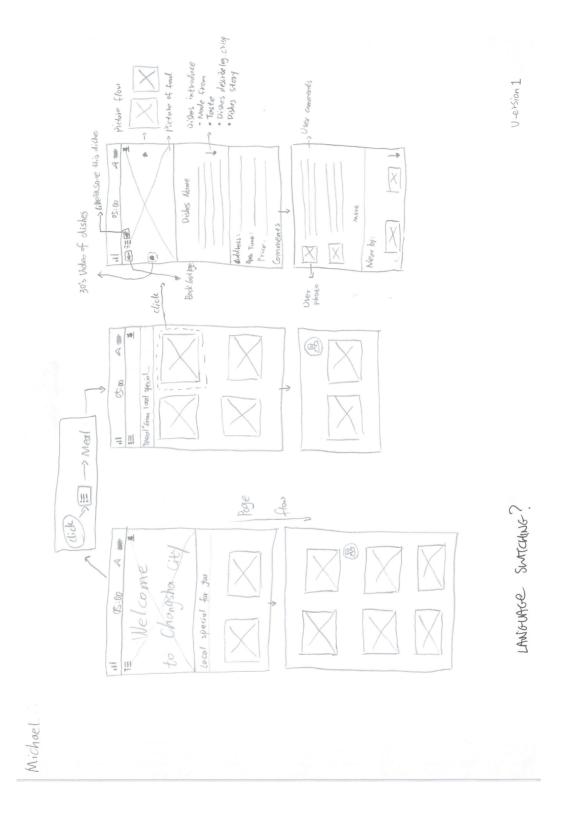
After the establishment of the personas and the journey maps, the user's path through the process was streamlined, and the process of using the app has a rough framework. So the first version of the user wireframe was drawn based on the journey map (see Figure 36).

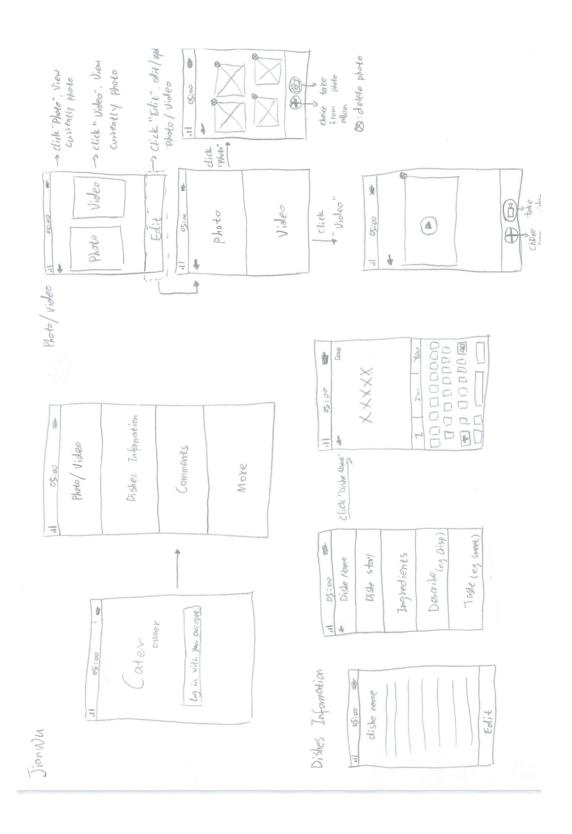












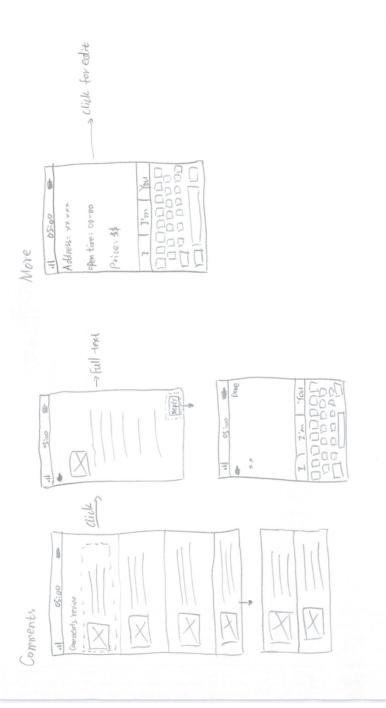


Figure 36. User wireframe version one

Use Cases

Persona Michael represents a foreigner who has had experience living in China and speaks some simple Chinese. His problem is that when he leaves his Chinese friend, he will still have trouble in the choice of food. He can only use the pictures of the restaurant to select food to order. However, most of the time the food is not the same as he expected. For this situation, 'Chī' can help Michael as his friends did for him- describe food. For example, if Michael wants to try the food from the pictures of the restaurant (see Figure 37), he only needs find the similar picture in 'Chī' and see the food description for decide to order or not. The food could be spicy or salty, pan-fried or deep fried, or crispy outside but soft inside. For Michael's needs, through the choice of the type of meal, such as a full meal or snack, and then in the food details page, he can view and understand the food description (see Figure 38).



Figure 37. Chou dou fu. Source: XiaoXiangNong (2017.)

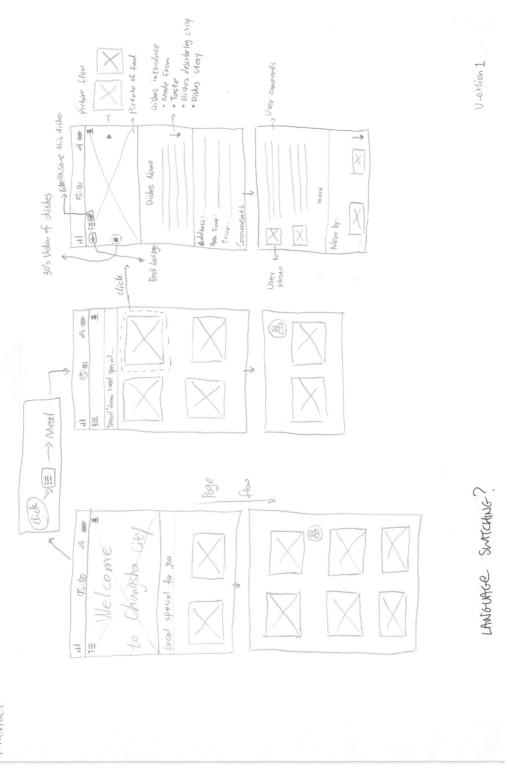


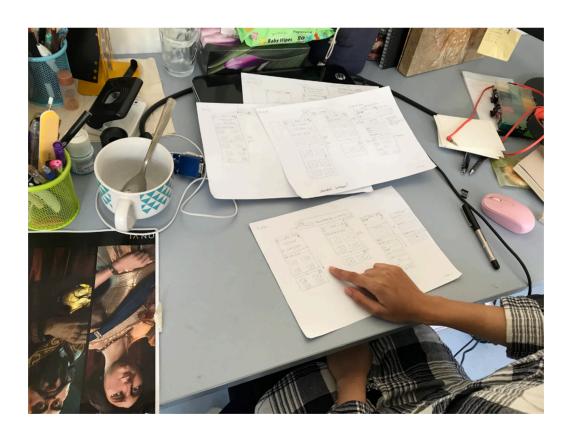
Figure 38. Persona Michael wireframe version one

TESTING

The designer or evaluator uses the best solution identified in the prototype phase to rigorously test the entire product, which is the final stage of design thinking. During the testing process, the results generated during the testing phase are the outcomes that designers often use to redefine one or more problems (Dam & Siang, 2018). Designers will be informed of the different test users' understanding; the processes of use; how people think, behave, and feel; and empathy. Even at this stage, some modifications and improvements are made to the problem solution and to understand the product and its users as much as possible (What is Design Thinking?, n.d.).

Paper prototyping: Wireframes (test session one)

In the first version of the user wireframe test, I did not show the tester any journey maps, and I kept silent throughout the process. It is important test whether the tester can determine her own journey without prompting (see Figure 39).



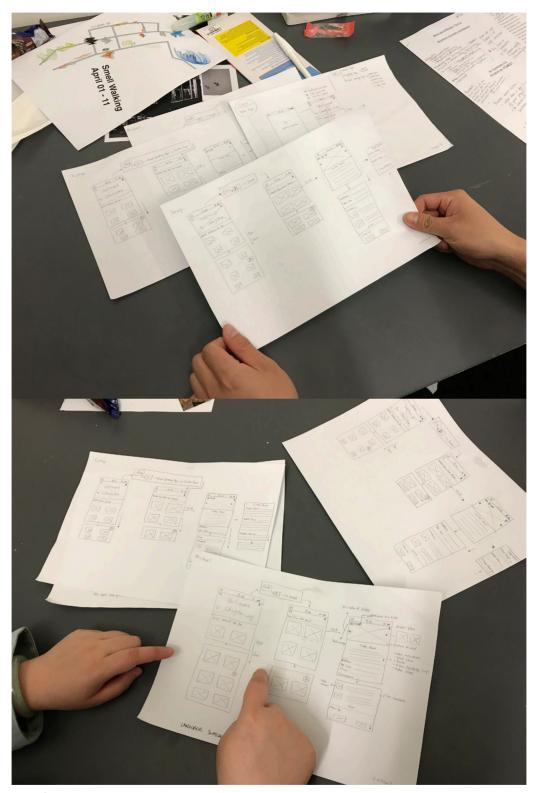
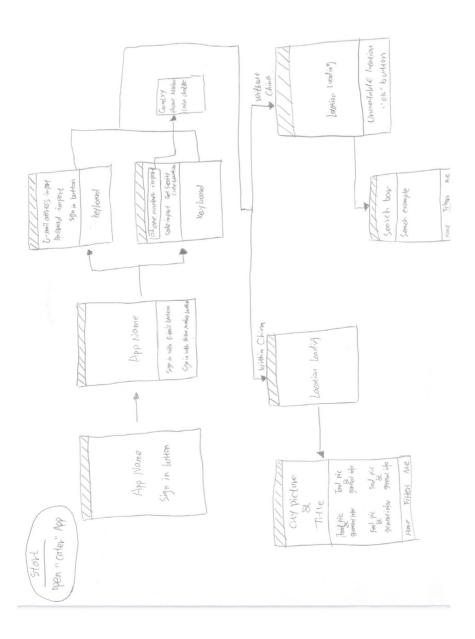


Figure 39. Wireframe version one test

During the first test, the tester could not clearly understand the meaning of some icons. For example, the 'map' icon is what it represents and why it is placed in that location. Moreover, the tester also felt that some functions were lacking. For example, the food screen only has pictures, and there is no simple text introduction to the pictures. With these observations from the testers, I improved the first version of the wireframes to give it more detail.

'Language Switching'

The 'language switching' of the wireframes, which is to completely draw the wireframe using a text structure without using any graphics (see Figure 40). This method can show more details in the wireframe and can prevent me from missing details in drawing the second version of the user wireframe.



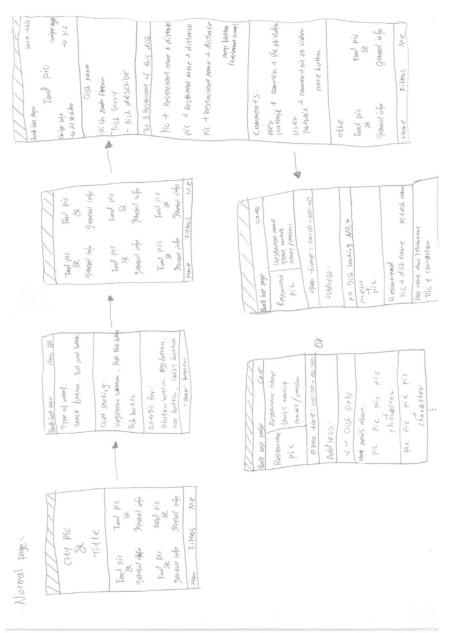
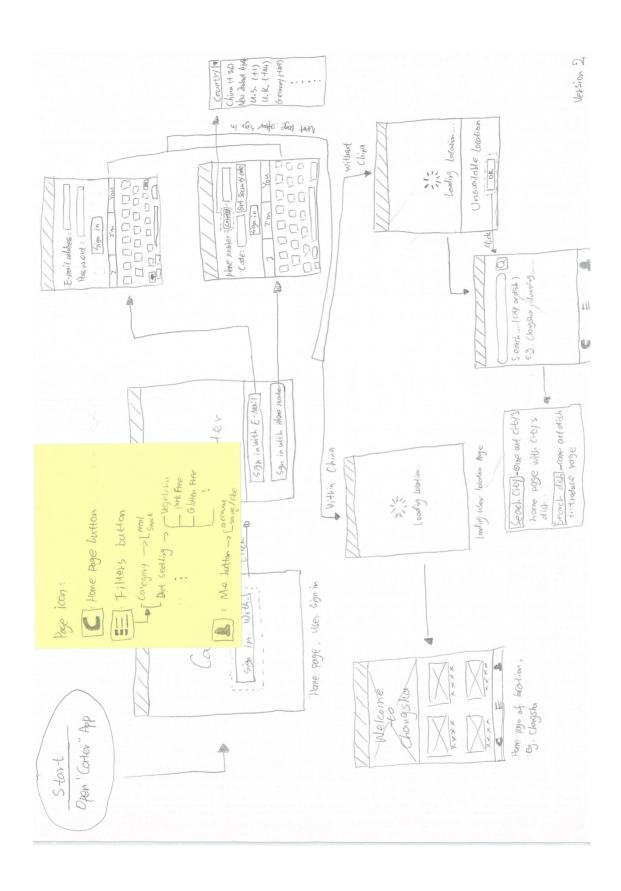
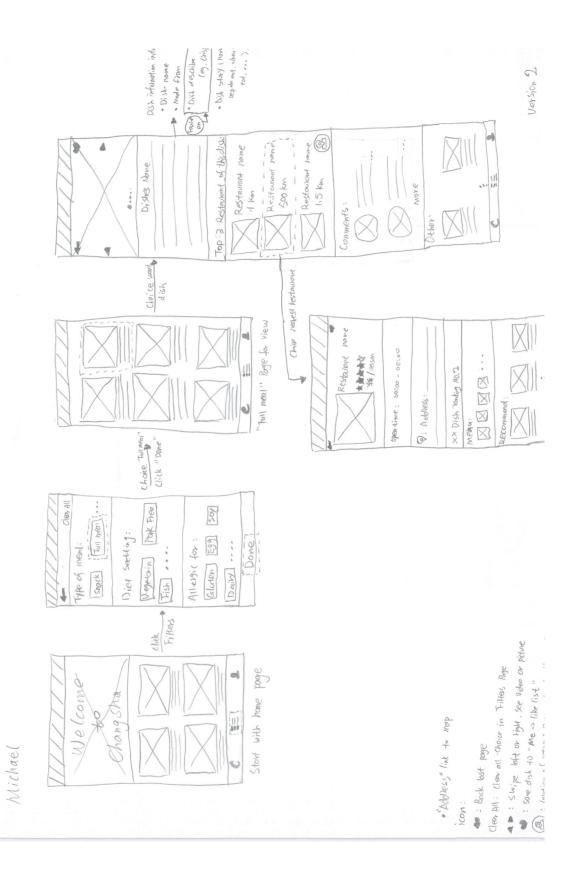


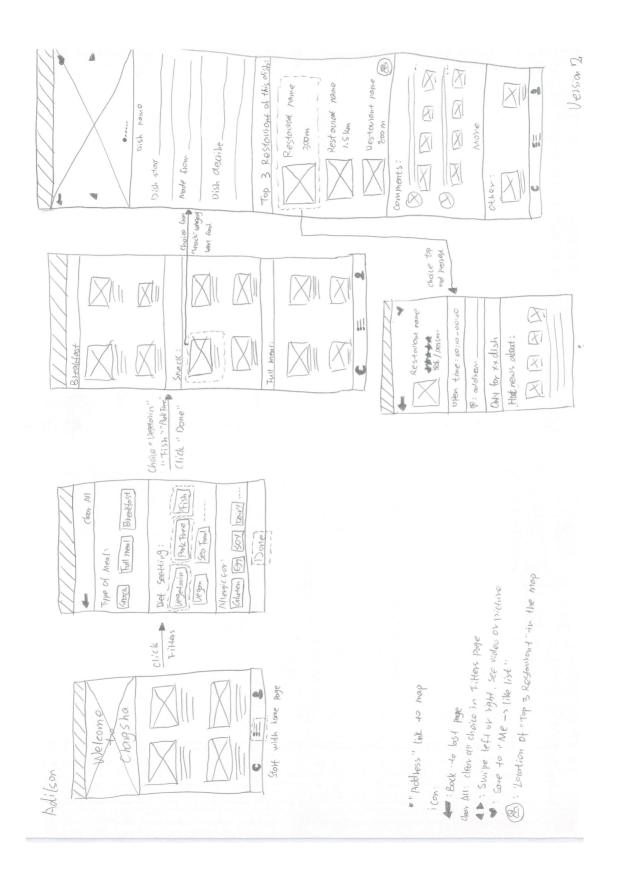
Figure 40. 'Language switching' practice

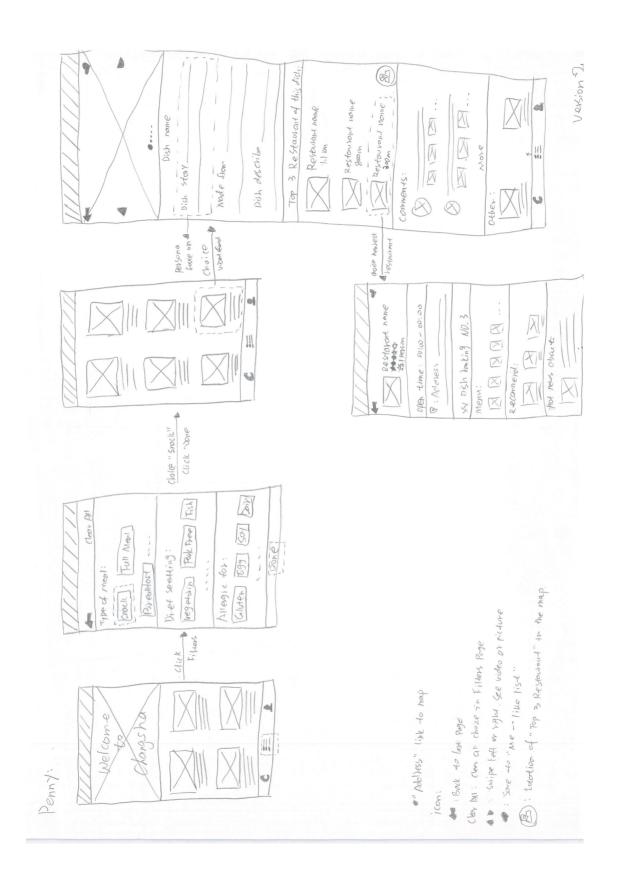
Paper prototyping: Wireframes (test session two)

After the first version of the test, the second version of the user wireframe was drawn (see Figure 41). The second version was also tested in the same manner as the first version (see Figure 42).









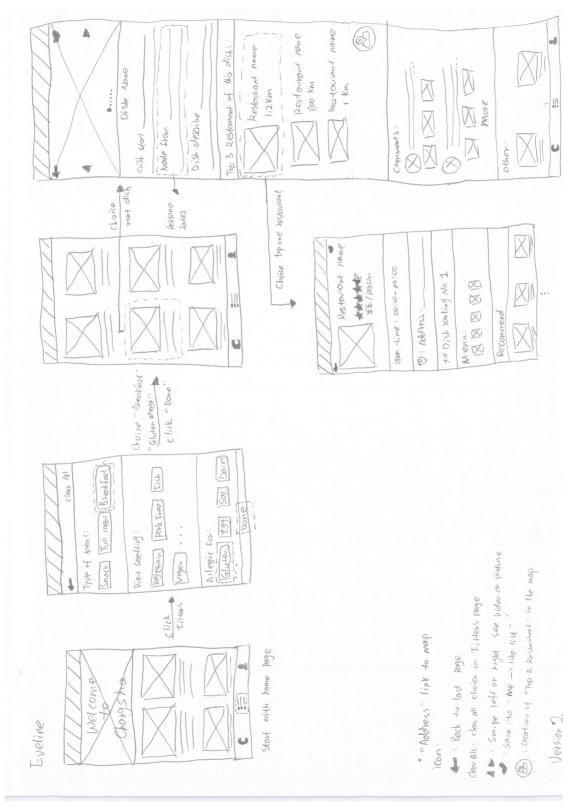


Figure 41. Wireframe version two



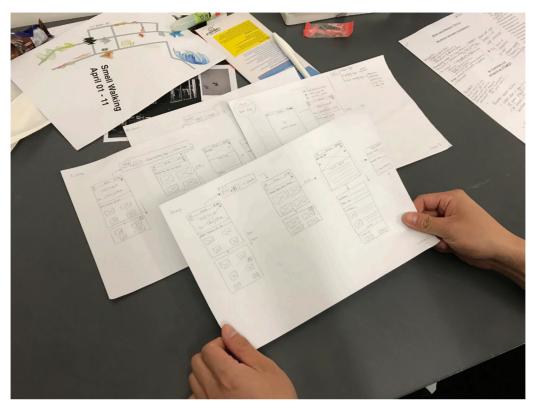


Figure 42. Wireframe version two test

From this testing session, the tester stated that all the details were clear and the meaning were explicit. The tester could confidently complete the task(s) based on the needs of the persona.

User Interface Design

After the first two versions of the wireframes, I started design the app interface (see Figure 43). In this version, it is determined that the basic colour of the app is red because some bright colours can stimulate people's appetite, such as fruit's red and orange, butter's yellow, green vegetables, and white sashimi (Chen, 2009). I made a comparison of the three colours before choosing the main colour (see Figure 44). The yellow colour looks more like the colour of the biscuits, and the green colour represents the colour of many vegetables. So, I finally chose red, which also alludes to 'Chinese red.' In addition to determining the colour of the main tone, I also added all the pictures of Changsha's traditional food as well as a short English description, the appropriate icon, and a simple phonetic translation of how to order in Chinese enable the user to have a simple conversation with the waiter (see Figure 45).

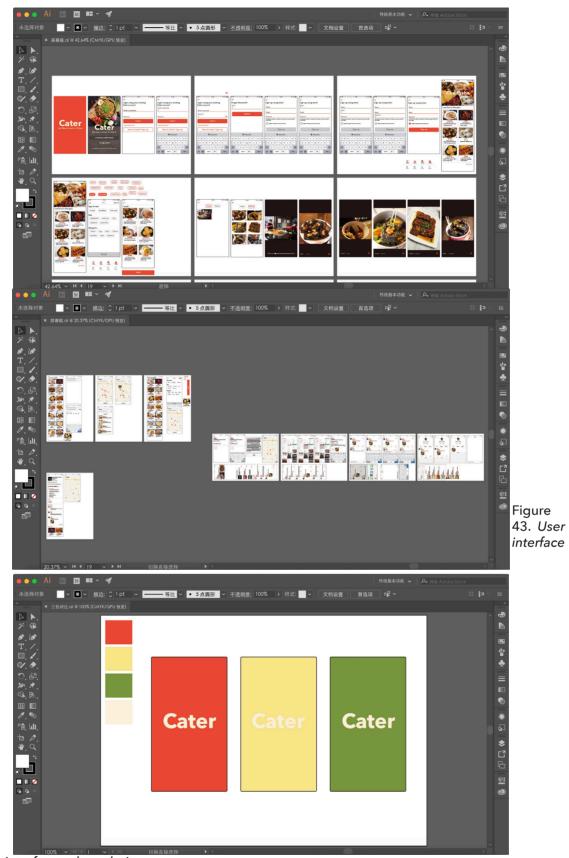


Figure 44. Interface colour choice

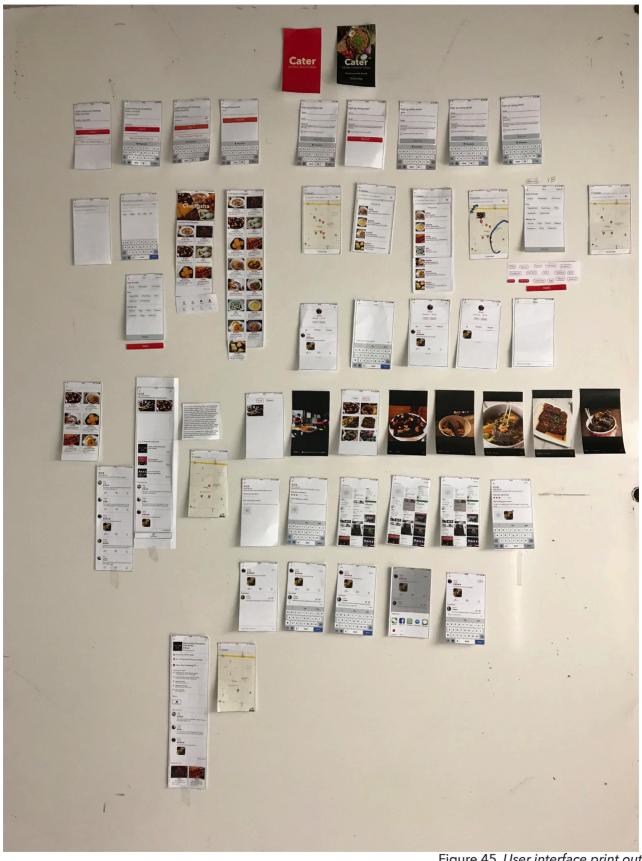


Figure 45. User interface print out

High Definition Prototype

Because the version of the prototyping interface on paper is entirely different from the previous two versions, this is no linear flow in the third version (it more realistically branches). So, in this version of the test, I provided the 'script' to the tester, allowing the tester to play one of the personas for the user test. For example, the tester is Eveline, who is allergic to wheat products. Eveline is already in China, and one morning she wants to find a place to eat breakfast near her. The tester performed the version of the prototyping interface on paper based on the 'script' I provided (see Figure 46).





Figure 46. High definition paper prototype testing

Simulate Again: App as Tour Guide

After the prototyping interface on paper test, the tester can find the information they need, but I found another problem. This app is not very different from the existing food recommendation apps on the market: the same operational process, and a similar method for providing food and restaurant information. The only difference between Zomato and 'Chī' is the addition of how to use Chinese for simple ordering. This is different from what I had originally envisioned. This prototype does not seem to bring the authentic, local dining experience to my target audience. I started to think again: how do I make my user feel like a local—even if temporarily letting them forget that they are a traveller?

I reflected that when my foreign friends came to Changsha, I am the local, so how did I introduce them to local traditional food and how to eat these traditional foods (see Figure 47). When I assumed the role of local guide in Changsha and wanted to take my foreign friends to taste the local food in Changsha, I would want to know what the taste my foreign friends preferred. For example, I would want to know whether they desired spicy food, or whether they can eat seafood, or what foods they may be allergic to. After learning about the individual tastes of my foreign friends, I would recommend local cuisine based on their tastes. Based on my local knowledge of food choices, they trusted me to recommended dishes, so I would take them to the most authentic restaurant. After arriving at the restaurant, I would explain to them what the food on the menu was made of, describe to them the taste of the food, then place the order. While waiting for food, I would tell my foreign friends about the story behind our ordered food. When the food came, I would tell them what tableware to use and the way we eat this dish. After finishing the meal, I would ask them if they are satisfied with the dish, whether they want to eat dessert, or what they wanted to do next, and provide ideas for them to choose.

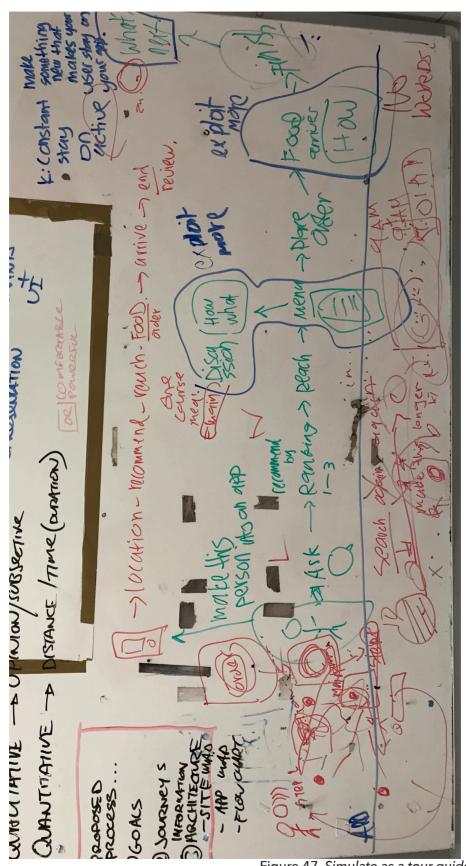


Figure 47. Simulate as a tour guide for foreigners

New Humanistic Functionality

Through the deep reflection simulation scenario, the entire meal process can be extended and more fun added by considering the narrative of the human experience. It is important to let the foreign travellers feel that there is an invisible local guide with them so that they feel safe and confident in choosing food. The unknowns and intangibles are considered so that they can temporarily forget that they are tourists. Therefore, some app architecture has been added or changed.

Change one: use the 'onboarding' user setting, cancel the 'log in later' setting. After the new user is registered, the personal eating habits and food taste settings are made, making the 'Chī' app a more personal food app.

Addition one: use GPS location reminders. According to the location of the user, the app will provide the user with a local authentic gourmet restaurant near the location so that the user can always grasp the location of the surrounding restaurant.

Addition two: using the user's location and time, information is given for different time periods according to the personal eating habits and personal tastes set by the user. For example, during breakfast time, the local traditional breakfasts around the user's location could be given. For user easy to have dish for anytime.

Addition three: when the traveller arrives at the restaurant and finishes ordering, they can select the 'order finished' button on the app. The app will show how-to-eat and food story during waiting time. While user waiting can learn more thing behind the food.

Addition four: the 'Conversation tips' module is listed separately in 'Profile,' and the simple Chinese provided can be applied to any restaurant scene. Give the confidence for user talk to locals.

Addition five: provides local people's evaluation of the restaurant and can translate Chinese into English to know the locals the locals' opinions of the dish.

Addition six: some personal needs in 'Profile' can be displayed to the service staff, user can easy to tell what they want. For example, on the 'Translation' screen, type in English "Can you provide a knife and fork?", click 'Translate,' and English will be converted into Chinese.

Addition seven: emphasise seasonal food choices and offer information about foods from different seasons. Don't miss the any food during trip.

Addition eight: on the restaurant information screen, estimated 'wait time' will be provide. This is convenient for the traveller to make arrangements.

Addition nine: provide a simple user evaluation template for users who do not like to write lengthy reviews. For example, people can select 'good service' and 'tastes good' in the 'frequently evaluated' area to post reviews.

REFINED DESIGN PROPOSAL (KEY SCREENS)

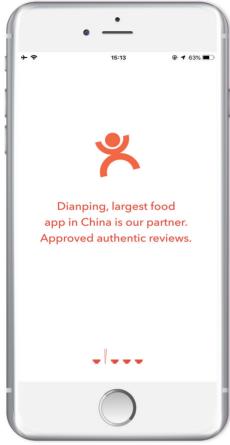
'What Chī provide'

This screen sequence appears when the user first uses 'Chī' in their device. These are the introductions to the main functions of 'Chī' (see Figure 48).









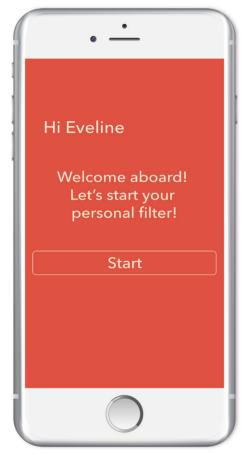


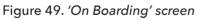


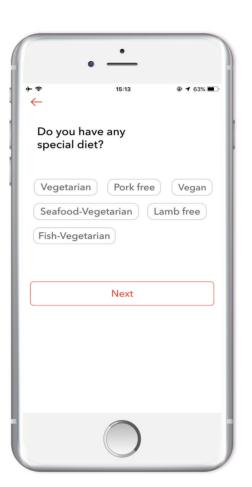


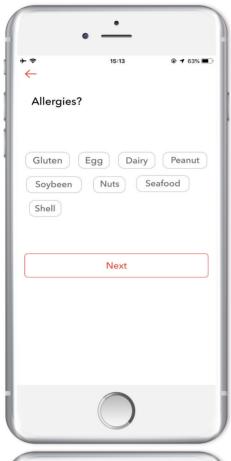
'On Boarding'

The 'On Boarding' screen sequence is for users to set up personal filters, help the app know the user, and tailor the app's flow to the user's preferred tastes (see Figure 49).

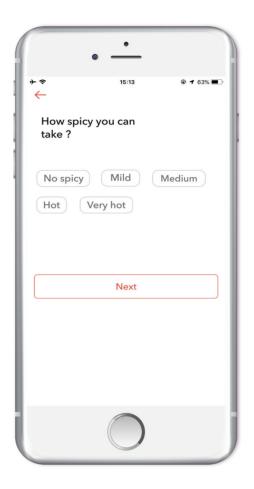












'Conversation tips' and 'Translation'

The 'Profile' screen has the 'Conversation tips' and 'Translation' (see Figure 50). The 'Conversation tips' screen will have basic Chinese language available for simple conversation suggestions for use in the restaurant (see Figure 51). The 'Translation' is for the user who has specific dietary requirements (see Figure 52).

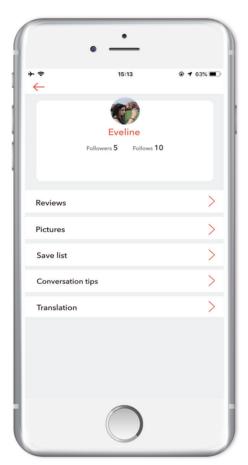
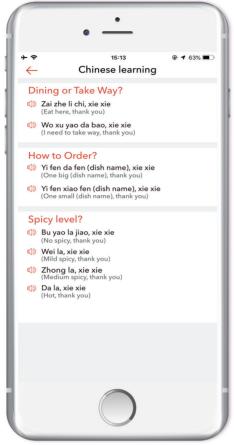


Figure 50. 'Profile' screen



Translation

Can you provide a knife and fork?

Translate

你能提供一副刀叉吗?

Figure 51. 'Conversation tips' screen

Figure 52. 'Translation' screen

'Text translate'

Ideally, 'Chī' would be partnered with the largest food recommendation app in China, Dianping, for approved authentic reviews. Also, reviews by local Chinese can be translated (see Figure 53).



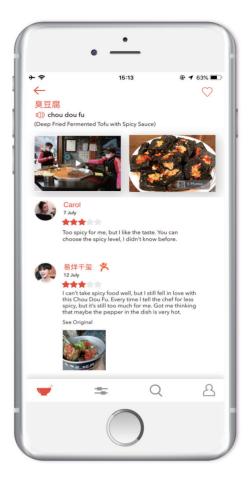


Figure 53. 'Text translate' screen

'Dining etiquette'

Illustrations show easy-to-follow steps for dining (see Figure 54).





Figure 54. 'Dining etiquette' screen

'Enable GPS location' Popup Dialog Box- Notifications

This facility allows the app to access the user's phone's location and alert the user on local cuisine whenever and wherever within proximity to try local food. It also works with specific meal time suggestions (see Figure 55).



Figure 55. Notification screen

'Dish information'

The app provides the user with 'Dish info,' 'Made of,' and 'Dish description' information. For users who have food allergies or different dietary needs, the app can help the user to find the desired food to eat, and users can learn about the background of the food (see Figure 56).



Figure 56. 'Dish information' screen

SUMMARY

Through this human-centred design research process, I reflected on how I helped my foreign friends. Learning about their needs from the perspective of foreign travellers who travel independently, I discovered problems in the tourism process, identified design opportunities, and created effective prototypes. The aims were to help foreign travellers who come to China to travel independently, feel safe and confident when choosing local food, and help them to understand local dietary traditions and eating habits. I also wanted to bring them into the local culture and try to make them forget they are travellers.

The final outcome of this study is an app concept that focuses on promotes traditional local Chinese cuisine. 'Chi' covers some of the information and features of existing food recommendation apps, but some information and functions are much different and intended to improve foreign travellers' experience with authentic Chinese food and food culture. 'Chi' includes local people's comments and can be translated into English so that foreign visitors can see the real locals' food reviews. The breakdown of ingredients in dishes is provided to foreign travellers who have food allergies or have different types of diets, such as vegetarians. This is in order to make foreign travellers with special dietary needs feel safer in their choice of food. Foreign travellers can confidently select the local traditional foods they want to eat based on the characteristics of the dish, such as the taste of the food, which could be described as crisp or sticky.

'Chi' will also introduce the story behind the local traditional food. Foreign travellers can learn about the background of the food deepening the overall experience. The app also provides an introduction to the specific eating etiquette, allowing foreign travellers to eat in the same way as locals bringing them closer to the local culture. 'Chi' can also help users learn some basic Chinese that can be used in ordering and dining to strengthen the connection between the travellers and the locals. Using location awareness about the user's location, travellers will be able to learn about nearby traditional food and filter out the chain, inauthentic and touristy options—just like the locals do. Through the incorporation of these unique features, foreign travellers can feel that they have an invisible tour guide for local food so that they can more freely enjoy food in China and embrace the local food culture.

Overall, the feedback generated by the entire research process was valuable, but there are also some limitations in the research. Throughout the process, I spent a lot of time thinking about how to give my target group information instead of understanding their needs and problems from their perspective, which led me to deviate from the goal of my research. Fortunately, I changed my thinking in the later stages. Moreover, there is little consideration for the restaurant owners' thinking and point of view. Because of the geographical restrictions and time limitations, only the travellers' perspective is included in the 'Chi' concept prototype., but the restaurant owner is recognised as an important link for Chi's viability.

If 'Chī' were to the continue to the next stage, its next development phase is to test it in the city of Changsha, get feedback from real foreign travellers, and improve the app accordingly. In addition, there could be partnerships with local tourism and official organizations to gather the data on local specialty food, local cultural information as well as publicity for the tourism and marketing (for foreign travellers). There is also the possibility to develop and expand 'Chī' for more cities in China, not only to provide help and services to foreign travellers but also to help foreigners living in China.

Meladze (2015) mentioned why tourists choose to travel in areas that are different from their own culture. In addition to leaving their original lifestyle, it is more about relaxing in another environment and a desire to understand another culture that is different from their own culture, making travel more meaningful. Seeing that more and more foreign travellers are travelling to China and are curious about Chinese culture and Chinese food. From a prideful Chinese perspective, I am thrilled by this phenomenon. It shows that China is gradually being understood by more people and that Chinese culture is attracting foreign interest. At the beginning of this research, I started with a non-major city in China. Because of the information about non-major cities is sparse, I wanted foreign travellers have access to more cities in China through my research and design.

REFERENCES

Assmann, J. (2008). Communicative and Cultur al Memor. Cultural Memory Studies. An International and Interdisciplinary Handbook, 109-118.

Bessiere, J., & Tibere, L. (2013). Traditional food and tourism: French tourist experience and food heritage in rural spaces: Traditional food and tourism in France. Journal of the Science of Food and Agriculture, 93(14), 3420-3425. https://doi.org/10.1002/jsfa.6284

Bondi, L. (2016). Emotional Geographies. Routledge.

Cropp, A. (2018, September 30). Cashing in on the China-New Zealand year of tourism. Retrieved from https://www.stuff.co.nz/business/107385355/cashing-in-on-the-chinanew-zealand-year-of-tourism

Canyin. (2015). In 2015, there are 5074852 restaurants. Retrieved from http://fj.winshang.com/news-563131.html

Cave, J., & Jolliffe, L. (2013). Green tourism souvenirs in rural Japan: challenges and opportunities. UK: Channel View, 119-131.

Chang, R. C. Y., Kivela, J., & Mak, A. H. N. (2010). Food preferences of Chinese tourists. Annals of Tourism Research, 37(4), 989-1011. https://doi.org/10.1016/j.annals.2010.03.007

Chen, J. (2018). The contemporary value and realization path of Chinese traditional food culture. Journal of huaihai institute of technology (humanities and social sciences), 16, 87-90.

Chen, S. (2009, December 15). Arouse the color of appetite and the color of hypnosis [sciencenet]. Retrieved from http://blog.sciencenet.cn/blog-40168-278696.html

Cohen, E., & Avieli, N. (2004). Food in tourism. Annals of Tourism Research, 31(4), 755-778. https://doi.org/10.1016/j.annals.2004.02.003

Consulate-General of The People's Republic of China in Christchurch. (2018, July 10). Nelson. Retrieved from http://christchurch.chineseconsulate.org/chn/lqqk/t1224139. htm

Cui, D. (2016). Study on the mechanism of tourism promoting cultural communication. Shijiazhuang railway university, (02), 75.

Cui, Y. (2009). Research on the sustainable development of hezhen traditional culture and national cultural tourism. Shandong University, (05), 273.

Dam, R., & Siang, T. (2018). 5 Stages in the Design Thinking Process. Retrieved from https://www.interaction-design.org/literature/article/5-stages-in-the-design-thinking-process

Deng, M. (2007). Research on social and cultural influencing factors of ethnic tourism destinations. Northwestern University, (04), 63.

Design Kit. (n.d.). Human Centered Design. Retrieved from http://www.designkit.org/human-centered-design

Germann Molz, J. (2007). Eating Difference: The Cosmopolitan Mobilities of Culinary Tourism. Space and Culture, 10(1), 77-93. https://doi.org/10.1177/1206331206296383

Gyimóthy, S., & Mykletun, R. J. (2009). Scary food: Commodifying culinary heritage as meal adventures in tourism. Journal of Vacation Marketing, 15(3), 259-273. https://doi.org/10.1177/1356766709104271

Harrington, R. J., & Ottenbacher, M. C. (2013). Managing the Culinary Innovation Process: The Case of New Product Development. Journal of Culinary Science & Technology, 11(1), 4-18. https://doi.org/10.1080/15428052.2012.754724

Henderson, J. C. (2009). Food tourism reviewed. British Food Journal, 111(4), 317-326. https://doi.org/10.1108/00070700910951470

Hjalager, A.-M., & Richards, G. (2002). Still undigested: research issues in tourism and gastronomy, 24.

Kim, Y. G., Eves, A., & Scarles, C. (2009). Building a model of local food consumption on trips and holidays: A grounded theory approach. International Journal of Hospitality Management, 28(3), 423-431. https://doi.org/10.1016/j.ijhm.2008.11.005

Kivela, J., & Crotts, J. C. (2006). Tourism and Gastronomy: Gastronomy's Influence on How Tourists Experience a Destination. Journal of Hospitality & Tourism Research, 30(3), 354-377. https://doi.org/10.1177/1096348006286797

Lacy, J. A., & Douglass, W. A. (2002). Beyond authenticity: The meanings and uses of cultural tourism. Tourist Studies, 2(1), 5-21. https://doi.org/10.1177/1468797602002001094

Li, W. (n.d.). Chinese Culture and Customs. Fudan University, 42.

Lin, L., & Mao, P.-C. (2015). Food for memories and culture - A content analysis study of food specialties and souvenirs. Journal of Hospitality and Tourism Management, 22, 19-29. https://doi.org/10.1016/j.jhtm.2014.12.001

Ma, G. (2015). Food, eating behavior, and culture in Chinese society. Journal of Ethnic Foods, 2(4), 195-199. https://doi.org/10.1016/j.jef.2015.11.004

Meladze, M. (2015). THE IMPORTANCE OF THE ROLE OF LOCAL FOOD IN GEORGIAN TOURISM, 6.

Mexico City cultural policy declaration. (2018, February 2). Retrieved 11 January 2019, from www.sohu.com/a/220441421_734807

Micropædia. (1999), 5, 55.

Mitchell, R., & Hall, C. M. (2003). Consuming tourists: food tourism consumer behaviour, 60-80.

Mo, F. (2017). Research on the social and cultural impact of tourism on destinations. Central south university of forestry and technology, (03), 77.

Pan, S. (1997). Tourist ethnology. Guizhou nationalities press.

Peng, Yan Jiao. (2018, September 1). Year 2017 tourism statistics report. Retrieved from http://www.cnta.gov.cn/xxfb/jdxwnew2/201801/t20180109_852953.shtml

Peštek, A., & Činjarević, M. (2014). Tourist perceived image of local cuisine: the case of Bosnian food culture. British Food Journal, 116(11), 1821-1838. https://doi.org/10.1108/BFJ-01-2014-0046

Sanders, E. B.-N. (2013). Prototyping for the design spaces of the future., 8.

Scarpato, R. (2002). Gastronomy as a tourist product: The perspective of gastronomy. London, 51-70.

Sims, R. (2009). Food, place and authenticity: local food and the sustainable tourism experience. Journal of Sustainable Tourism, 17(3), 321-336. https://doi.org/10.1080/09669580802359293

Sun, L. (2009). On the translation of Chinese scenic spot names. THE SCIENCE EDUCATION ARTICLE COLLECTS, 182-182.

Sutton, D. E. (2010). Food and the Senses. Annual Review of Anthropology, 39(1), 209-223. https://doi.org/10.1146/annurev.anthro.012809.104957

Tan, Y. (2013). Study on Hunan province food culture and communication strategy. The university of Hunan province, (05), 71.

Tylor, E. B. (1871). Primitive Culture: Researches Into the Development of Mythology, Philosophy, Religion, Art, and Custom. J. Murray.

UNWTO. (2017, November 17). International tourism on track for a record year | World Tourism Organization UNWTO. Retrieved 3 February 2018, from http://media.unwto.org/press-release/2017-11-06/international-tourism-track-record-year Urry, J. (1990). The Tourist Gaze. Leisure and Travel in Contemporary Societies. Sage Publications.

Wang, J. (2015). "A Bite of China"- Analysis of traditional food culture. Zhejiang Normal University, (03), 67.

What is Design Thinking? (n.d.). Retrieved from https://www.interaction-design.org/literature/topics/design-thinking

Yang, T. (2017). Research on the integrated development of ancient culture street and tourism in Tianjin. Tianjin university of technology, (10), 60.

Yao, W. (2014). Food: the foundation of Chinese traditional culture. Journal of nanning vocational and technical college, 19(04), 1-5.

Zealand (www.bka.co.nz), S. designed and developed by bka interactive ltd, Auckland, New. (n.d.). Food allergies |Health Navigator NZ. Retrieved from https://www.healthnavigator.org.nz/health-a-z/f/food-allergies/

Zhang, H. (2004). Comparison of 'flow' and 'play' -- a preliminary exploration of leisure aesthetic feeling. Journal of Shanghai university (social science edition), 36-40.

Zhu, D. (2008). Research on the influence of tourism on rural cultural inheritance. Beijing forestry university, (01), 87.

LIST OF IMAGES/FIGURES

Figure 1.

Mo, F. (2017). Research on the social and cultural impact of tourism on destinations. Central south university of forestry and technology, (03), 77.

Figure 2.

Mo, F. (2017). Research on the social and cultural impact of tourism on destinations. Central south university of forestry and technology, (03), 77.

Figure 3. Dam, R., & Siang, T. (2018). 5 Stages in the Design Thinking Process. Retrieved from https://www.interaction-design.org/literature/article/5-stages-in-the-design-thinking-process

Figure 4. Lin. (2018). Preparation before the trip.

Figure 5. Lin. (2018). Chinese food books and travel guide books.

Figure 6. Lin. (2018). Top Left: Lonely Planet travel guide book.

Figure 7. Lin. (2018). Bottom right: Lonely Planet travel guide book page of Changsha.

Figure 8. Lin. (2018). The Broke Backpacker" "Goats on the Road "and "Backpacker" travel blog's' finding results.

Figure 9. Lin. (2018). "Claire's footsteps" blog, 'China' category.

Figure 10. Lin. (2018). "Backpacking to Changsha blog" searching results.

Figure 11. Lin. (2018). 'Changsha' searching result on YouTube.

Figure 12. Lin. (2018). Lonely Planet app searching for 'Changsha' result.

Figure 13. Lin. (2018). Lonely Planet website about Changsha restaurants.

Figure 14. Lin. (2018). TripAdvisor website about Changsha restaurants.

Figure 15. Lin. (2018). The local food is important in a trip.

Figure 16. Lin. (2018). The methods of chosen local food in destination.

Figure 17. Lin. (2018). The expectation of restaurants.

Figure 18. Lin. (2018). The interview for five key points people.

Figure 19. Lin. (2018). Interview questions.

Figure 20. Linshideaiqing. (2017, September 29). Tai Ping Street, Changsha [Photograph]. Retrieved from https://kknews.cc/travel/b4mog5j.html

Figure 21. Lin. (2018). Focus group record and notes.

Figure 22. Lin. (2018). Changsha local food, "Tang You Baba".

Figure 23. Lin. (2018). Brief brainstorm.

Figure 24.

Yang I. (2017). The study of foreign tourists travels in China and attitudes toward Chinese cities in 2017, 45.

Figure 25.

Yang I. (2017). The study of foreign tourists travels in China and attitudes toward Chinese cities in 2017, 45.

```
Figure 26. Lin. (2019). Logo sketch
Figure 27. Lin. (2019). App Logo
Figure 28. Lin. (2018). Zomato app analysis.
Figure 29. Lin. (2018). Airbnb app analysis.
Figure 30. Lin. (2018). Airbnb app register page.
Figure 31. Lin. (2018). Airbnb app homepage.
Figure 32. Lin. (2018). TripAdvisor app analysis.
Figure 33. Lin. (2018). TripAdvisor app offline download page.
Figure 34. Lin. (2018). Five different personas.
Figure 35. Lin. (2018). Personas' journey map.
```

Figure 36. Lin. (2018). User wireframe version one.

Figure 37.

AiXiangNong. (2018). Chou dou fu. Retrieved from http://www.073192.com/wap/companynews/470.html

```
Figure 38. Lin. (2018). Persona Michael wireframe version one.
Figure 39. Lin. (2018). Wireframe version one test.
Figure 40. Lin. (2018). 'Language switching' practice.
Figure 41. Lin. (2018). Wireframe version two.
Figure 42. Lin. (2018). Wireframe version two test.
Figure 43. Lin. (2018). User interface.
Figure 44. Lin. (2018). Interface colour choice.
Figure 45. Lin. (2018). User interface print out.
Figure 46. Lin. (2018). High definition paper prototype testing.
Figure 47. Lin. (2018). Simulate as a tour guide for foreigner.
Figure 48. Lin. (2019). 'What Chī provide' screen
Figure 49. Lin. (2019). 'On Boarding' screen
Figure 50. Lin. (2019). 'Profile' screen
Figure 51. Lin. (2019). 'Conversation tips' screen
Figure 52. Lin. (2019). 'Translation' screen
Figure 53. Lin. (2019). 'Text translate' screen
Figure 54. Lin. (2019). 'Dining etiquette' screen
Figure 55. Lin. (2019). Notification screen
Figure 56. Lin. (2019). 'Dish information' screen
```

APPENDIX



Date: 10 May 2018

Dear Danjing Lin

Re: Ethics Notification - 4000019486 - Human Ethics LowRisk

Application for user research project: A Culture Cuisine Guide for the EnglishSpeaking

Visitor in a Nonmajor

City in China

Thank you for your notification which you have assessed as Low Risk.

Your project has been recorded in our system which is reported in the Annual Report of the Massey University Human Ethics Committee.

The low risk notification for this project is valid for a maximum of three years.

If situations subsequently occur which cause you to reconsider your ethical analysis, please contact a Research Ethics Administrator.

Please note that travel undertaken by students must be approved by the supervisor and the relevant Pro Vice-Chancellor and be in accordance with the Policy and Procedures for Course-Related Student Travel Overseas. In addition, the supervisor must advise the University's Insurance Officer.

A reminder to include the following statement on all public documents:

"This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named in this document are responsible for the ethical conduct of this research.

If you have any concerns about the conduct of this research that you want to raise with someone other than the researcher(s), please contact Associate Professor Tracy Riley, Acting Director - Ethics, telephone 06 3569099 ext 84408, email humanethics@massey.ac.nz. "

Please note, if a sponsoring organisation, funding authority or a journal in which you wish to publish requires evidence of committee approval (with an approval number), you will have to complete the application form again, answering "yes" to the publication question to provide more information for one of the University's Human Ethics Committees. You should also note that such an approval can only be provided prior to the commencement of the research.

Yours sincerely

Research Ethics Office, Research and Enterprise

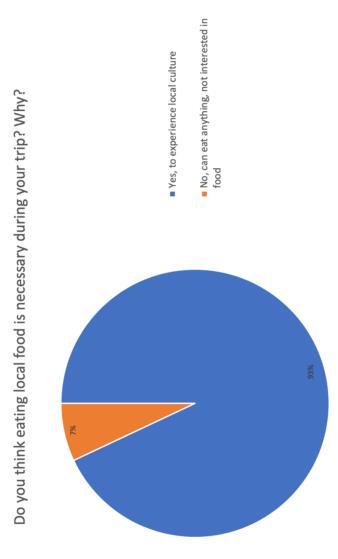
Massey University, Private Bag 11 222, Palmerston North, 4442, New Zealand T 06 350 5573; 06 350 5575 F 06 355 7973

E humanethics@massey.ac.nz W http://humanethics.massey.ac.nz

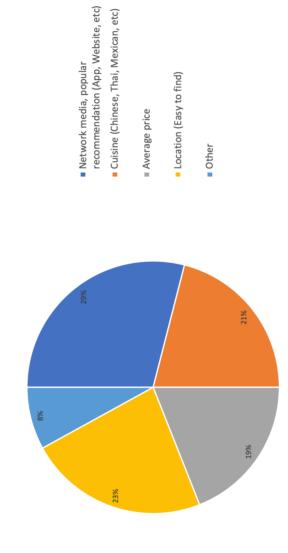
Human Ethics Low Risk notification

Associate Professor Tracy Riley, Dean Research Acting Director (Research Ethics)

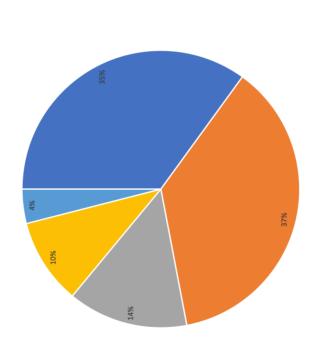
Trang the



When you travel abroad for the first time, what methods do you use to choose a restaurant?



What is your expectation of the restaurant?



- Environment and atmosphere (Clean, comfortable, good service, etc)
 - Food quality (Taste, serving size, etc)
- Special catering (Religious, vegetarian, allergens, etc)

Other

112

Interview Script

Local eating house (in China)

Q: Could you tell me about this eating house and your position?

A: I'm the owner of this eating house, this eating house was start with my grandfather. We sale limited number of dishes per day, for make the food fresh, because all ingredient we buy every morning.

Q: Have you interacted with tourists? Chinese or foreigners? What kinds of question do they usually ask? Have any of your customers asked you about the background of the dishes such as its cultural history? Do your customers ask you about the ingredients in the dish? Do they ask about the ingredients just for curiosity or is there a reason for it such as allergy?

A: If is not busy, I do talk to tourists. More Chinese or foreigners with Chinese friends, well, I don't speak English. Normally ask, how long is the eating house, why we only do this dish, is the sauce homemade. They do ask some our food background, wants to know how the dish become a local food and why. Yes, some people will tell as, what they can't eat, that is for allergy or just doesn't like. Some customer wants to know the recipe of the sauce, because says very good, but, no, that is a secret.

Q: Back to history of the food, do you know the background of these traditional foods? (or...can you give me an example?)

A: Yes, I know, I heart from my grandfather, says A businessman named Wang Zhihe, he opened a tofu workshop. One summer, because his son got married and needed money, he asked the whole family to work hard to make tofu... Who knows, a lot of tofu was left, the weather is very hot, and no refrigerator was invented at that time. In the evening, the tofu starts to yellow, ferment, and then stinks! Wang Zhihe thought that his mother told him that if wanted to put the food for a little longer, would spread salt on it, just like pickled radish! He thinks this method may also work for tofu. So, he sprinkled a lot of salt on the tofu, and sprinkled some spices like pepper powder, and then asked people to carry it to the shade of the back hall. After a few days, the back of the store was full of strange smells. Wang Zhihe ran to the back hall and saw that the white bean curd became a piece of "green square". He picked up a piece and put it in his mouth. He cried in surprise: "Oh! I have made a tofu for a lifetime. I have never tasted such a delicious taste!" Wang Zhihe immediately mobilized his wife and children and put "Qingfang" all Moving out of the store and selling. This strange smell caused many people to watch. Some people bought a few pieces out of curiosity and went back to taste it. They felt that the taste was very delicious. After the news spread, everyone rushed to buy, stinky tofu was quickly snapped up.

Q: Does your restaurant appear in any food app? What information is provided? How did you choose what information to provide?

A: Yes, Dianping, Meituan, Elema. Menu, food picture, address, phone, open hours, these basic information.

Foreigner (live in China)

113

- Q: How long have you been in China? Why do you come to China? What makes you choose to stay in China? Anything else you'd like to share about yourself—especially concerning your dining preferences??
- A: 5 years in China, wants to build a business in here, for choose stay here is because China has more work opportunity and more food. Now when I back to UK, the Chinese food in Chinatown is different that I eat in China and I can eat very spicy now, before I cannot eat any spicy.
- Q: Do you remember how you chose food when you first arrived in China. What was your first impression of local food?
- A: Yes, I do remember. Was my colleague bring me to try, was very spicy, but very tasty
- Q: What are your thoughts when you are trying something that you have never eaten before? Good...any stories?
- A: Feelings not bad, actually I like to try new thing. And in Guanzhou city, no people eat hot, I was surprised when I first time go to Guangzhou, I thought every Chinese eat spicy food.
- Q: You have been in China for some time. Do you know all the local food? Do you understand the food's background?
- A: The food from the city that I live I know almost local food. I do understand a bit of the food's background.
- Q: Do you think the background of the food is important (especially as a foreigners), why?
- A: Yes, is important. Because you can learn new thing and will easier get into the local life.
- Q: Have you used a guidebook, brochure, app, etc. That is about Chinese local traditional food designed specifically for foreigners? How was it helpful? How could it be more helpful?
- A: Yes, I use TripAdvior and booking.com in China, just use for when I go travel. For now, no an app about Chinese local traditional food designed specifically for foreigners. If I want to eat local traditional food, I will just ask my Chinese friends. If in the future will have a stuff is about Chinese local traditional food designed specifically for foreigners, with a translation and map to destination will be great!

Chinese restaurant owner (in New Zealand)

- Q: Could you please tell me about your restaurant? How long have you been operating this restaurant? What kinds of cuisine do you offer that is traditional to this area? Why chooses that area? Please introduce this Chinese restaurant?
- A: This restaurant is in Nelson, already 10 years for doing operating. Is Guangzhou

and Sichuan food. The last owner of this restaurant is doing Guangzhou cuisine, just continued, add Sichuan cuisine is because the Chinese student from NMIT, more student like spicy style.

- Q: Tell me about the kinds of tourists you've met in your restaurant. Where do they come from? Why are they interested in the food here? What questions are usually asked?
- A: Independent traveller and tour group, normally from Europe or Asian. Get interested with embellishment first, then dish later. Will ask the style of the embellishment and the food taste.
- Q: Based on your experience, do you get more Chinese or kiwis or other customers? Why do you think so?
- A: More kiwis then Chinese. Frist is the price, second is the Chinese eat too much Chinese food when they in China, so they want to try something different.
- Q: What questions are typically asked by customers who come to eat here?
- A: What the dish made from or what the dish have inside.
- Q: Have you ever been asked about Chinese (food) culture by your customers? What do they ask?
- A: Yes, always. What is the original name of the dish, how do you pronounce it? Why is this name, has some reason?
- Q: The taste of your dishes—is it an original Chinese recipe or has it been modified to match the local's and/or foreigner's people's taste? Why?
- A: Before was match the local's taste, but now is more original taste. Because local are more ask the original taste and also more Chinese student and Chinese traveller come.

Interesting for China

- Q: Introduce yourself and why you are interested in China (especially food)?
- A: Stephanie, from US, now working in NZ. Chinese food really testy, my husband and I really like it, we go Chinese restaurant every weekend.
- Q: Where did you learn about China and what is your impression of China's food? What is the most anticipating thing that you would look forward to in China concerning food?
- A: I learned about China from the online, book, channel, a lot of place. Chinese food is testy and too much way to cook, even for a same ingredient. Some food that I didn't try from US Chinese restaurant.
- Q: How many Chinese dishes do you know? Why do you like these dishes?

- A: Quite a lot, like Kongpo chicken, Mapo toufu, hot pot.... I like spicy, and these foods is really delicious.
- Q: When you go to a Chinese restaurant, what is your focus? why?
- A: Menu suggestion, flavours, guess ingredients and to see how other people eat. Wants to try the good teste food and learn the traditional way to eat.
- Q: What do you think about the food culture?
- A: Is the part that should to know, but don't go too deep, better with some fun stories.
- Q: Would you consider using some type of media (guidebook, brochure, app, etc.) that is about Chinese local traditional food designed specifically for foreigners? How would it be helpful? How could it be more helpful? What food related features would you want available in the media?
- A: Yes, I would like to use, better with app or website, is more convenient, can give me more opportunity to try food! I would like to know the eating step (how to eat), store of the dish, atmospheres to give me special food experience.

Allergy person (New Zealand citizen travelled to China)

- Q: Tell me about yourself—especially your dining preferences. Do you/why do you like Chinese food?
- A: First time been to China was my 8 years, because my parents work in China. I like Chinese food is because the flavour, all flour made food. But I had gluten allergise when I was 16 years, after that, I can't eat a lot food in China.
- Q: What were your favourite foods when you were in China? Why? Do you know or learn some cultural history of the food?
- A: Traditional Chinese rice-pudding was my favourite food. Same thing can make for sweet and salt both flavour and teats very fresh. Yes, I learned same cultural history of the food
- Q: If you have food allergy (e.g., glutton), when you were/are in China, how did you dine out?
- A: Normally no dine out, presents cook. If do dine out, will be the place that often to go with presents or have friends help in the restaurant. No along dine out.
- Q: If there were media (guidebook, brochure, app, etc) that is about Chinese local traditional food, designed specifically for foreigners, what features and functionality would you want available in the media?
- A: First needs to show the food ingredient inside or allergies tips. Second, can help me communicate with restaurant will be good.



