Hands and Chopsticks, How to Eat
A Comparative Study of Javanese and Japanese Eating Culture
and Utensil Designs

Maharani Dian Permanasari

Abstract
We are how we eat. The distinctive Javanese and Japanese eating styles inspired me to study both eating cultures. I will investigate three aspects of cooking and eating: the behavioral pattern in eating activities; cooking and eating utensil designs; and the layout of kitchens and dining rooms where most activities take place. The research methods combine literature review with several approaches from Anthropology and Design, such as ethnography, participatory observation, interviews, and design-thinking methods. This research is conducted on Japanese people in Ishikawa and Javanese people in Indonesia. The study focuses on interviewing and observing Japanese and Javanese residents in local cities who maintain traditional customs in their daily life. I conduct a comparative study between Japanese and Javanese culture of eating in order to gain insights for eating utensils design development. This study explores human and product interactions in eating culture to predict changes in the patterns of eating culture. I found similarities in handed down traditions, feudal structure in eating activities in both cultures, and the use of hands as an essential part of eating culture. Javanese and Japanese eating styles reflect their dynamic traditions, and I am hoping to see these traditions flowing to the future.

Keywords: eating culture, behavioral pattern, eating utensils
1. Introduction: Research Background

“What is it about food that makes it an especially intriguing and insightful lens of analysis?” a concluding remark in Food and Culture (Counihan and Van Esterik, 2013: 11) inspires us to learn more about food and its association with cultural change. Eating activities shape culture, particularly the food culture, which has abundant developing possibilities.

Food culture is a recently discussed topic, which can be described within several essential spheres such as types of meal event, cooking and eating activity, utensils, the space where the activity takes place, and so on. Eating could be an instrumental activity to satiate our hunger, and eventually become a savoring activity by enjoying the food for the sake of pleasure or entertainment, or even become an inspirational one with the emerging trends such as slow cooking and raw food movement. The distinctive way of “eating” is one main element in cultural identity, and that inspires me to conduct this study. The way we eat may be changed through time, but there are always the handed down traditions that distinguish one’s eating culture from another.

The main concern of this research is on the interaction between behaviors of the people and the utensils they use. I will focus on three main elements: the eating pattern, the utensil designs, and the use of space/setting where cooking and eating activities take place.

As a cultural identity, “eating” has a lot of features, such as historical and geographical background, religion, external influences, economic, social and lifestyle development, etc. The main concern of this research is the behavioral pattern and how it affects the interaction between the user and the tools/eating utensils. The development of eating utensils design is bound by various constraints, such as cultural constraints, habits and behavior of the people, mannerisms and customs, materials, and also trends or design forecasts of the eating utensil products. This research combines ethnography and design thinking methods, starting from insight into validation seeking.

This ethnographical research was conducted from March until September 2014 among Japanese families in Ishikawa prefecture and Javanese families in Indonesia, which maintains their traditional culture in local cities. Both the Japanese and Javanese cultures
are well known throughout the world for their long history, tangible and intangible cultural heritage such as art, crafts, traditional music, cuisines, folktales, mannerisms, non-verbal communication and language structure. Japanese and Javanese cultures share similarities in many cultural aspects, yet have markedly different eating cultures.

This comparative study combines literature review with approaches from anthropology and design, such as ethnography, observatory participation, face-to-face interaction and interviews, and design thinking methods including analyzing insights by sketching and drawing. The approaches mentioned are used to analyze three main discussions:

How the behavioral pattern in eating activity affects the interactions between the user and the utensils.

How the activities and movements within the cooking and eating space/area affect the eating culture.

How eating utensil designs complement the eating culture.

2. Outline of Japanese and Javanese Eating Culture

Ashkenazi and Jacob (2000: Chapter Two) explain that the understanding of any particular food culture must take into account the historical and environmental factors that have brought the elements of that culture into being. Social institutions also have strong immediate effects on individual behavior concerning with food. The central “locus” and arena of activity of food behavior is family. The household or family is where most humans are first encounter and learn about food, proper behavior in the presence of food, and the ideologies and beliefs associated with food. Family is the basis for food practices in life, ranging from cooking and eating to changes in food culture. Following this argument, my research also focuses in the behavioral patterns of eating in households.

2.1. Eating Culture in Japan

2.1.1. Historical Background

Behavioral patterns in eating culture of Japanese households are based on some
“rules” pertaining to all elements of a food culture, which are followed throughout a society. Within any human food culture, there is the main staple or major food event we call “meal”. It generally includes a central carbohydrate consumed in the domestic sphere (a home) with its normative structure. It is also composed of many elements beside the ingestion of food. Some rules for meal include the food choice, order of the menu, and diners and their behavior.

The dining experience itself is considered as a personal experience –or often called “emic” by anthropologists to explain the realm of subjective evaluation, emotional response- but the ”etic” –those parts that can be described objectively or materially- is also essential. Two main issues of “etic” (objectively identifiable) and “emic” (conscious or unconscious expressions of cultural concern) in the Japanese thinking are: topographical and climatic nature of the Japanese islands, and cultural influence from the mainland, specifically China and Korea and Europe and America later on (Ashkenazi and Jacob, 2000: 37).

In Japan, many food-related issues are concerned with the difference of classes or status in society, which started by the rise of aristocratic-bureaucratic state from the eighth to the twelfth centuries. During that period, Japanese society was organized into formal system classifications that brought different ideology and practices in terms of the food they ate and the ways in which they consumed.

Religion was also influential in the shaping of Japanese cuisine. Shinto as the original religion of the Japanese peoples’ beliefs prescribes that what we consume should concern about naturalism and purity. Buddhism elaborated offerings of food. Both religions have formed the aesthetic base for many of the Japanese food’s preparation and presentation, such as: freshness, balance, and restraint (Ashkenazi and Jacob, 2000: 42).

Throughout its history, Japanese cuisine has managed to maintain and protect its own inherent basic characteristics, particularly in the underlying philosophy and a cluster of features. One thing that is staying constant in the Japanese food culture is the consumption of rice as the main staple food, since the authorities encouraged rice cultivation from the emergence of the Japanese state in the eighth century AD.

The methods of rice cultivation and the use of the common Japanese eating utensils –chopsticks and bowl- were adopted from China. Japan has not been just a borrower but
rather been an innovator in the sense that the Japanese have absorbed and modified their imports. The Japanese still maintain their characteristic dining of seasonal-theme. This includes not only the material for the course, but also the sets of dishes, serving plates and utensils, even the scents of the food. Attention was given to make the dining experience more enjoyable in various sensory delights like visual, taste, tactile, texture, handedness, and olfactory sense.

In sum, cooked rice as its main carbohydrate source, with side dishes and cooking methods adapted from a number of various foreign sources characterize Japanese cuisine. The Japanese has modified imported foods and methods of processing, thus has made them become their own original Japanese foods.

2.1.2. Schematic Structure of Japanese Meal

A basic Japanese meal called *ichiju issai* (one soup-one vegetable) consists of three elements: a carbohydrate (rice), a soup (*suimono*), and a side dish (*okazu*). In later period, the amount of the side dish expanded into three, thus it called as *ichiju sansai* (one soup, three dishes). The principle of *ichiju sansai* is codified within the structure of *kaiseki* (Japanese Tea ceremony cuisine, an aesthetic standard which is partially responsible for the preservation of the aesthetic principles in Japanese cuisine). Today the components of side dishes of the codified meal are simplified into home cooked dishes (*sozai*) and is found in the everyday meal occasions.

An important element of this principle is modularity, for example: a rice bowl must fit the hand, must be of rounded shape, cannot contain too much, and so on. The association with the Tea ceremony gives attention to the rice bowl as the most refined utensils in eating activity. Rice is the centerpiece of the meal, without which the event could not be defined as a proper meal. Meanwhile, in serving the soup (*suimono*), the normative ideal is to serve it in lidded lacquered wooden bowls.

In accordance with the variance in ingredients and cooking method is the variety of utensils and their constituent materials, ranging from ceramic, stoneware, glass, wood, leaves, and stones. The plate on which a dish is served is as much a part of the dish itself, and in fact each item in a Japanese meal is intended to be a piece of art itself, thus great
care is taken in selecting the proper setting for the food (Ashkenazi and Jacob, 2000: 76).

Japanese meals are highly structured events, and defined by the central position of rice whose presence is culturally very important. The relationship between each element in Japanese meal is ruled by consistency and appropriateness.

2.1.3. Aesthetics in Japanese Food

The aesthetics of Japanese cuisine is based not solely on taste, but also on the visual presentations. In serving the meals, Japanese people present the concept of nature which is supposed to be simple, uncomplicated, and to embrace a deep meaning of life. They also put a great attention to color as it allows a subtle visual appeal. Ashkenazi and Jacob (2000: 76) mentioned about Kitaoji Rosanjin –a potter and a cook- who is best remembered by his insistence that pottery utensils must be designed to fit the foods that are to be served. By this, Rosanjin meant more than merely about shape, but also texture and glaze, colour and form. In effect, Rosanjin took the heart of Japanese philosophy and aesthetics –the need for harmonising disparate elements of experience- into the expressions of Japanese cuisine in the shape of naturalism and harmony.

External influence also affects the Japanese eating utensils. Korean pottery imported to Japan in the fifth century made a gradual switch from the native practice of heavy reliance on wood to ceramics. The use of ceramics fit for the serving of food, because a ceramic bowl keeps the rice warm while insulating the user’s hand. Thus, ceramic came to be material of choice for containing and eating rice, and the shape was adapted to be comfortable in the hand.

The materials of rice bowl is essential, because at a regular meal, the rice bowl is to be brought to the lips, and must fit the hand comfortably. When the Japanese people choose a rice bowl to buy, they usually hold it and weigh it with imaging they use it in their meals.

Shintoism and Buddhism also influenced Japanese daily meal in the food arrangement they made on food trays, the use of relatively simple blocks of colour except in formal offerings, and also in the philosophy of purity expressed in simple lines, natural wood of the trays, and the use of plain white paper. Moreover, Zen Buddhism emphasizes relations between individuals, humans, the divine and the nature. The ideas of simplicity, and
‘naturalness’ in Japanese cuisine owe a great deal to Zen.

2.2. Eating Culture in Java

2.2.1. Historical and Geographical Background

Indonesia is the world’s biggest archipelago comprising more than 17 thousands islands of which about six thousands are inhabited by the Indonesian citizens nowadays. Located in equatorial line with ring of volcanoes, the lush Indonesian archipelago has been an important trade region since at least the 7th century, when Srivijaya Kingdom and then later Majapahit Kingdom traded with merchants of China and India. Local kingdom rulers then gradually absorbed foreign influences, which caused Hindu, Buddhist, and Islamic kingdoms flourished, replacing the previous animism belief. Indonesian abundant resources have drawn foreign powers to invade the region, particularly European, to monopolize the spices of Indonesia. After three and a half centuries of Dutch colonialism and three and a half year of Japanese invasion, Indonesia proclaimed its independence in 17 August 1945.

Indonesian nation consists of hundreds of ethnic groups, 95% of which are of native Indonesian ancestry, including Javanese people as the largest ethnic group. The Javanese are an ethnic group predominantly located in the central to eastern parts of Java Island. The Javanese civilization has been influenced by the native animism “Kejawen” and the Indian Hindu-Buddhist culture, and the influences are still visible in Javanese history, culture, traditions, and art and crafts. The majority of the contemporary Javanese identify themselves as Muslims, with a minority identifying as Christians and Hindu.

The Javanese people have been influenced by feudal structure since the era of Javanese Kingdoms, Dutch colonialism, until today. The structure affects various socio-cultural aspects, including eating culture.

2.2.2. Behavior and Habits in Javanese Eating Culture

Javanese people eat rice as their main staple food, and they consider as not having a meal if they have not eating rice yet. For the agrarian Javanese, rice symbolizes
development and prosperity. The Javanese cuisine is a harmony of each of its element: rice, meat, and vegetable, mixed together on a round plate.

Javanese people are familiar with meal events, because eating activities are related with the wider socio-cultural phenomena. They have the concept of “gugon tuhon” (taboo; unwritten norms that are passed down in words), a tradition that is passed on through generations as quoted below.

“Eating, for Javanese people, can not be done with walking, standing, talking, or in sleeping position. In the tradition of Javanese, food has become the frame of social life. The concept of ‘ora ilok’ (what is proper and improper) is closely related with food and eating activity. In other words, eating is not only putting foodstuffs into our mouth, but also a construction of wider socio-cultural scope.” (Translated from Endraswara, 2010: 146)

Before came the influence of European culture, the using of hands to eat was more widely popular than spoon and fork. Javanese people tended to eat in the kitchen, whether it is on the bamboo bench or on the floor. They eat in the living room if they have guests. They traditionally put the foodstuffs on banana or teak leaf before they knew eating utensils like ceramic or stainless plates. Until today, banana leaves are still widely used to cover the plate before they put the foodstuff on it. Influenced not only by European culture but also by India, Arab, China, and Japan, the Javanese people developed their eating culture dynamically without leaving the traditional trail behind.

2.3. The Changes of Japanese and Javanese Eating Culture

In Japanese household, mothers usually prepare the meal for their family. A very generalized picture of Japanese domestic food is as follows: three meals and two to three snacks a day. Japanese housewives cook regularly for their family and sometimes also buy the food outside if they are too busy. Modernity affects Japanese culture to become more instant and efficient as explained by Ashkenazi and Jacob (2000: 56). They state that the relatively small size of the most Japanese houses prescribes the cultural preference for
‘modularity’ in life. Accordingly, most kitchen utensils and furnishings have to be appropriately small.

Not only the kitchen and utensils but the eating pattern also have changed. The move of Japanese society into a consumer-oriented economy and society, and also the rise of expectations from both men and women in making two-income households, have caused the use of convenience foods increased. Convenience foods are an extension of traditional service such as delivered foods or demae and take-away (mochikaeri) since the Edo period. Convenience foods require little preparation. This also brought the proliferation of public eating-space, which offers Japanese households to eat outside. Breakfast, however, are generally prepared by mother everyday.

As similar as in Japanese culture, the essential role of the women/mothers in Javanese culture is to prepare the meals for their family. Javanese people also have three meals a day (breakfast, lunch, dinner), which includes rice as the main element. There are no major difference between Javanese eating pattern in the past and nowadays, except some development on the utensils.

Japanese and Javanese daily meals contain cultural meanings implied in the arrangement or in the portion of the food elements.

3. Ethnography of Japanese and Javanese Eating Culture

3.1. Japanese Families in Ishikawa, Japan

The first phase of my ethnographic research by observing and interviewing five Japanese households in local cities in Ishikawa prefecture was conducted from March until July 2014. I participated in their activities — cooking and preparing the food — before eating together with the informants. There are five informants in my research, three of them are working either a full-time job or a part-time one while one other is already retired, and the last one is a housewife. All of them prepare the food for their family everyday.

Details of the research is explained in Table 1 below:
### Table 1 Ethnographical research in Ishikawa

<table>
<thead>
<tr>
<th>No</th>
<th>Date</th>
<th>Informant</th>
<th>Place of Residency</th>
<th>Research Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>March 2014</td>
<td>Mrs. A</td>
<td>Kanazawa, Ishikawa</td>
<td>Participatory observation, interview (cooking, eating)</td>
</tr>
<tr>
<td>2</td>
<td>April 20, 2014</td>
<td>Mrs. A</td>
<td>Kanazawa, Ishikawa</td>
<td>Participatory observation, interview (cooking, eating)</td>
</tr>
<tr>
<td>3</td>
<td>May 25, 2014</td>
<td>Mrs. A</td>
<td>Kanazawa, Ishikawa</td>
<td>Participatory observation, interview (cooking, eating)</td>
</tr>
<tr>
<td>4</td>
<td>July 17, 2014</td>
<td>Mrs. B</td>
<td>Kanazawa, Ishikawa</td>
<td>Observation, interview</td>
</tr>
<tr>
<td>5</td>
<td>July 20, 2014</td>
<td>Mrs. C</td>
<td>Komatsu, Ishikawa</td>
<td>Observation, interview (eating)</td>
</tr>
<tr>
<td>6</td>
<td>July 24, 2014</td>
<td>Mrs. D</td>
<td>Kanazawa, Ishikawa</td>
<td>Observation, interview</td>
</tr>
<tr>
<td>7</td>
<td>July 25, 2014</td>
<td>Mrs. E</td>
<td>Kanazawa, Ishikawa</td>
<td>Observation, interview</td>
</tr>
</tbody>
</table>

Most of the participants’ kitchen is equipped with cabinet pantry, shelves and storage to accommodate the relatively small space. It is usually located near dining room, either with a distinct border or in unison. The activities of cooking mostly take place in the kitchen. Due to limitations of space, the kitchen’s design should accommodate the movement efficiently. One pantry and cabinet generally fill the kitchen area, and storage such as cupboard, shelves, or hidden compartments could be placed in the kitchen or near the dining room.

The Japanese people preparing the food start by rinsing the foodstuffs under the water tap, and cutting them on the cabinet area near the stove. Then they cook on the gas stove and bring the cooked meal to the dining table. Through this process, their activities are restricted to a small space so as to limit mobility and necessitate efficiency.

### 3.2. Japanese Food Arrangement

The principle of Japanese food arrangement (*moritsuke*) replicates the traditional “nature-oriented” arts of Japan, which share the aesthetic principles with—*ikebana* (Japanese flower arrangement). Traditionally, Japanese meals were, and only in limited cases are served on a tray. A schematic structure of the Japanese meal consists of four elements: a carbohydrate (rice), a soup (*suimono/shirumono*), main dish (*shusai*), and
sub-dishes (fukusai). This arrangement is called *ichiju-sansai* (one soup, three dishes), which is the development of *ichiju-issai* (one soup, one dish).

The principles of *ichiju sansai* are codified within the structure of *kaiseki* (Tea ceremony cuisine, which is partially responsible for the preservation of the aesthetic principles of Japanese cuisine as coherent standards (Ashkenazi, 2000: 73). In this tradition, Japanese meals have developed as highly structured events ruled by consistency and appropriateness.

We can also see the implementation of Japanese traditions in cooking and eating utensils. Generally, Japanese people use chopsticks and several types of bowls. There are two types of Japanese chopsticks - regular chopsticks or *hashi*, and kitchen chopsticks or *saibashi*. *Saibashi* generally are 30 cm or more long. They are not designed for eating; they are used for cooking and meal placement. The materials are usually from wood or bamboo. Regular chopsticks are made from various materials such as bamboo, plastic, wood, metal, porcelain, or even bone, jade, and ivory.

Rice bowls and dish plates for *okazu* are made of ceramic; soup bowls are made of wooden lacquer ware, even though nowadays they are gradually replaced by plastic ones. Japanese households usually stock and use various types and shapes of dish plates. Each type and shape is used for a particular kind of dish: cooked fish, boiled meats and vegetables, pickles, dipping soy-sources, etc. Western dishes are mainly used for western style meals.
3.3. Japanese Eating Customs

Japanese people generally use chopsticks and hands in some occasion. Feudal structure also can be seen in the eating activity where the mother will serve the father before the children and herself. Japanese people generally sat in *seiza* position (folding both feet firmly) while having their meal served on a small desk-tray called *gozen*, before they got familiar with dining chair and table. Although the eating customs have gradually changed due to the modernization, the custom of saying “itadakimasu” before mealtime still prevails.

Another interesting point found in most of the informant’s households is their set arrangement for the daily utensils. Generally they have daily meals three times a day, and each meal consists of rice, *shirumono*, main dish, and sub-dish. This set of arrangement, which is called *ichiju sansai* as explained previously, could be served on a tray or on a table. The Japanese values the subtle flavor of food, thus they rarely mix their meals in one receptacle, except for *nabemono* in special occasion.

Most of the Japanese informants in this research personalized their eating utensils. For some Japanese families, the sense of belonging of the utensils is shown by the way they choose their rice bowls or chopsticks. It is unlikely for them to share their fixed eating utensils.

3.4. Javanese Families in Indonesia

The second phase of my ethnographic research is done from July until September 2014 towards Javanese families residing in several local cities in Indonesia, mainly in Java Island and East Borneo. The informants include those who maintain traditional lifestyle as well as those living in modern style.

Details of the ethnographical research is explained in Table 2 below:
Table 2 Ethnography research in Indonesia

<table>
<thead>
<tr>
<th>No</th>
<th>Date</th>
<th>Informant</th>
<th>Place of Residency</th>
<th>Research Activity</th>
</tr>
</thead>
<tbody>
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<td>1</td>
<td>August 9, 2014</td>
<td>Mrs. A</td>
<td>Lembang, West Java</td>
<td>Observation, interview</td>
</tr>
<tr>
<td>2</td>
<td>August 10, 2014</td>
<td>Mrs. B</td>
<td>Cimahi, West Java</td>
<td>Observation, interview (eating)</td>
</tr>
<tr>
<td>3</td>
<td>August 14, 2014</td>
<td>Mrs. C</td>
<td>Bojonegoro, East Java</td>
<td>Observation, interview</td>
</tr>
<tr>
<td>4</td>
<td>August 15, 2014</td>
<td>Mrs. D</td>
<td>Madiun, East Java</td>
<td>Observation, interview (eating)</td>
</tr>
<tr>
<td>6</td>
<td>August 16, 2014</td>
<td>Mrs. E</td>
<td>Ngawi, East Java</td>
<td>Observation, interview (eating)</td>
</tr>
<tr>
<td>7</td>
<td>August 19, 2014</td>
<td>Mrs. F</td>
<td>Yogyakarta, Central Java</td>
<td>Observation, interview (eating)</td>
</tr>
<tr>
<td>8</td>
<td>September 17, 2014</td>
<td>Mrs. G</td>
<td>Pasirian, East Java</td>
<td>Observation, interview (eating)</td>
</tr>
<tr>
<td>9</td>
<td>September 20, 2014</td>
<td>Mrs. H</td>
<td>Berau, East Borneo</td>
<td>Observation, interview (eating)</td>
</tr>
<tr>
<td>10</td>
<td>September 23, 2014</td>
<td>Mrs. I</td>
<td>Berau, East Borneo</td>
<td>Observation, interview</td>
</tr>
</tbody>
</table>

The concept of dining room does not exist for the Javanese people. Traditionally, the kitchen is in the same place with the dining area. They usually take the meal straightly from the stove and eat at anywhere they like, whether in the kitchen, in the outside of the house, in the living room, or anywhere as long as it is not crossing the rules of “gugon tuhon”, the Javanese traditions passed on through generations. Traditional Javanese households still use earthenware stove in their wide kitchen, while the contemporary one use gas stove. Semi traditional households use kerosene stove. The modern Javanese households already use electric or big gas stove complementing their well-designed kitchen pantry and cabinets.

All of Javanese kitchens researched, whether it is traditional or modern, use the same kind of utensils. Those utensils consist of ceramic plates, and spoon and fork made of stainless steel. Although there are some plates or dish made from stainless steel, the majority uses ceramic or plastic plates.

3.5. Javanese Food Arrangement

Javanese food arrangement follows philosophical wisdom of harmonizing every elements of the food by combining several elements on one receptacle. The Javanese meal
always include rice as the main carbohydrate source, “lauk pauk” or sub-dish that contains protein nutrient either from meat or plants, “sayur mayur” or vegetables as vitamin source, and “sambal” or chili paste to complement the meal.

The distinctive differences between the Javanese and Japanese food arrangement is the separation of the food. While the Japanese serve one set of meals for each person, the Javanese put the meal all at one place and each person takes the food to their plate. They still use banana leaf or teak leaf to wrap the food, or simply to cover the receptacles.

3.6. Javanese Eating Customs

Traditionally, Javanese people sit on the floor while eating using their hands, and the older male of their family member eat first before others. Javanese people nowadays sit on a chair and use spoon and fork to eat, and not necessarily wait the elders to eat although there is an unwritten rule on how each family member should eat properly. While eating, Javanese people usually sit in cross leg position or on the dining chair. There are not so many changes in eating customs, and praying before and after mealtimes still exist.

While eating with their hands, Javanese people pick up small portion of food with conical shape of fingers, and use the thumb to push the foodstuff into to their mouth. Javanese people also believe that they should not eat and sleep too much, because the tradition taught them to stay humble and be grateful for every blessing in their life. As for the food arrangement, because of the concept of “harmony”, each member of Javanese household needs one plate to put the rice together with the main and sub dish. They use any eating utensils without the sense of personal belongings of utensil.

4. Graphical Analyses

4.1. Interactions of Behavioral Pattern with Eating Utensils

Analysis on interactions of Japanese and Javanese behavioral pattern with eating utensils in this chapter can be divided into three aspects: hands gesture with and without
utensils, food arrangements, and sitting positions. In order to ease the understanding, I examine the data through graphic analysis.

First aspect is the behavioral pattern with and without eating utensils. Two main focuses in this aspect include the hand gestures with and without utensils, and the way of lifting the receptacles while eating. Behavioral pattern in Japanese eating culture, using chopsticks as their eating utensils:

**ANALYSIS**

* BEHAVIOUR IN EATING CULTURE — HANDS (JAPANESE)

1. PICK UP THE FOOD STUFFS FROM THE BOWL/DISH WITH CHOPSTICKS
2. LIFT UP THE CHOPSTICKS AND BRING FOODSTUFFS CLOSER TO MOUTH
3. PUT THE FOODSTUFFS INTO MOUTH

Figure 2 Japanese behavioral eating pattern using chopsticks
(Drawing by Maharani Dian Permanasari)

Behavioral pattern in Japanese eating culture, using hands:

**ANALYSIS**

* BEHAVIOUR IN EATING CULTURE — HANDS (JAPANESE)

1. PICK UP THE FOOD STUFFS (E.G. SUSHI) FROM THE DISH/PLATE WITH HANDS
2. LIFT UP HANDS AND BRING FOODSTUFFS CLOSER TO MOUTH
3. LIFT ОВАЯ WITH ONE HAND OR TWO HANDS AND BRING IT INTO MOUTH

Figure 3 Japanese behavioral eating pattern using hands
(Drawing by Maharani Dian Permanasari)

Behavioral pattern in Japanese eating culture, lifting the receptacles—either rice bowl
Japanese eating utensils are mainly chopsticks and bowl for rice or miso soup. Lifting the bowl is common in the Japanese eating culture.

In contemporary eating culture of Javanese people, spoons are common:

Eating with hands is also common for the Javanese; usually holding the foodstuff by four fingers and the thumb pushing it into mouth:
In the Javanese eating culture, it is considered as inappropriate to use left hands while eating, thus they don’t usually lift the plate with their left hand. The materials for the plate are also heavy, because it is meant to be steady on the floor or table. But nowadays, there are many plastic plates that are lighter and easier to be lifted while eating.

Both Javanese and Japanese maintain the traditional rules concerning with eating activity. In the Javanese customs, it is inappropriate to make sounds while eating, but in...
Japan it is better to make sounds while eating ramen or sipping tea or soup.

The second aspect in interactions of behavioral pattern with eating utensils is the food arrangements. There is a distinct contrast between Japanese and Javanese food arrangements. As explained in the previous chapter, Japanese food is generally arranged based on the *ichiju sansai* (one soup three dishes) principle. The foods are served in separated receptacles—whether a dish plate or bowls, divided by ranks as main dish or sub-dish. This kind of Japanese food set arrangements is often called as *washoku* style.

![Figure 8 Japanese food arrangements](image)

(JDrawing by Maharani Dian Permanasari)

Javanese food arrangements principle is to mix all the foodstuffs together in one plate. Usually, the dishes are served in separated serving plates divided by its materials. Afterwards, the father will lead each family member to put an amount of rice and small portions of each dishes on the eating plate.

The concept of “naturalness” and “harmony” in Japanese and Javanese eating culture also applied in their way of cooking the foodstuffs. The concept of “naturalness” in Japanese cooking implies the simple ingredients in order to enhance the subtlety of the original flavor of each foodstuff. Meanwhile, the principle of “harmony” in Javanese cooking requires a balance mix of ingredients and herbs to complement the natural taste of
The third aspect is the sitting positions and behavior while eating. Contemporary Japanese are using dining table due to many foreign influences, but traditionally they sit on tatami floor. This sitting position is called seiza, and it is originally derived from the customs in Japanese Tea ceremony. In some occasion, the meals are served in a traditional tray called gozen that is basically a food tray made from lacquered wooden materials. Both Japanese and Javanese are familiar with sitting on the floor, but Japanese is firmer in the way of sitting. Japanese people consider the cross leg sitting position improper in a meal occasion. In contrasts, Javanese tends to sit in the most comfortable ways on the floor before the Western influence introduced them to dining table.
Figure 10 Japanese sitting behaviors (Drawing by Maharani Dian Permanasari)

Figure 11 Javanese sitting behaviors (Drawing by Maharani Dian Permanasari)
4.2. The Efficiency of Space

This section examines the efficiency of kitchens and dining rooms where most activities take place. The term “space” here means the layout of Japanese and Javanese kitchens and dining rooms, and also movements in cooking and eating activities. The cooking activity of both Japanese and Javanese are basically same: cleaning the foodstuff by washing them using clean water, cutting and preparing, processing or cooking, and serving. To ease the understanding of cooking process, movement and activities in the kitchen area, I analyze through sketches and illustrations as below:

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• RESEARCH ANALYSIS – COOKING ACTIVITY - JAPANESE
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![Figure 12 Japanese cooking activity](image)

(Drawing by Maharani Dian Permanasari)

The Japanese informants begin their cooking activity from washing the foodstuffs using the water tap; then cutting and preparing on the kitchen counter; processing or cooking on the gas stove; and serving on the dining room.
As illustrated above, all of the Japanese informants do their cooking activities within a limited kitchen space, which also shares a similar layout. Japanese mothers move efficiently on a single kitchen pantry or cabinet in their kitchen. In this research, I analyze only the modern types of Japanese houses without comparing them to the traditional ones. In Japan’s local cities nowadays, traditional houses are less common being used as daily household purpose, unlike in Java.

As for the Javanese cases, I must distinguish the traditional and modern ones. All of the informants reside in local cities and they maintain traditional customs in their daily life. Some of them still preserve the basic layout of *joglo*, or Javanese traditional house, while others modify –even demolish and rebuild- them due to the land availability or modernity. The cooking activity of the Javanese is more dynamic and requires a lot of movements from one place to another. Particularly in traditional Javanese houses, the water source is usually located outside the house. In modern Javanese houses the installment of water tap is inside the kitchen area. As for the cooking process, traditional Javanese still use earthenware stove, while contemporary Javanese already use gas stove. Illustration of the general cooking activity of Javanese people are shown below:
As illustrated above, the first activity is cleaning the foodstuffs, and secondly is preparing them. Traditional Javanese do the preparing activity on a long bamboo bench called amben. Modern and traditional Javanese still use small wooden stool called dhingklik, but the limited size of modern Javanese kitchen does not provide enough space for the long bamboo bench. Cooking processes are similar between traditional and modern Javanese household. Difference can be found in the cooking activity based on the different type of stove. In cooking with earthenware stove, a Javanese mother needs to sit on a wooden stool/dhingklik. This wooden stool is also used in the first process that is cleaning the foodstuff. In modern Javanese kitchen, mothers generally stand while cooking, or sit on small plastic stool.
The illustration above shows the special operations of a series of cooking activities in traditional Javanese kitchen. After the meal is ready, the Javanese people eat in the kitchen or living room.

The activity in contemporary Javanese household requires less movement than the traditional one. The cooking process is similar with the traditional one, but in a smaller area. Contemporary Javanese families generally eat in the dining room next to the kitchen. Other than the dining room, Javanese nowadays also eat in the living room while watching television.
4.3. Interrelationship between Eating Behavior, Utensils, and Cooking Space

In the Japanese eating culture, not only the food itself but also the plates and bowls are essential to express the quality and the host’s respect for the guests. Japanese eating culture considers each item in a Japanese meal as a piece of art, and the plate on which a dish is served is as much a part of the dish itself (Ashkenazi and Jacob, 2000: 76). Meanwhile in Javanese eating culture the plates and bowls just serve the functional role.

From the ethnographical research, it is proven that the space usage of cooking activity does not affect the design of eating utensils. The scale or width of the area influences the behavior and movement, as we can see in the limited movements in Japanese kitchen and the dynamic movements in Javanese traditional kitchen. The limit of space requires smart storage system within the kitchen area, and it becomes a major issue for designers and architects. As the land costs highly arise nowadays, compact living space –including the kitchen and dining area- is an emerging trend globally. Japan with its craftsmanship is one of the pioneers in designing compatible houses in small spaces by using hidden-storage system, leveling, etc.
Levi-Strauss (in Counihan and Van Esterik, 2013: 41) argues that the way people do in preparing their meal –boiling, smoking, and roasting- is closely related with the culture of the people as a whole. Based on the ethnographical data, both Japanese and Javanese culture use these three basic ways of cooking, and are commonly boil their food. In preserving their food, both cultures often use dried and salted techniques, other than making pickles. Roasting or making barbeque requires a good ventilation system thus rarely found during my ethnographical research.

From my research, I found that behavioral patterns in eating activity affect the design of the utensils. Japanese behavior of using both hands while eating –to lift up the bowl and to use chopsticks- requires a lightweight utensils to ease them. For the soup-based food materials, either thick or subtle flavored, urushi-lacquered utensils are convenient. The Japanese people also tend to consume the meal while it is still hot, so the utensils are required to absorb the heat from the soup. On the other hand, Javanese people consume the meal when the heat is already reduced, thus they use a wide ceramic plate with spoon and fork. The plate is untouched and put on the table when eating, so the heavy stable plate is preferred.

![Figure 17 Analysis of eating utensils design in eating culture](Drawing by Maharani Dian Permanasari)
5. Conclusions and Suggestions

5.1. Conclusions

Eating culture is an essential cultural element, although it is still a recently recognized research topic and study field. The way of preparing and consuming food is naturally handed down by generations, and human is constantly creating and developing products or means to ease them in doing the activity. In this context, everything that is created and learned by people during their meal activities became cultural products. Food as a cultural product needs to be recognized and promoted as a major study subject in anthropology, sociology, and art and design. Identifying composing elements of eating culture is essential to develop the next phase of study in this field. In order to do so, this study analyses three elements:

Behavior:
The way we eat defines our cultural identity. It may be evolved and developed, but we will never leave the passed-on traditions, whether it’s material or immaterial.

Place/setting:
It evolves due to modernization and the availability of space and efficiency of time.

Utensils:
Tradition has become inspirations to create and develop various utensil products.
In this study, I paid attention to the interaction among these three elements and analyzed the dynamic interrelationship among them through graphical analysis. My temporary conclusion can be summarized as follows.

For both Japanese and Javanese culture, eating activity is a structured event. In this perspective, I distinguish the term “traditional” and “modern” to explain the basic food arrangements before they are affected by foreign influences. Traditionally, Japanese eating culture with its principle of “naturalness” appreciates the seasonal material and subtlety of original taste and flavor. It requires different receptacles in various sizes and types to contain each kind of foodstuff. In modern Japan, the foreign influence has introduced the use of large and deep plates for curry rice, meat dishes, pasta, etc. Both traditional and modern Japanese meal use chopsticks suitable to pick up foodstuffs
separately. The variety of bowls and plates also serves to keep the different taste of each dish, thus enable Japanese people to enjoy “natural” taste of seasonal food materials.

Contrary to the Japanese case, Javanese eating culture with the principle of “harmony” highly values the balance and mixed taste of various foods. Either traditional or modern Javanese meal requires only one large plate for eating, in which people can mix several foodstuffs in one receptacle. Javanese people traditionally ate with hands, but nowadays spoons are usually used. By hands or by spoons, the various kinds of foodstuffs including rice and soup are usually mixed of the eating plate to realize the “harmony” of different tastes.

The basic principle of “naturalness” and “harmony” in Japanese and Javanese eating culture also applied in the way of cooking the food. Japanese cooking uses fewer ingredients than Javanese cooking. Japanese concept of “naturalness” enhances the subtlety of the original flavor of each foodstuff. Javanese principle of “harmony” requires a balance mix of many ingredients and herbs to boost the taste of the foodstuff.

In both eating activity, Japanese and Javanese are familiar with sitting on the floor. Their way of sitting and behavior while having meals also affect the utensils. A major contrast is the way they interact with the utensils, where Japanese people use both hands in eating activity, while Javanese tend to use only their right hand. Japanese behavior of using both hands while eating –lifting up the bowl and using chopsticks- requires a lightweight utensils. Japanese people also tend to consume meal when it is still hot, thus they need utensils that are able to contain the heat of the food. In contrary, Javanese people need a wide and heavy stable plate to be put down because they consume the food when the heat is already decreased and pick up the food with their right hand.

These close relationship between eating principles, ways of serving and eating foods and shapes and functions of eating utensils are what I found both in Japanese and Javanese eating culture through this study.

5.2. Suggestions

Tradition –as a tool to create “the soul” in cultural identity- has a significant role for contemporary situation. Both Japanese and Javanese has wisdoms, lessons, and principles
concerning with eating and cooking activity, which become inspirations for many people to direct their lives more sustainably.

Many problems nowadays (i.e. throwaway culture) are the results of the modern lifestyle, rooted in human’s detachment from nature. Economical and practical reasons can’t be good all the time, and it is wise to keep connected with tradition to guide us improving our lives.

Comparative study of Javanese and Japanese eating culture enabled me to understand about the similarities and differences in Eastern Culture. In the Western culture, people have become used to eat using utensils such as fork, spoon and knife. But in Ancient Rome, eating with hands was a tradition. Nowadays, some parts of the world including Africa, the Middle East, and Asia (particularly Japanese and Javanese), eating with hands are quite common. The food may be evolved and constantly explored, but the interaction with the food is another thing.

This study found that both Japanese and Javanese are consuming rice as their main staple food, with similarities in eating behavior that is using hands in eating activity. This way of eating emerges as a new trend in the development of eating utensils design. Eating culture is changing in fast pace, becoming more practical, efficient, and economical. It affects the eating utensils development in several aspects such as behavioral patterns and interactions with food, material sustainability, traditions, etc. Subtractions of traditions are valuable in generating new ideas in order to improve our lives, as we can see in eating utensils development today.

From this research focusing on the behavioral patterns of eating, the space usage, and the utensils design, I found that both Japanese and Javanese way of eating food is authentic and distinctive. This potential makes them unique and influential globally in eating culture, whether it is the way of using hands while eating, the characteristics of the utensils, etc. There is an abundant possibility to develop further in utilizing this cultural value, and it will need collaboration from various fields of study.

Acknowledgements
I would like to express my gratitude to my supervisor Kagami Haruya for the advices, suggestions, and remarks through the learning process of this master thesis. Furthermore I would like to thank
Nishimoto Yoichi, Yoshida Yasuyuki, Xin Xiaoli, Yamagata Mariko, and the rest of all professors and teaching staffs for their encouragement, insightful comments and questions. My sincere thanks also goes to Matsumura Eri for introducing me to the participants in my survey, and Tamura Ulara, Broadaway Tomoko, Consolvo Geoffrey for the supports. Also, I would like to thank Kagami Nining, Muramotu Junko, Ota Shizuka, Fukui Sachiko, Toide Tugiko, Indartati, Eni Nuraeni, Sri Niswatin, Sugiharti, Martini Soebardi, Mbah Marto, Sutiyami, Sri Kumalasari, Sri Alawiyah Makmur, and Hastuti Saroso who have willingly shared their precious time during the time of my research. I thank my fellow classmates in Cultural Resource Management Program and friends in Kanazawa University for the stimulating discussions. Last but not least, I would like to thank my parents, family, and my loved ones, by keeping me in harmony and supporting me spiritually throughout my life.

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Kanazawa University