



**A STUDY OF COMPARATIVE EXPERIENCE DESIGN:
SERVICE AND PRODUCT DESIGN OF TURKISH TEA
AND JAPANESE GREEN TEA CULTURES**

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Thesis for the Master's Program in Design Studies

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the Department of Design Studies

Izmir
2023

ETHICAL DECLARATION

I hereby declare that I am the sole author of this thesis and that I have conducted my work in accordance with academic rules and ethical behaviour at every stage from the planning of the thesis to its defence. I confirm that I have cited all ideas, information and findings that are not specific to my study, as required by the code of ethical behaviour, and that all statements not cited are my own.

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Date: 19.01.2023

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ABSTRACT

A STUDY OF COMPARATIVE EXPERIENCE DESIGN: SERVICE AND PRODUCT DESIGN OF TURKISH TEA AND JAPANESE GREEN TEA CULTURES

Akdaş, Müge

Master's Program in Design Studies

Advisor: Asst. Prof. Dr. Can ÖZCAN

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Tea has an important place in every culture. Tea culture experiences every process from tea making to consumption differently in every culture. For this reason, there are so many types of tea in the world, each of which has different taste, presentation, color and smell, but they are all produced from a single plant, *Camellia Sinensis*. According to statistics, while looking at the beverages consumed in the world, tea is the second most consumed beverage after water. This situation adds economic value to areas where tea is produced and consumed. Tea, which is also a cultural element, has an important place in every culture. The experience from brewing tea to consumption is different in every culture. At the same time, the tea equipment that is a part of the tea experience and even the type of tea consumed differs to reflect the cultures. Tea is a social experience when viewed in a cultural context. As it is accepted as one of the signs of hospitality in Turkish culture, it also aims to provide the bond between the host and the guest in Japanese culture. While Turkish tea is a classless beverage, a

liquid consumed by people of all statuses and provides class cohesion, Japanese green tea became popular in the Japanese religious classes then with the production of tea cultivation in Japan became a popular beverage of the royal and elite classes. Like this cultural difference, the service, presentation, experience and products used for tea differ. In this study, it is aimed to compare Turkish tea and Japanese Green Tea within the framework of experience design.

Keywords: Tea Culture, Comparative Experience Design, Turkish Tea Culture, Japanese Tea Culture, Tea Tourism, Service and Product Design.



ÖZET

KARŞILAŞTIRMALI DENEYİM TASARIMI ÇALIŞMASI: TÜRK ÇAYI VE JAPON YEŞİL ÇAY KÜLTÜRLERİNİN HİZMET VE ÜRÜN TASARIMI

Akdaş, Müge

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Çay her kültürde önemli bir yere sahiptir. Çay kültürü, çayın yapımından tüketimine kadar her süreci her kültürde farklı yaşar. Bu nedenle dünyada her biri farklı tat, sunum, renk ve kokuya sahip o kadar çok çay türü var ki, hepsi tek bir bitki olan Camellia Sinensis'ten üretiliyor. İstatistiklere göre dünyada tüketilen içeceklere bakıldığında çay, sudan sonra en çok tüketilen ikinci içecektir. Bu durum çayın üretildiği ve tüketildiği alanlara ekonomik değer katmaktadır. Aynı zamanda bir kültür unsuru olan çay, her kültürde önemli bir yere sahiptir. Çayın demlenmesinden tüketimine kadar yaşanan deneyim her kültürde farklıdır. Aynı zamanda çay deneyiminin bir parçası olan çay gereçleri ve hatta tüketilen çayın türü bile kültürleri yansıtabilecek şekilde farklılık göstermektedir. Çay, kültürel bağlamda baktığımızda sosyal bir deneyimdir. Türk kültüründe misafirperverliğin göstergelerinden biri olarak kabul edildiği gibi Japon kültüründe de ev sahibi ile misafir arasındaki bağı sağlamayı amaçlar. Türk çayı sınıfsız bir içecek, her statüden insan tarafından tüketilen ve sınıf

bütünlüğünü sağlayan bir sıvı iken, Japon yeşil çayı Japon dini sınıflarında popüler olmuş, ardından Japonya'da çay yetiştiriciliğinin üretilmesiyle kraliyet ve seçkin sınıfların popüler bir içeceği haline gelmiştir. . Bu kültürel farklılık gibi çayın servis, sunum, deneyim ve kullanılan ürünler de farklılık göstermektedir. Bu çalışmada deneyim tasarımı çerçevesinde Türk çayı ile Japon Yeşil Çayının karşılaştırılması amaçlanmaktadır.

Anahtar Kelimeler: Çay Kültürü, Karşılaştırmalı Deneyim Tasarımı, Türk Çay Kültürü, Japon Çay Kültürü, Çay Turizmi, Servis ve Ürün Tasarımı.





Dedicated to my father Dr. Tayfun YÜCESOY

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To my dearest mother and father, who supported me in every way throughout my life, encouraged me to go further, and always trusted me in what I could do.

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CHAPTER 1: INTRODUCTION

According to statistics, among the beverages consumed in the world, tea is the second most consumed beverage after water. This situation adds economic value to areas where tea is produced and consumed. Tea, which is also a cultural element, has an important place in every culture. The experience from brewing tea to consumption is different in every culture. At the same time, the tea equipment that is a part of the tea experience and even the type of tea consumed differs to reflect the cultures. Tea is a social experience when we look at it in a cultural context. As it is accepted as one of the signs of hospitality in Turkish culture, it also aims to provide the bond between the host and the guest in Japanese culture. While Turkish tea is a classless beverage, a liquid consumed by people of all statuses and provides class cohesion, Japanese green tea became popular in the Japanese religious classes then with the production of tea cultivation in Japan became a popular beverage of the royal and elite classes. Like this cultural difference, the service, presentation, experience and products used for tea differ. In this study, it is aimed to compare Turkish tea and Japanese Green Tea within the framework of experience design.

1.1 Research Problem

According to statistics, tea is the most consumed beverage after water. Therefore, it adds economic value to the region where it is produced and consumed. It is also a cultural element. Tea has an important place in every culture. Tea culture experiences every process from tea making to consumption differently in every culture. For this reason, there are so many types of tea in the world, each of which has different taste, presentation, color and smell, but they are all produced from a single plant, *Camellia Sinensis*. Different textures, different rituals customize it from region to region. At the same time, the type and production of tea according to the region where it is produced and the design of the products used in its production according to the rituals are different and culture-specific. In this study, tea, which is a cultural element, will be compared in terms of Turkish tea and Japanese green tea, as it differs according to cultures. And in this comparison, experience design will be discussed within the framework of service and product design.

Research Question

As a starting point for comparing Turkish tea and Japanese tea in the frame of experience design it is important to answer the following question: How does the experience of tea change in different cultures, specifically Turkish and Japanese culture? A comparative study on the experiences of Turkish tea and Japanese tea.

Sub Questions

1. What are the criteria that make tea a part of culture?
2. What are the traditional preferences of tea in Japan? To what extent are these flavors changing in the face of increasing international influence and the growth of chain cafes?
3. What are the traditional preferences of tea in Turkey? To what extent are these flavors changing in the face of increasing international influence and the growth of chain cafes?
4. How is the rise of e-commerce changing the retail and competitive landscape of the tea sector?
5. Where is the future growth of the tea sector expected to be most dynamic?
6. How are products distributed in tea in Japan and Turkey?
7. To what extent are health considerations impacting consumption of tea in Japan?
8. How can technology be used while harmonizing tea resources and tourism within the framework of Japanese tea culture and tradition or Turkish tea culture and tradition in order to increase touristic capacity?

1.2 Aims Of The Study

In this study, it is aimed to compare Turkish tea and Japanese Green Tea within the framework of experience design. The main aims of this paper are to examine the role of tea in these cultures within the framework of Japan and Turkey, where tea is a part of culture, comparing how tea is experienced with differences or similarities between these two cultures and comparison of tea design equipment between these two countries during the tea experience.

1.3 Method Of The Study

This study is an example of qualitative research. The first part of the study will describe an overview of experience design, tea and tea in terms of design and experience. And also, opportunities, challenges and trends in the tea sector in Turkish and Japanese tea production will be shortly described. In addition to literature review, observation and interviews are the most important methods to be used in the study. Since this study aims to compare two different cultures, interviews with people belonging to that culture are important. At the same time, in the comparison of the experience of tea as a part of culture, it is necessary to experience it personally as well as literature review. For this study, tea gardens, companies, factories and a tea museum that Fujinokuni Cha no Miyako Museum in the Shizuoka region of Japan were visited and interviewed with people. At the same time, tea ceremonies were attended to examine and observe at different times. For this study, observation and research was carried out in Rize for the part of the study in Turkey. During these researches, interviews with Ardeşen CAYKUR tea factory and Gündoğdu CAYKUR tea factory, CAYKUR Headquarters, tea gardens in Rize center, Çamlıhemşin organic tea gardens and organic tea producers in Camlıhemşin, and also tea research institute were visited and both interviewed and observed were made. In order to make a cultural comparison of the tea ceremony observed in Japan in Turkey, observations were made for a week by staying with an organic tea producer family in Camlıhemşin. In addition to adding economic value to the place where tea is produced and consumed, observation is an important method because it is actually a part of the culture.

CHAPTER 2: EXPERIENCE DESIGN

First of all, it is necessary to start with experience. Experience, as a lexical meaning, is the knowledge or influence learned from doing, seeing or feeling that thing in the process experienced while doing it. The experience, the user's interaction with the tangible or intangible product can be shaped and planned as desired. In this way, the lived experience can be directed in accordance with the purpose. At this point, experience design plays a role. It is the detailed planning of tangible or intangible products with the concern of establishing an emotional connection with the user. As a matter of fact, experiences are very personal. Experience is something that is shaped by perception, culture, or current mood. Of course, it is also an emotional state.

User experience, UX in short, is the result of interacting with or using anything in general.

“User experience: the experience the product creates for the people who use it in the real world. When a product is being developed, people pay a great deal of attention to what it does. User experience is the other, often overlooked, side of the equation—how it works—that can often make the difference between a successful product and a failure. User experience is not about the inner workings of a product or service. User experience is about how it works on the outside, where a person comes into contact with it. When someone asks you what it’s like to use a product or service, they’re asking about the user experience.” (Garret, 2011)

Today, when it comes to user experience, things related to technology come to mind first; phone, tablet, web or software. However, each of us actually experiences the user experience while shopping at the store, obeying the traffic rules while driving or simply brewing tea at home. Considering that even brewing tea has many different user experiences. For example, consider making tea with teabags, preparing Turkish tea, and the Japanese tea ceremony. The preparation of each takes place with different equipment, at different times and in a different atmosphere. There is a single tea plant, 3 different experiences.

Experience design can actually be seen as a human impulse that has existed since time immemorial. When viewed from the past, rituals and various arrangements made depending on the teachings can be given as examples of this practice. An example of Feng Shui, a very ancient Ancient Chinese teaching, is about designing experience. Feng Shui includes the spatial arrangements of objects and products that allow the flow of energy, which means wind and water, to be made as desired. Feng Shui is also about arranging the environment in a user-friendly way from all angles. In this teaching, it is about a lot of things, from the layout of the environment, the material, the color, and even the direction of the object. In fact, it is a matter of designing a kind of experience.

“Experience design is an ancient practice, going back to the earliest human impulse to develop rituals, ceremonies, drama, and even architecture. But the design of experiences has become much more pervasive during the twentieth century. Media has played a central role, including radio, television, multimedia, and virtual reality. But experience design is also informed by new ideas in economics, especially Pine and Gilmore’s notion of the emerging experience economy. And it draws upon ideas from artificial intelligence, the psychology of optimal experiences, sociology, and other areas, including electronic commerce, persuasive, human–computer interface design, drama, and digital storytelling.” (McLellan, 2000)

Experience design is about the user at the center and accordingly how the user will put an experience into his life. “If design used to be a matter of physical form, its subject the material object, it now increasingly seems to be about the user and her experiences.” (Redström, 2006, p.127)

“Most design is intended to be used by people, so the needs and requirements of people ought to be driving much of the work throughout the entire process.” (Norman, 1988)

When revealing this experience, it is in question what kind of emotional response they will give or a certain behavior will be triggered and revealed.

“A good UX design not only focuses on increased engagement and persistence but also has an indirect effect on the regulation of the user's emotions.” (Dirin et al., 2022, p.5)

In this study, Turkish tea and Japanese green tea cultures are compared in terms of experience design, and in fact, these experiences are actually cultural elements and include a social interaction, so emotions, beliefs and cultural traces come to the fore. For example, in Turkish culture, when women come together and have tea together with home-made food while they are having a day, there is actually a very loud atmosphere where people can laugh and chat among themselves. However, on the other hand, a quieter, serene atmosphere is created in the Japanese green tea ceremony.



CHAPTER 3: THE MOST CONSUMED BEVERAGE AFTER WATER: TEA

According to statistics, tea is the most consumed beverage after water. Although there are many types of tea in the world, each of them differs in taste, presentation, color and smell, they are all produced from a single plant: *Camellia Sinensis*.

*“Green tea is sourced from *Camellia sinensis* (L.) O. Kuntze (Theaceae), the same species from which white, oolong, black and pu-erh teas are derived. The various tea types are classified on the basis of their processing, and the associated oxidation and fermentation levels which influence taste and aroma profiles.”* (Ahmed and Stepp, 2013, p.19)

The edges of the tea leaves are serrated and have a shiny appearance.

The young leaf on the top is used to make green tea and white tea.



The mature leaves are used for oolong tea.

Figure 1. Tea Leaf.

Tea is a beverage made from the plant called *Camellia Sinensis* and has become an integral part of many cultures. It is both a cultural element and adds value to the places where it is produced and consumed. It is also a product that creates a sector with a very high potential in rural development and employment.

“Green tea is sourced from Camellia Sinensis (L.) O. Kuntze (Theaceae), the same species from which white, oolong, black and pu-erh teas are derived. The various tea types are classified on the basis of their processing, and the associated oxidation and fermentation levels which influence taste and aroma profiles. Green tea is a minimally oxidized and non-fermented tea.” (Ahmed and Stepp, 2012)

It is a plant that can adapt to the region where it grows after providing the basic conditions for growing a tea plant. Tea plant is a plant that yields in tropical and subtropical regions. The more slowly the tea plant grows, the more distinctively aromatic it becomes. Climate plays a very important role in the cultivation of tea. First of all, it should be high humidity and rainy for tea cultivation. The temperature should not fall below a certain degree. While the tea plant is below 2 meters in tea farming regions, the plant can become much taller if released. (Kacar, 2010; Erke, 2019; Çilingiroğlu Shipman, 2017)

3.1 Etymology Of Tea

Tea, which is the most consumed beverage in the world after water, is an aromatic beverage prepared with hot water from the fresh or dried leaves of the tea plant *Camellia Sinensis*. The dictionary meaning is expressed as: It is a beverage obtained by combining the dried and cut tea plant with hot water using leaves or sometimes flowers. (Cambridge Dictionary, n.d.)

Opinions about the homeland of the tea plant differ. Some studies argue that the origin of tea is China, some studies argue that it is India. However, According to Dr. Abhilasha Gaur Saraswat, tea originated in Southwest China during the Shang Dynasty, when it was used as a medicinal beverage. (Saraswat, 2018, p.7) And when viewed etymologically, tea seems to have spread from China as a name.

“Most words for ‘tea’ found in the world’s languages are ultimately of Chinese origin, but they differ significantly in their form due to their coming via different routes. The differences begin already on Chinese soil.” (Dahl, 2013)

“One that is definitely not part of the universal heritage of mankind but rather is connected to a specific agricultural product. What is shown on the map are the sources of the words for ‘tea’ in various languages in the world, illustrating in a somewhat peculiar way the spread of words together with material culture. In particular, the map shows the importance of long-distance contacts, such as the trade relations between European countries and East Asia, and is thus a healthy reminder of the fact that languages need not be geographically contiguous to influence each other.” (Dahl, 2013)

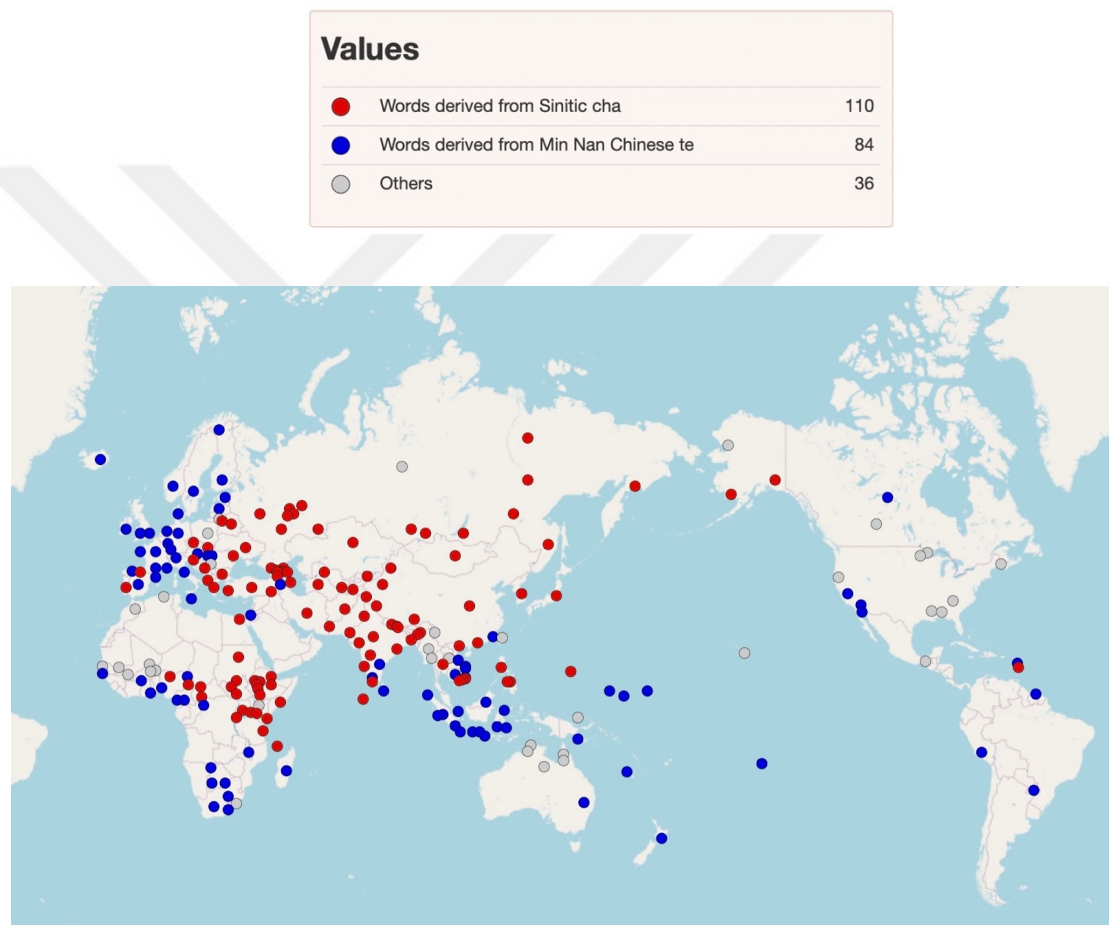


Figure 2. Values of Map 138A. Tea (Source: Dahl, 2013)

3.2 A Brief History Of Tea

Tea has gained a unique place in each culture by blending it with the culture, geographical conditions and traditions in that region in many countries around the world, and as a result, it has become an inseparable part of cultures. China, India,

Japan, Turkey... and more. Although tea is produced from a single plant in these countries and cultures, the types of tea consumed differ. Even the things that make up the tea experience, such as the tea equipment, where the tea is drunk, or the tea drinking etiquette, vary from country to country. After all, tea is a cultural element.

“The tea plant (Camellia sinensis) grows in a vast area that stretches from Assam (India) in the west to the east coast of China and southwards into Myanmar, Thailand and Vietnam. The use of the beverage made from the leaves is said to have originated in China and according to legend goes back to 2700 bce. Tea spread first to Japan around 800 ce. In the 17th century the use of tea became common in Europe.” (Dahl, 2013)

The story of the tea starts in China at 2737. (Kacar, 2010, p.7; Erke, 2019, p.48) Legend has it that the Chinese emperor Shen Nong, while resting next to a tea tree, was impressed by the smell of tea leaves falling into boiling water and wanted to taste it. This is how the past event that enabled tea to become a part of cultures is told in this way. After that sip, tea becomes an item that has entered our lives. Shen Nong, the second ruler of China in the San Huang period, found the taste of tea very refreshing and decided that it gave vitality as a result of his observations. The etymology of the word tea is shown as further proof that tea originated in China. The words used for tea in the world are formed from the Chinese words t'e and cha. The root of the words representing tea is cha; Turkish (tea), Japanese (ocha), Hindi (chaay), Persian (cây) and Russian (chay). English (tea), Spanish (té), German (tee). (Kacar, 2010; Encyclopedia Britannique, 1960, p.861) Buddhist monks have a great influence on the spread of tea and its becoming a part of the culture. Monks used tea during their meditations to withstand insomnia, to invigorate, and to increase their focus. In China and India, tea was prepared by hand-picking and processing wild tea plants. These plateaus and mountains, where the tea grows wild, are tropical and semi-tropical places that receive a lot of precipitation and at the same time have extremely high temperatures. (Kacar, 2010)

The tea horse path is made by the Tang dynasty between China and Tibet. transported.

“The tea that traveled to Tibet along the Tea Horse Road was the crudest form of the beverage.” (National Geographic, 2010)

Later, in the 11th century, tea, which was turned into bricks, began to be used as money. The Chinese used these tea bricks to buy horses from Tibet, so tea not only became a merchandise but continued to spread over a wider area. (National Geographic, 2010; Erke, 2019)

“Buddhism spread widely on the ancient tea horse road. The ancient tea horse road connected Sichuan Basin, Yunnan-Guizhou Plateau and Qinghai-Tibet Plateau, extending into Bhutan, Sikkim, Nepal and India, and reaching West Asia and West Africa. On this road, the horse carried not only tea and luxuries, but also cultural collision and blending.” (Haitao, 2021)

Considering that the history of tea began in ancient China, in the light of information obtained from studies of ancient plant remains from two regions in Tibet in western China, research on the oldest tea as evidence of a branch of the Silk Road on the Tibetan Plateau shows that the first use of tea dates back to 2100 years ago. Therefore, the spread of tea to different cultures can be thought of in this way. The Tibetan Plateau (TP) in Central Eurasia is an important and influential area for the spread of cultures. According to the study of Earliest tea as evidence for one branch of the Silk Road across the Tibetan Plateau,

“Phytoliths and biomolecular components extracted from ancient plant remains from Chang’an (Xi’an, the city where the Silk Road begins) and Ngari (Ali) in western Tibet, China, show that the tea was grown 2100 years ago to cater for the drinking habits of the Western Han Dynasty (207 BCE-9 CE), and then carried toward central Asia by ca. 200 CE, several hundred years earlier than previously recorded.” (Lu et al., 2016)

To sum up, therefore, the tea trade of the Silk Road and the Tea Horse Road has been very effective in spreading tea over a wide area. In this way, tea has had the opportunity to meet many cultures and become a part of cultures. Later, Lu Yu, the Chinese tea master and author, wrote the very famous Chajing (The Classic of Tea) book about tea in East Asia, It was published in 780 AD. This book contains detailed information

about tea and information that will serve as a guide for using tea. Tea culture has been further enriched by the influence of Chinese practices and by Korean and Japanese Buddhist monks bringing tea seeds from China to their countries. With the return of Buddhist Eisai from China to Japan, the Japanese tea ceremony, which is an integral part of Japanese culture today, began.

The English was introduced tea in 1598 and the Portuguese was in 1600. The Dutch were instrumental in bringing tea to the West and taking an active role in the tea trade. In 1619, the Dutch established the port of Batavia, now Jakarta, to import tea into Indonesia. By 1658, advertisements were published in the newspapers in London that tea was a useful beverage. Later, in 1664, the East India company not only imported tea from China to England, but also started planting tea for England. Tea became widespread in England thanks to Queen Catherine, the wife of King Charles II of England. She came with tea in the queen's dowry. Tea gained popularity among the nobility with Queen Catherine. By 1689, tea trade started between China and Russia.

Although there are exceptional records about tea in the customs books, the introduction of tea by the Turks dates back to the 19th century. The first significant breakthrough in tea agriculture was made in Bursa in 1888 with saplings brought from China. However, the failure of this attempt was due to the fact that the city chosen for tea farming did not have suitable conditions for growing tea plants. (Kacar, 2010; Güneş, 2012; Klastra et al., 2007, p.523) After this unsuccessful attempt, attempts started again in 1918. Ali Riza Erten, who was assigned to make an investigation on tea agriculture, wrote in his report that our Eastern Black Sea coasts have similar climates and conditions suitable for tea cultivation. (Kacar, 2010; Yurteri et al., 2019, p.112) After this, in 1924, tea seeds were supplied from Batumi and the first trials were started. Then, in 1937, real tea studies started under the leadership of Zihni Derin. With the start of tea farming and the enactment of the tea law, the producer was assured. In 1947, the first tea factory started production in Rize. After the development of tea agriculture, the General Directorate of Tea Institution, namely ÇAYKUR, was established in 1971 and is still the current institution in tea agriculture and business.

3.3 Global Tea Data: Producers, Exporters, Importers, And Consumption

Tea is a plant that grows in tropical and subtropical regions. Tea producing countries in the world; mainly in the Far East, namely in countries such as China, Japan, Indonesia, India, Sri Lanka, in Latin America, such as Argentina, Brazil, in Africa, such as South Africa, Kenya, Uganda, Malawi, and in the Near East, such as Turkey and Iran.

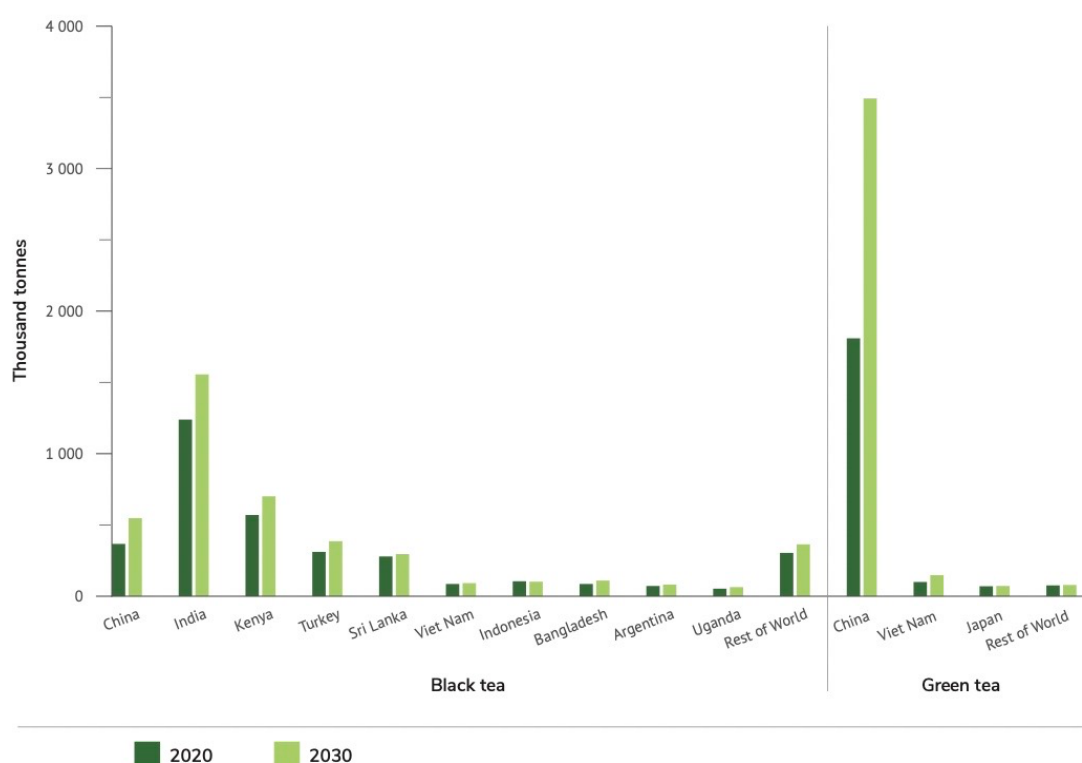


Figure 3. Tea Production by Major Producing Countries (Source: Food and Agriculture Organization of the United Nations, 2022)

In the places where tea is produced and consumed, besides being a cultural element, it is also an element that provides an economic return. In countries where tea is such an element, the tea industry constitutes a strong area for development and for people to make a living in rural areas where tea is grown. In short, the tea industry provides an important source of income and employment for these regions.

“The global tea production amounts annually to over USD 17 billion, while world tea trade is valued at about USD 9.5 billion, accounting for an important source of export

earnings. One key characteristic about tea is that smallholders are responsible for 60 percent of world production. Importantly, tea provides productive jobs in rural areas, which empowers households and communities to meet their food security needs and improve their nutritional status.” (Food and Agriculture Organization of the United Nations, 2022, p.1)

“World tea production (black, green, instant and other) increased by 3.5 percent annually over the last decade to reach 6.29 million tonnes in 2020. China accounted for 46.6 percent of world tea production, with an output of 2.93 million tonnes in 2020; production in India, the second largest producer, declined by 9.6 percent in 2020 to 1.26 million tonnes, from 1.4 million tonnes in 2019, due to unfavourable weather conditions and movement restrictions imposed to contain the outbreak of COVID-19. Output in the two largest exporting countries, Kenya and Sri Lanka, reached 571 805 tonnes and 283 943 tonnes, respectively. Production in Kenya increased by 24.0 percent in 2020, while in Sri Lanka it declined by 7.6 percent.” (The FAO Intergovernmental Group (IGG), 2022)

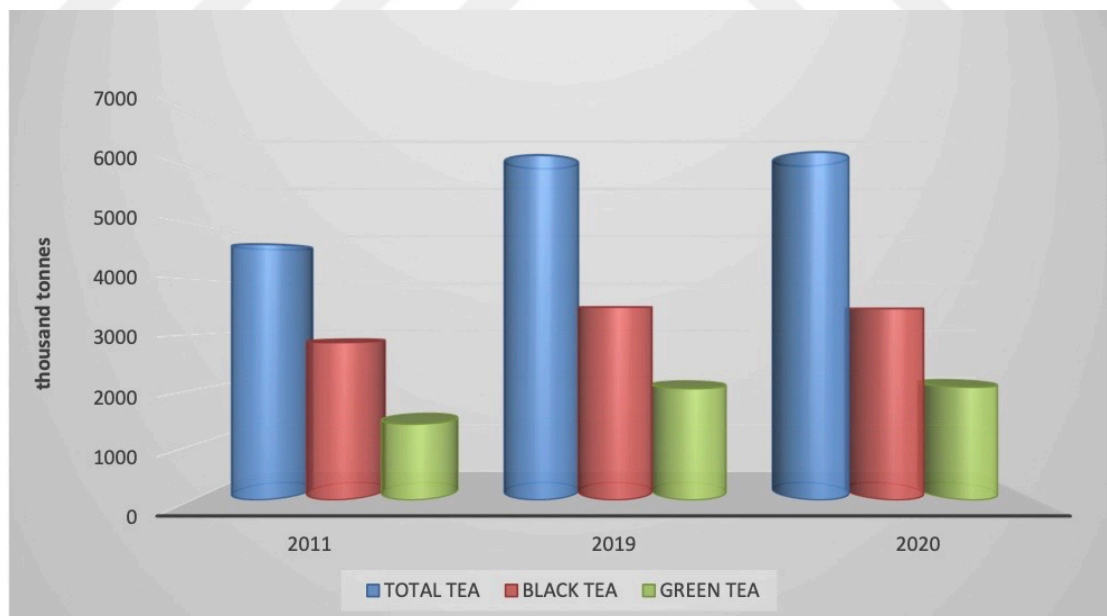


Figure 4. World Tea Production (Source: The FAO Intergovernmental Group (IGG), 2022)

According to the report of the 24th Session of the Intergovernmental Group on Tea which is Committee On Commodity Problems about Current Global Market Situation And Emerging Issues,

“Year-on-year, global tea production increased slightly (by 0.86 percent) in 2020 compared to 2019, as higher production of green tea and "other" tea offset the decline in black tea output.” (The FAO Intergovernmental Group (IGG), 2022)

According to the Observatory of Economic Complexity, if we look at the import and export data for 2020, China seems to be in a leadership position in exports compared to other countries. While Japan ranks 7th in tea imports, Turkey ranks 17th right after it. (The Observatory of Economic Complexity, n.d.)

“World tea exports increased annually by 0.5 percent over the last decade to reach 1.74 million tonnes in 2020, underpinned by growing shipments from Kenya, the major exporter of black tea, as well as a strong annual growth of 2.3 percent in green tea exports (compared to the annual growth of black tea exports of 0.1 percent).” (The FAO Intergovernmental Group (IGG), 2022)

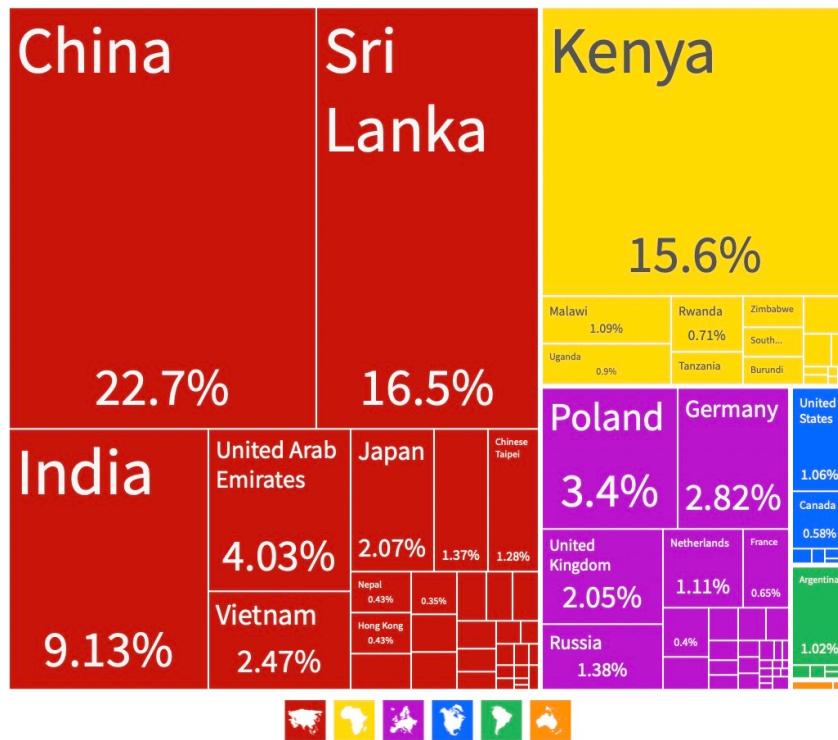


Figure 5. 2020 Exporters of Tea (Source: The Observatory of Economic Complexity, n.d.)

According to the Observatory of Economic Complexity, looking at the 2020 import data, Pakistan ranks first with a rate of 8.39%, while Japan ranks 10th in tea imports, Turkey ranks 11th right after it.

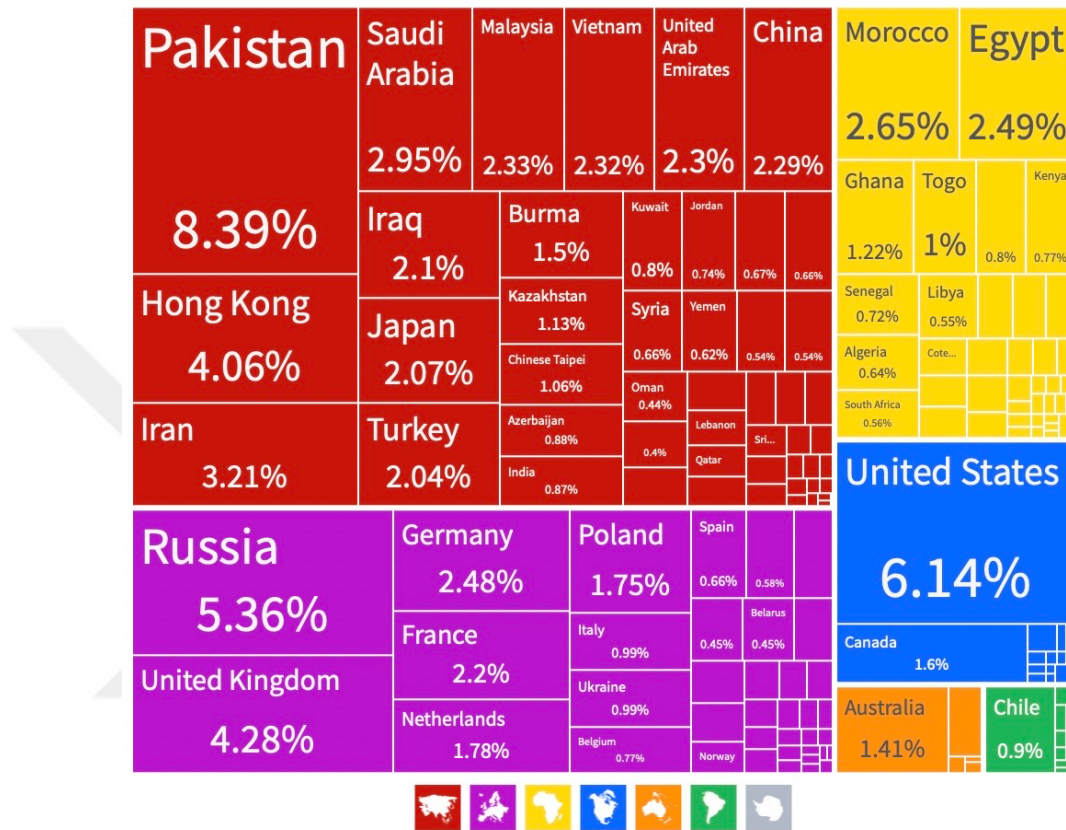


Figure 6. 2020 Importers of Tea (Source: The Observatory of Economic Complexity, n.d.)

China is the world leader in terms of tea production, consumption and export.

“As a characteristic of agriculture, China's tea industry is an important industry involving more than 80 million tea farmers, more than 70,000 tea enterprises and more than 20 tea-producing provinces and autonomous regions.” (Wu et al., 2020)

The demand for tea is shaped according to certain characteristics, demographic characteristics, price, culture, as well as the fact that the effects of tea on health are now more well known and scientifically proven are some of them. Of course, the

reasons such as the fact that tea products have become more diverse and that practical tea products are introduced to the market for those who adopt a fast lifestyle attract the new generation, which is far from traditional. “World tea consumption increased annually by 3.6 percent to 6.1 million tonnes over the decade to 2020” (The FAO Intergovernmental Group (IGG), 2022)

With the increase in per capita income in developing countries, there has been an increase in demand in terms of tea consumption. “Growth in demand expanded significantly in most of the tea producing countries in Asia, Africa and Latin America. In China, consumption expanded at an annual rate of 7.3 percent over the decade, reaching 2.6 million tonnes in 2020, representing 43.1 percent of world tea consumption. India, with consumption estimated at 1.07 million tonnes, was the second largest tea consumer in 2020, accounting for 17.5 percent of the global total. At the global level, tea consumption expanded by 1.07 percent in 2020 compared to 2019, and further increased in 2021, as the market continues to be underpinned by robust demand.” (The FAO Intergovernmental Group (IGG), 2022)

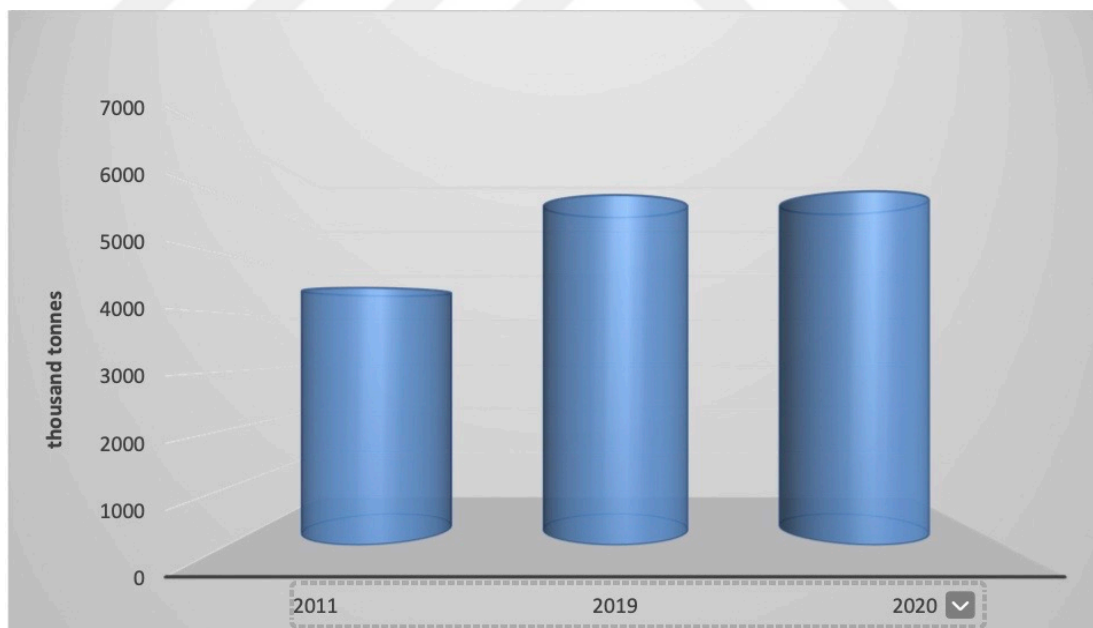


Figure 7. World Tea Consumption (Source: The FAO Intergovernmental Group (IGG), 2022)

3.4 Cultivation And Processing Of Tea

The tea plant, which is an evergreen plant in summer and winter, does not exceed a certain size in tea cultivation areas and is under control. However, if left to grow, it will grow like a tree. The basic criteria for the development of the tea plant, for example, in places with sufficient temperature and humidity, the tea plant gives shoots all year long. Since there are changes in temperature and humidity conditions in Turkey and Japan, the tea plant shoots intermittently. In such places, during the cold periods of the year, the tea plant enters the resting period and does not shoot at that time. The tea plant is a very long-lived plant and begins to produce products from the age of four.

“The amount of product depending on the conditions reaches its highest level after 10-15 years of age.” (Kacar, 2010, p.13)

If the tea plant does not receive sufficient rainfall during the exile periods, the amount of product will decrease. The flower of the tea plant is white. While tea plants bloom in August in Rize, Turkey, they bloom in autumn in Japan.



Figure 8. Tea Garden in Shimada in 2019

There are two basic criteria for growing a tea plant: climate and soil. The climatic criteria that play a role in the development of the tea plant are temperature, precipitation, humidity, wind, insolation and shading.

“In terms of growing the tea plant economically, it should not fall below 14° degrees annually.” (Kacar, 2010, p.19)

The tea plant needs rainfall to thrive. The distribution of precipitation throughout the year should be regular. Humidity is effective in making the tea plant more aromatic as it develops. The development of the tea plant is adversely affected by calcium. The pH of the soil in the range of 4.5-6.0 is the most suitable conditions for the development of the tea plant.

“Cultivation may occur from sea level to 2,200 meters, with some tea cultivars found as high as 3,000 m. Higher altitudes are often associated with higher tea quality. At least five hours of direct or 11 hours of indirect sunlight daily are required for tea cultivation. Soils must be well-drained, sandy, thoroughly aired, deep and nutritious with a healthy layer of humus and low pH. Drought, water logging, excessive heat, and frost are harmful for the growth of tea plants and may result in a lower quality product in terms of chemistry, taste, aroma, and bioactivity. Tea plants are often raised in controlled nursery conditions or other protected conditions for their first two to four years. They are classified as immature at this time and are not harvested. Once tea plants mature, they are transplanted to the field and are ready for harvest.” (Ahmed and Stepp, 2013, p.21)

There is one thing that is standard when harvesting tea, the two leaves of the tea being collected in the form of a bud.

“The main purpose of usually two leaves and one bud is desired in the processing of tea. Besides the high content of polyphenol and caffeine, their physical structure is also very suitable for processing.” (Kacar, 2010, p.70)

Hand picking is the most valuable method of tea harvesting. However, today, apart from certain types of tea, scissors or a tea picking machine are also used. After the tea is harvested, it should be delivered to the factory as soon as possible without being contaminated or compressed. The reason for this is to be protected from drying and premature fermentation. The quality of the tea; environmental conditions determine factors such as climate and soil, the way the product is collected by hand or tool, time of harvest, granule size or brewing style. We can say that the physical and chemical applications in the tea production process affect the quality of the tea as well as the variety. After the tea reaches the factory, it goes through various applications.

“The tea shoots are subjected to undergo changes in various stages of processing such as withering, rolling, fermentation and drying. All the stages are associated with several chemical reactions which determine the quality of end product.” (Bhuyan et al., 2012, p.34)

“The quality of green tea is impacted by numerous factors involved incultivation, harvest, processing, storage and preparation that influence the chemistry, taste, aroma, morphology and bioactivity of tea leaves.” (Ahmed and Stepp, 2013, p.19)

“For the manufacture of green tea, the withered leaf is steamed (Japanese style) or pan fired (Chinese style) and then rolled before drying. Steaming/pan firing is done to prevent the oxidation of the leaves. A brewed green tea is typically green, yellow or light brown in color. Black tea is produced by withering, rolling/cutting, fermentation (oxidation) and drying. During black tea processing, the rolled leaves are oxidized for about 1-2 hours to ensure they are fully oxidized. Black tea has two main process types, these are orthodox rolling and CTC (cut tear curl).” (Rana, 2022, p.4)

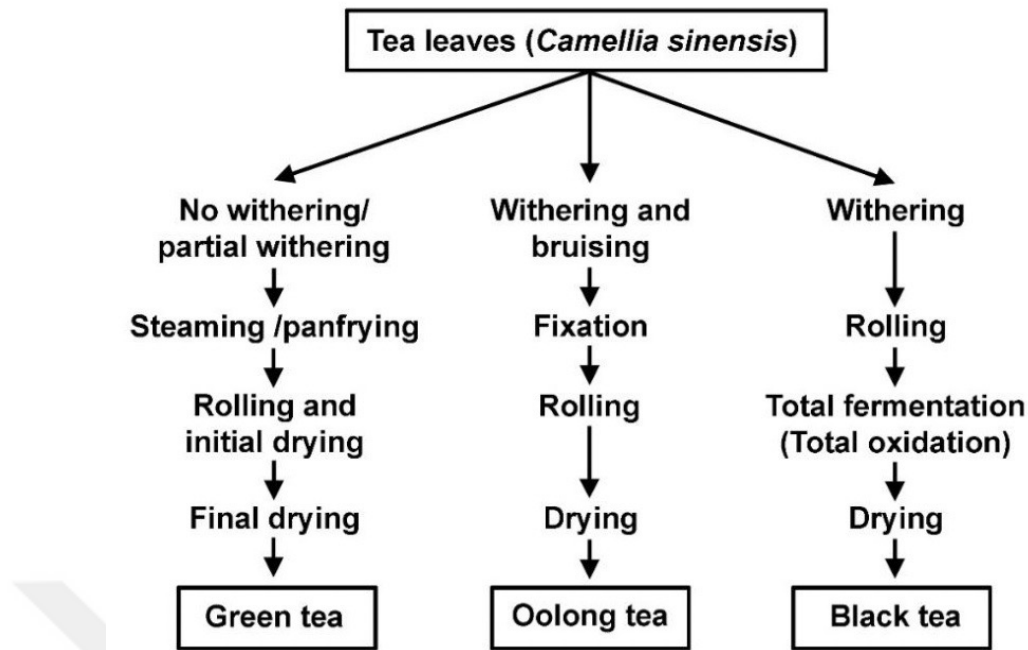


Figure 9. Production Flow Chart of the Three Basic Types of Tea (Source: Rana, 2022)

3.5 The Place Of Tea In The Agricultural Sectors Of Japan And Turkiye

Tea has become a part of social life, an integral part of culture, and a product that adds value to the place where it is produced and consumed, both in Turkey and in Japan. Beyond being a beverage, tea has both cultural traces and economic contribution to both countries.

3.5.1 Tea Production In The Close Frame Of Turkish Tea And Japanese Green Tea

Tea production and harvesting is a very laborious and careful process. After planting, pruning and harvesting, harvest time is carefully done either by hand or with a tool such as tea scissors. The formula of quality tea at harvest is expressed as two leaves and one bud. Collectors are generally women worldwide. The processes of tea production and reaching the factory in Turkey are as follows; First, the tea collected at harvest time is packed into baskets or tea bags on the backs of the pickers. The collected tea is kept in the tea storage rooms until the personnel in charge from the

factories arrive. If the personnel has already arrived, there is no need to be waited the collected tea. First, the collected tea is weighed by the personnel and the producer's account is written on how much product he has obtained. Afterwards, the tea is delivered to the factory as soon as possible so that there is no change in quality and before it oxidizes.

The places where Tea cultivation is done in Japan are Shizuoka, the place with the highest production volume first, followed by Kagoshima, Mie, Kyoto, Fukuoka, Miyazaki, Kumamoto, Saitama, Saga, Nagasaki and Aichi. According to data collected since 1883, Shizuoka Prefecture has always been the region with the highest production volume. (Global Japanese Tea Association, 2022)

The harvest period in Japan is 3 or 4. It continues from spring to autumn. The best quality teas are harvested in the spring, such as gyokuro, sencha or matcha. The springtime harvest period varies from region to region. While it is done in the middle of April in some places, the tea harvest starts in May in some places and continues until June. The second tea harvest covers June and July, and lower quality teas such as lower quality sencha are harvested. In the period from the end of August to the middle of September, some regions are able to harvest again, but in general, it is not preferred. In September and October, the last harvest is made, but the quality of tea in this harvest is quite low. The teas collected in the last harvest are used in making tea bags or instant tea. During the period from October to the end of November, producers re-harvest to prune in preparation for the next first harvest period. However, the tea leaves in this pruning harvest are very hard and difficult to process. For this reason, the leaves used in the production of Hirabancha or Kyobancha are the leaves collected during this pruning period.

The most popular tea consumed in Japan is sencha. Making Sencha green tea goes through the following stages:

If it starts from the harvest of the tea, the collected tea leaves begin to heat up and oxidize, so it must reach the factory as soon as possible. According to Nakai Organic Tea Garden, an organic tea producer in Kyoto, this should be a minimum of 5 minutes

and a maximum of 15 minutes. This period is very important for the quality of the tea. Afterwards, they are subjected to the following processes, respectively.

Ventilation and Humidification

Freshly picked leaves immediately begin to oxidize and heat up. Based on the quality of the tea and the tea variety, it is ventilated with humid air to preserve the moisture of the leaves. The aeration process, on the other hand, brings the heated tea leaves to the required temperature. In this way, both the freshness of the tea is preserved and its quality is in the desired dimensions.

Steaming

One of the most important points in making green tea is not to perform the fermentation. The steaming process helps to stop the oxidation and fermentation effect of the enzymes in the leaves. This process helps preserve the green color of the tea leaves. In addition, the unique smell of tea leaves is eliminated by this process. Steaming is a critical process because many properties change depending on the steaming time, such as the taste, smell and color of the tea. This process is done carefully and carefully in making sencha tea.











Method	Light steaming	Moderate steaming (Normal steaming)	Deep steaming	Special steaming	Extra deep steaming
Steaming time	20 - 30 seconds	30 - 40 seconds	40 - 60 seconds	90 - 120 seconds	140 - 160 seconds (two step steaming)
	Short time ←————→ Long time				
Flavor	Clear taste	Slightly rich taste	Rich taste	Full-bodied rich taste	Low astringency. Strong taste and color
	Clean finish (astringency)	Deep, full-bodied taste (smoothness)			
Aroma	Strong ←————→ Fresh aroma —————→ Weak				Light aroma
Leaf shape					
	Long, narrow, uniform shape	Broken shape, fine			
Tea color					
	Clear, light green color	Darkish green color			

Figure 10. Steaming Time and Tea Characteristics (Source: ITOEN Global, n.d.)

Cooling

After steaming, the tea leaves should be cooled so that they do not lose their color and taste. It is tried to be brought to normal room temperature by circulating air over the

steamed leaves. Thus, the brightness, color, aroma and taste of the tea leaves will be preserved.

Pressing

It is the process of pressing tea leaves as dry hot air penetrates through the tops to reduce their moisture. This process enhances the taste, aroma and brightness of the tea leaves. At the same time, this process contributes to the shortening of the initial curling process.

First Rolling

Just like in making black tea, this application is made to soften the leaves and reduce their moisture. Hot air is brought into contact with the leaves and appropriate compression is applied.

Rolling and Twisting

In this application, the tea leaves are not heated and pressed piece by piece. In this way, the components in the leaf are easily released.

Second Rolling

Since the tea leaves still do not have suitable conditions after being rolled and twisted, hot and dry air is brought into contact with them again. While hot and dry air touches the tea leaves, the teas are rolled. And the humidity rate is adapted to the desired conditions and it is ready for the final curling process.

Final Rolling

It is the process applied to give the final shape of the tea leaves and to further reduce their moisture. During the process, the tea leaves are rolled in one direction.

Drying

About half of the moisture remaining in the leaf after the sin-rolling process is removed by this process. Thanks to this process, the tea has a longer storage chance. In addition, its unique aroma is revealed even more.

Secondary Processing of Sencha

Despite going through many processes, the tea is still high in moisture content and irregular in shape. In short, it cannot be considered as a finished product and cannot be offered for sale, therefore, a second processing process is needed.

Blending

Blending is combining different green teas to create a tea with a specific aroma. This application is made for different tastes or different pricing.

Cutting / Sorting

With the sorting machine, light or dust particles are separated by blowing air into small and large parts. And also, with the help of a sieve, the leaves are collected in a certain standard size.

Drying

This process is applied in order to achieve a desired humidity rate with the drying process.



Figure 11. CAYKUR Tea Leaf Drying Process in 2022

In Turkiye, tea is produced in Turkiye on the eastern Black Sea coast. Cities where tea is produced are Rize, Artvin, Trabzon, Giresun and Ordu. In these cities, there are 44 production areas in total. Production regions are divided into two as organic tea

farming area and normal tea area. For example, Çamlıhemsin region is considered as an organic tea farming region. According to the ÇAYKUR 2019 sectoral report, the tea harvest period is between May and October and covers 3 harvest periods. first harvest; Between 10 May and 30 June, the second harvest; Between 1 July and 26 August, the third and final exile is between 27 August and 20 October. (CAYKUR General Directorate of Tea Businesses, n.d.)



Figure 12. Tea Garden in Rize in 2022

While black tea is processed in Turkey, it goes through 6 different processes.

Withering Process

The collected leaves are first laid in a thinly ventilated place. The leaves both lose water and the leaves become soft. The optimum water loss rate in withering is mentioned as 60%.

Curling Process

After the withering process, the tea leaves are rolled. This process, which was done by hand with the old method, is mostly done with machines specially produced for this process. These machines crush and curl the tea leaves. With this process, the taste and aroma of the tea are revealed.

Sifting Process

The crushed and curled tea leaves are divided into two at this stage and separated into thin and thick layers in machines.

Fermentation

Twisted and sifted tea leaves are left to ferment to make black tea. The amount of fermentation is of great importance in terms of tea variety, taste and quality.

Drying Process

After the fermentation process, the tea leaves take their place in the machines for the drying process.

Classification of Dried Teas

Dried teas are separated into particle size. When creating various types of tea, basically 4 classes of tea are used. For example, although there are 220 types of tea in ÇAYKUR, it is basically created with different mixtures of 4 types of tea.

These; Quality tea, good tea, low quality tea, powdered tea to get the volume of the pack.

3.5.2 Types Of Turkish And Japanese Teas

Tea, which has a very important place in Turkish and Japanese cultures, appears in different varieties. Each tea variety acquires its own unique characteristics due to different production methods. These properties appear as differences in taste, odor, aroma or density, or the ingredients it contains. Tea is generally classified under 6 types. These; black tea, green tea, white tea, oolong tea, dark tea (post-fermented) and yellow tea. Green tea and white tea, especially black tea, are generally consumed in Turkey. Black tea has become a part of the culture and is consumed in social life, breakfast, dinner, at work, anytime and anywhere. Black tea is popularly used in Turkey, and when Turkish tea is mentioned, black dried black tea powder brewed in a

Turkish style teapot comes to mind. It has gained a place in Turkey as a means of socialization.



Figure 13. Turkish Black Tea

In Japan it is different, green tea has become a part of the culture. Although many different varieties of green tea are used, when you say Japan, tea ceremony comes to mind, and when tea ceremony is mentioned, matcha comes to mind. A key point in tea ceremonies in Japan, matcha is made with the finely ground powder of specially grown and processed green tea leaves. Matcha tea, which has a very aromatic, slightly bitter and refreshing taste, has a more intense and aromatic taste compared to other green teas. There are many types of tea other than matcha, and almost all of these teas are actually green tea. Sencha is the most consumed type of tea other than matcha in Japan. Sencha is consumed a lot because of its refreshing good taste and because it has an affordable price. Most of Sencha's production needs in Japan are met by Shizuoka Prefecture.



Figure 14. Japanese Tea Samples in Fujinokuni Cha no Miyako Museum

There are many examples of tea that go through different production processes in Japan. For example, hojicha is produced by roasting high quality Bancha tea on a charcoal fire, so its color is brown, not green. Another popular tea is genmaicha. Genmaicha is green tea made by combining sencha with roasted brown rice. Its taste and smell are unique and aromatic. Another example is gyokuro. Gyokuro is the highest quality green tea in Japan. Unlike Sencha, it grows in shade rather than sun. It has an umami flavor.

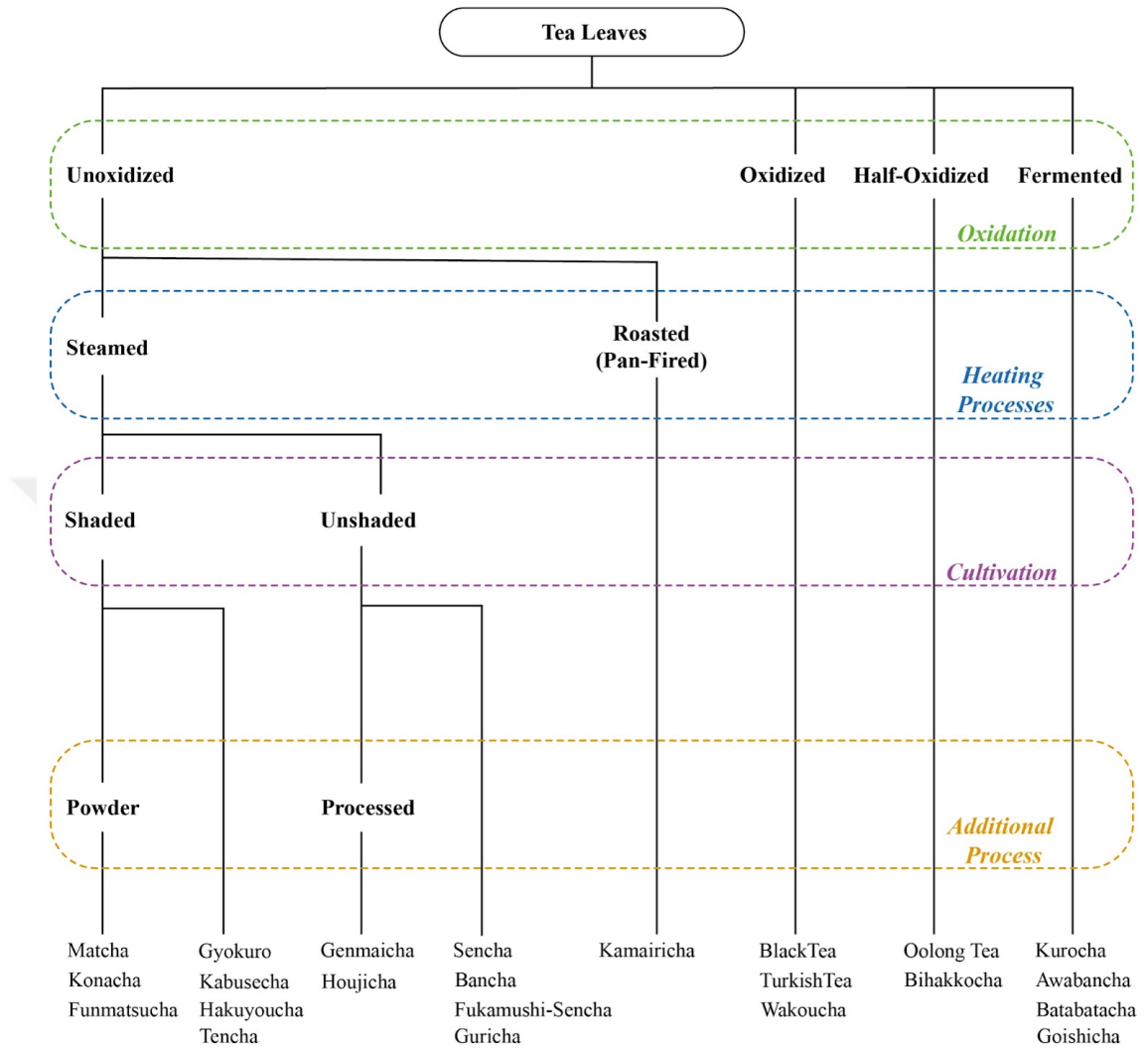


Figure 15. Tea Types Map (Source: Tezumi, n.d. and TeaLife, n.d.)

CHAPTER 4: GENERAL OUTLOOK TO THE TEA IN TERMS OF DESIGN AND EXPERIENCE

4.1 Rich Historical Background Imbedded The Cultures

When the historical adventure of tea is examined, it is seen that it was first used for medicinal purposes, not as a beverage.

“In fact, tea’s medicinal properties have long been known. For centuries, people drank tea when recovering from flu and flu-like illnesses.” (Trevisanato and Kim, 2000)

Tea, which is the only product that is very popular today and has a place in different cultures and can be a cultural part, has been proven by studies how beneficial it is in terms of health today. In addition, becoming a part of cultures has created different experiences. When comparing the examples of Japan and Turkey, Japanese tea is a class drink, while Turkish tea is seen as a classless social drink used by the society.

4.2 Tea As A Cultural Tool In Turkish And Japanese Culture

Tea brewing styles vary from culture to culture and country to country. If we look at the examples, Arabs boil tea and sugar in the same pot and this is called the "Sulaymani" method. Indians, on the other hand, prefer to prepare tea by boiling sugar and milk together. In Central Asia, tea, butter is cooked and milk and cream are put on top. (Duman, 2017, p.158)

Like all these examples, in Turkey and Japan, both the type of tea used and the brewing methods, the presentation of the tea, the environment in which the tea experience takes place, and each element, behavior and tea drinking rules that make up the whole tea experience are different and culturally specific. When all these are evaluated, it means that drinking tea has actually become a cultural experience rather than a simple tea drinking experience. If evaluated on the basis of Japan and Turkey, tea is primarily as a class product in Japan between these two countries.

“At the root of the tea ceremony lies the idea of ennobling even the simplest and most everyday events in life through aesthetics and ceremony.” (Reimertz, 1999, p.71),

when viewed from the Turkish side, it is clearly seen that it serves as a tool for social cohesion.

“Tea gardens become the place where the heart of the town life, especially the seaside resorts, beats during the summer days. Ordering tea with a samovar and enjoying tea with the family for hours is another fun. Thus, the concept of family tea garden is established, these places where men and women can be together in the public sphere, in fact, provide social relief in a sense.” (Erke, 2019, p.95)

4.2.1 Tea In Turkish Culture

Turkish tea is in every moment of social life. Breakfast is unthinkable without tea when starting the day, there is always tea at the desk when starting work, tea is offered at meetings, tea is an indispensable part of conversation when you get together with people, or simply, tradesmen offer you tea while shopping at local stores... According to 2016 data, Turkey's With an average annual consumption of 3.16 kg per person, it is the country that drinks the most tea in the world. (Statista, 2016)

Wherever they go in Turkey, tea is served to their guests. In Turkish culture, tea is both an indicator of hospitality, a means of socialization and an indicator of sincerity.

“China and India are known as the original sources of tea. Although it is not originally a Turkish drink, being one that was introduced to the Turks rather late, it has become a significant part of Turkish culture and a sign of friendship and Turkish hospitality.” (Keskin and Güneş, 2021, p.5)

There is also a developed business area related to tea making in Turkey. Coffee houses and tea shops are the points where tea makers become a profession. The issue of tea as a means of socialization can be understood by looking at the coffee houses which are "kahvehane" in Turkish language culture in Turkey. In this coffeehouse culture, where people gather, chat and have a drink, tea is actually drunk rather than coffee. In

short, tea occupies a great value and place in the social life of Turkish society both at home and outside the home. And as a matter of fact, coffee has entered Turkish culture before tea. How could tea become more popular and part of culture than coffee, which existed before it and gave its name to a part of a cultural event? When we look at Turkey historically, tea has come after coffee and has become a more popular beverage in daily life.

“Tea has become widespread in a short time and has become the favorite beverage of the people because it is cheaper and easier to prepare than coffee.” (Duman, 2008)

It is an integral part of Turkish culture and has become a value that reflects cultural values in daily life which is an indicator of hospitality and sincerity.

Turkish tea is made by brewing powder roasted black tea in a Turkish teapot and served in thin waisted special tea glasses. The Turkish teapot used in making Turkish tea consists of two parts. One of them is "demlik" and the other is "çaydanlık". The infuser which is demlik is for brewing roasted black tea powder. The kettle part which is caydanlik is used to boil water. The infuser is placed over the caydanlik and is smaller when we look at its design. First, water is boiled in the lower part, then, first roasted black tea powder is added to the upper part, and then boiled water is added to it. The water that has decreased in the teapot is filled again and it is waited for 15-20 minutes for the tea to take its brew. When tea is prepared, it is served in thin-waisted tea glasses. To serve, first the desired amount of tea from the teapot which is demlik in Turkish language part is filtered to get rid of the tea powder and put into a thin-waisted tea glass. Then, boiled water from the teapot is added to the teapot. If the tea is less infused, it is called light tea. If the tea is too brewed, it is referred to as brewed tea.



Figure 16. Turkish Teapot, Thin-Waisted Tea Cup and Tea Strainer

If the tea is to be drunk with sugar, sugar is added later. Among the people, the ideal brewed version of Turkish tea, that is, the ideal ratio of brew and water, is called with a special name, which is "rabbit blood tea". There is another characterization of tea among the people. It is the "pasha tea" prepared for children. It is prepared by adding cold water to a small amount of brew and hot water mixture. It is a very light and warm cup of tea.

“The transition from pasha tea to rabbit blood tea symbolizes the transition from childhood to adulthood in a way.” (Güneş, 2012, p.237)



Figure 17. Thin-Waisted Tea Glass and Sugar Bowl

4.1.3 Tea In Japanese Culture

When we look at the tea culture in Japan, at first, green tea was used as medicine. And this healing drink was a class drink at that time, and it was a product consumed by the

nobles. Tea culture in Japan developed further when Japanese Buddhist monks brought tea seeds from China to their country. However, zen monks used it for issues such as insomnia and concentration. With the beginning of learning Zen Buddhism in Japan, the importance of tea began to be given by the samurai. As the samurai continued this practice, tea began to become more widespread. Murata Shukou, later known as the founder and father of the tea ceremony, laid the foundations of the Japanese tea ceremony. Known as the tea path in Japan, the chado, or tea ceremony, is an experience of simplicity, grace, attention and respect rooted in Zen thought.

“Distinct from the Chinese form, which consists of brewing and drinking tea for medicinal purposes to prolong life, the Japanese form developed by Murata Shukō (1423–1502) during the fifteenth century presents it as a cultural art that emphasizes the physical dimensions of personal cultivation. By focusing on this form of the tea ceremony, it discusses how the medieval period’s tea ceremony introduced basic standards of manners and etiquette that have contributed to the formulation of a medieval habitus in the warrior class.” (Medieval Form of the Japanese Tea Ceremony. In: On the Process of Civilisation in Japan, 2022)

Considering the statistics, although Sencha green tea is popularly used in daily life, the first thing that comes to mind when Japan is mentioned is the Japanese tea ceremony and matcha tea. Matcha actually means more than just a beverage for the Japanese Tea ceremony. Performed with grace, silence, and care, the Japanese tea ceremony actually integrates with the binding of respect and focus.

4.1.4 Japanese Tea Ceremony

The Japanese tea ceremony has been an integral part of Japanese culture from time immemorial. Traditionally, it is a ceremonial way of preparing and drinking green tea (matcha) in a tatami-floored room, that is, in a traditional tea house or lounge. One of the main purposes of the Japanese tea ceremony is for the guests to experience the hospitality of the host without thinking about the next step in the different atmosphere created by the tea ceremony. For this purpose, it is planned to establish a bond between the host and the guest and to find inner peace. In the Japanese tea ceremony, it is aimed

to achieve inner peace and bond, with a series of rituals followed with beauty and grace.

When Japan first met with tea, tea was used as medicine and was a class product used by the nobility. With the arrival of tea in Japan in the 9th century, tea began to be a part of the culture and began to become a cultural experience in the process until the 13th century. While the samurai class gained importance during the Muramachi period, tea drinking continued to become popular among this class as well. Sen no Rikyu (1522 ~ 1591), the founder of today's tea ceremony, took part in integrating tea drinking into a physically designated setting, the making of tea, even the drinking etiquette and ethics, and the relationship of all this to the environment. Just like in the philosophy of wabi sabi, it guides the participants to seek beauty and perfection in this temporary existence during the tea ceremony of the incomplete, imperfect and discontinuous one. The tea ceremony bears traces of meaning-seeking beyond simply drinking tea.

The popularity of tea continued to increase during the Edo Period (1600~1868). Of course, it was an experience that was more practiced among the samurai class in this period. Before the Meiji period, tea was consumed only among certain classes, such as religious groups, royalty, samurai. But during the Meiji period (1868~1912), the Japanese government designated the tea ceremony as an important cultural heritage. (Acar, 2021) Another important point of this period is that women were not allowed to participate in tea ceremonies before this period. (Chiba, 2013)



Figure 18. Tea Ceremony Gathering in the Meiji Period, Mizuno Toshikata (Source: Acar, 2021)

The Japanese tea ceremony is a special traditional Japanese experience made with matcha, the quality green tea suitable for the ceremony in powder form, with a set of special tea equipment made for this tea experience. If we look at the rituals of the Japanese tea ceremony, which is done quietly, calmly and gracefully; Today, levels of formality can vary from meeting to meeting. The tea ceremony starts with the dessert prepared according to the season before the tea. During the preparation phase, the environment is quiet and this ritual is aimed at finding inner peace while creating a bond between the guest and the host. For this reason, the Japanese tea ceremony is also seen as a meditation activity. The founder of the tea ceremony, Sen no Rikyu, defines the tea ceremony as *ichi go ichi e*, that is, one time, one meeting. In short, the tea ceremony is based on the evaluation and living of the moment that will never come again, beyond drinking tea. For this reason, the main focus is an important point in the tea ceremony. It is important in establishing the bond between the guest and the host. (Acar, 2020)

“The Japanese Tea Ceremony represents harmony, respect, purity and tranquility which we must embrace in order to achieve the main purpose of the tea ceremony. This event is unique as every process from the tea equipment preparation until the tea is drunk has a distinctive technique. Therefore the positive values are applied to the whole process of the ceremony without not only focusing on the tea as the end product which is essential to present a good value to perfect the ceremony in order to convey it to the guests.” (Ali et al., 2013)



Figure 19. Tea Ceremony in Fujinokuni Cha no Miyako Museum

There are two types of tea ceremony: chakai which is an informal tea ceremony and chaji which is formal tea ceremony. Chaji, the more formal Japanese tea ceremony, takes long hours before the ceremony ends. In long-lasting tea ceremonies, chaji, guests are served a meal called kaiseki. (Okamoto, 2021) Chaji is prepared with thickly ground matcha koicha. (Erke, 2019, p.66) Chaji is the word used today to denote the official tea ceremony, but the use of the term Chakai is quite old and refers to short tea ceremonies. Chakai, or less formal tea ceremonies of short duration, includes an experience prepared with matcha usucha and served sweet before matcha tea. (Erke, 2019; Mitchnick, 2012)



Figure 20. Wagashi During the Tea Ceremony in Fujinokuni Cha no Miyako Museum

In Japanese tea ceremonies, traditional Japanese confectionery, wagashi, is served before matcha tea. Wagashi is a traditional confectionery made with plant-derived products. There are varieties consisting of mochi, anko or fruit. The wagashi variety in the first photo is called youkan and is a traditional confectionery made from red bean paste, agar, and sugar, sold in blocks.

“In contemporary Japan the tea ceremony is regarded as high culture and a “classy” hobby. Each school has its specific set of body movements for making tea, and it takes years or decades for pupils to learn them all. These specific manners (temae) are learned from teachers who are licensed by certain schools. Pupils, too, need a license in order to learn the movements. Teacher and students have regular lessons (keiko) at the teacher’s house or in public institutions like community centers. Those who have learned basic movements sometimes attend formal tea ceremony gatherings (chakai) hosted by other practitioners; those at a more advanced level host their own chakai. Practitioners at further advanced levels can host or attend a more exclusive, more formal, more time-consuming gathering called chaji, though the opportunities are rare today.” (Kato, 2009, p.144)

4.1.4.2 Japanese Tea Ceremony In The Frame Of Zen And Omotenashi

In Japanese culture, matcha green tea is much more than a beverage and is an integral part of the culture. There are a number of rituals when consuming matcha green tea, and this is called the tea ceremony. This tea ceremony has been an integral part of

traditional Japanese culture since ancient times. This ceremony is done with grace and beauty. Also called a silent celebration, the matcha tea ceremony is an experience that integrates attention, focus and respect. Matcha consists of the finely ground powder of the first tea leaves of the year. It has a slightly harsh, aromatic and refreshing taste. During the Muramachi period, about 600 years ago, a priest Juko Murata created the concept of wabicha, which emphasizes simplicity. “The Japanese tea ceremony is called chanoyu in Japanese. It is a multifaceted traditional activity strongly influenced by Zen Buddhism, in which powdered green tea, or matcha, is ceremonially prepared and served to the guests.

“Cha-no-yu is the name given to the Japanese tea ceremony, and it consists of preparing green tea powder in accordance with some traditional rules under the influence of Zen Buddhism, serving it as tea and drinking this tea.” (Erdemir, 2010, #106) Wabicha is a style of Japanese tea ceremony particularly associated with Sen no Rikyū that emphasizes simplicity. He refined the art of Japanese tea ceremony equipment and tea house design, with a preference for very simple and very small tea rooms, and natural materials with simpler decoration.” (Noviana, 2015)

This style, which emphasizes simplicity and silence at the same time, is called wabi. Emphasizing simplicity, this concept is the Japanese style of tea ceremony. The concept of wabi is the basic idea of the Japanese tea ceremony, or sado. What we call sado or chado is also called a tea ceremony, or simply the way of tea. This concept, which is in the mentality of the traditional tea ceremony, which is a very stereotyped way of preparing green tea, includes some tea making and drinking etiquette. Etiquette includes how to make tea and the integration of this ceremony with humility and peace of mind. Chado goes far beyond the ceremony of preparing and serving tea. It is seen as a real art that requires fine precision and extensive knowledge. Sado is also a concept that encourages questioning the purpose of life and valuing nature at the same time. Wabi sabi accepts that natural, simple and minimal things are better and shows these values in the tea ceremony as well. In fact, this concept is deeply rooted in Zen Buddhism. When we look at it, many similarities draw attention between the tea ceremony and the basic practices of Zen.

The tea ceremony involves following dozens of predetermined steps so that you don't have to think about the next step and gain inner peace while performing this ritual activity. Therefore, the tea ceremony cannot be separated from Zen. If we look at the basic concepts that we encounter in the tea ceremony, we can say that they are harmony, respect and tranquility. When we look at Zen philosophy, the concepts that make us feel like there is a similarity or connection are awareness, transience and acceptance. There is a Japanese expression that combines these concepts and hospitality: Omotenashi. Omotenashi stands for awareness and hospitality. This concept is more common in Japanese tea ceremony.

“Omotenashi, which is defined as a warm reception reflecting Japanese culture and courtesy, is perceived and practiced differently depending on the hosts and providers.” (Morishita, 2021, p.88)

“Originally, tea ceremony (Sado) was called “Chato” or “Cha no Yu”. The name “Sado” was adopted in early Edo period, and it is used until today. The ultimate aim of tea ceremony is the sense of harmony between the host and the guest. Therefore, elements such as tea things, chiefly among them the tea bowl, or hanging scroll with Zen wisdom hang in the alcove of tea room are more than just individual artworks. Rather, they are parts that constitute the whole, and the passing time of tea ceremony itself is regarded as a total work of art. The traditional Japanese act of boiling water, prepare tea and serve it, and the style and art based on this act, is considered to be a particularly Japanese “Omotenashi”. In tea ceremony, the host that is holding the ceremony invites guests after careful preparation, and the guests are expected to understand the intention of the host, behave appropriately to the situation and show gratitude. In other words, they create pleasant space by the host and the guests becoming one. This “reciprocity of the host and the guests” is also called “unity of the hosts and the guests.” (Ota et al., 2017)

The tea ceremony is mostly about the bond between the host and the guest, just like the value of tea in Turkish culture, but it is definitely a meditation event, as the founder Sen no Rikyu called one of the main elements of the tea ceremony, peace.

“Tea ceremony, which is considered to be representative of Japanese traditional culture, is used as one of methods to learn the spirit of “Omotenashi” which is a particularly Japanese form of hospitality. That is because when conducting a tea ceremony, care and sympathy shown toward one’s guest is considered to be the most important. In tea ceremonies, there are attitudes, such as “Treasure Every Meeting, For It will Never Recur” that are crucial when hosting guests. Especially, attitudes that “the host must prepare thoroughly for the guests, stage a pleasant experience” and “the guests enjoy the preparation of the host” are important. In “Omotenashi”, the side that is providing the service and the side that is receiving the service are equal, and the guest and the host (the one who invites guest) are also equal in tea ceremony.” (Ota et al., 2017)

If we take Japan and Turkey, tea is produced in Turkey on the eastern Black Sea coast. Cities where tea is produced are Rize, Artvin, Trabzon, Giresun and Ordu. In these cities, there are 44 production areas in total. Production regions are divided into two as organic tea farming area and normal tea area. For example, Çamlıhemşin region is considered as an organic tea farming region. According to the ÇAYKUR 2019 sectoral report, the tea harvest period is between May and October and covers 3 harvest periods. first harvest; Between 10 May and 30 June, the second harvest; Between 1 July and 26 August, the third and final harvest is between 27 August and 20 October. (ÇAYKUR General Directorate of Tea Businesses, n.d.)

4.3 The New Model In Tea Experiences

As a new model in tea experiences, it is aimed both to gather all tea sources together and to make the experiences richer by making use of technology in order to bring the experiences to a different dimension. In this way, it has become more comfortable to activate all the senses and make the experience richer and fuller, while ensuring that it is impressive and memorable.

4.3.1 Consumption Of The Tea Trends And Ceremonies In Japan And Turkish Cultures

Today, tea has taken its place as a part of social life and cultures. It can have different meanings in every culture and can be drunk for different purposes.

“Tea means differently in different cultures. Americans drink tea mainly for health reasons and daily needs as well. It is mainly a beverage of tea. Drinking tea together with friends is an enjoyment of life and a social occasion in Britain. British tea also provides physical and mental relaxation in life and work process. Tea is used as a tool of education in Korea to manifest certain etiquette and opinions of aesthetics as well as spiritual thoughts.” (Jingxia and Zhaodan, 2012, p.133)

The purpose of drinking tea in society and the preferences determine the trends. In the past, long tea ceremonies were held to find inner peace during this tea experience or to strengthen the bond between the guest and the host. Today, it has been difficult to serve such a purpose, because in a fast life, people have begun to not prefer to spare time for it, and at the same time, they have become more individual within the framework of today's conditions.

For this reason, we see that the Japanese tea ceremony is starting to lag behind today's instant teas. In today's world, a fast lifestyle has been adopted and people have turned to the practical and easy in many subjects. For this reason, the popularity of a market, chain tea cafes or ready-to-use packaged products is increasing today, where they can buy ready-made tea and continue on their way.

“With changes of lifestyle and society environment, demand for ready-to-drink (RTD) tea is continuously growing, which promotes the development of tea beverages.” (Liang et al., 2022)

If we look at this situation on the basis of Turkey, chain tea stores are becoming increasingly popular in Turkey and the consumption of different types of tea is increasing. For example, bubble tea. In the past, women used to gather together on a monthly basis or in different periods to have a special meeting with tea, but due to the

pandemic conditions and fast lifestyle, the tendency to individuality is clearly seen here as well. Although it is necessary to brew Turkish-style tea in every home, practical quick tea products have become highly preferred.

In summary, although the traditional method of consuming tea is still being carried out today, it is possible to say that when we look at the trending practices in consuming tea, people tend to prefer more practical products.

4.3.2 The New Trends For Tea In The Frame Of Experience Design

Today, if we look at tea tourism in both Japan and Turkey, we see many applications for designing the experience. Each application that turns from material to experience attracts more people's attention and revitalizes tourism. When you look at it, tea museums, tea houses, tea markets, exhibitions and film screenings established for the promotion of tea, applied tea productions and tea tastings and more... Tea and all the possibilities that can be created are trying to provide added value by using the strong potential of tea. It is possible to list examples from Turkey and Japan, which take the tea experience to different dimensions.

For example, Fujinokuni Cha no Miyako Museum, located in Shizuoka province, where the need for green tea production in Japan is met to a large extent, is a museum established right next to the Makinohara tea plantations, where you can experience many experiences about the tea world. First of all, as soon as you step inside the museum, a traditional Japanese tea house welcomes you, on the one hand, there is an infrastructure where you can experience all kinds of information about tea from the past to the present, both interactively and with the help of technology, from various kiosks. Before you go to the traditional style tea house, a beautifully designed Japanese garden welcomes you. When you first enter the tea house, you take off your shoes in the entrance waiting area and enter. There are special devices for those who want language support, so everything is planned in detail so that you can spend this experience quite efficiently even if you do not speak Japanese. Afterwards, you experience the Japanese tea ceremony by literally practicing and experiencing it, guided. While you are experiencing the ceremony, a borrowed view accompanies you when viewed from the window. Even this view is part of the concept. You have the

chance to experience everything thought out to the smallest detail. If you come to the museum section afterward, you can experience how tea was processed and made in the past by seeing and experiencing the 1/1 scale products and machines. Separate areas have been created for all tea cultures in the world, and tea products and equipment for each tea culture are both exhibited and you can experience it by doing it yourself. The opportunity to experience it by doing it enriches the experience, and by tasting the tea that is a part of the culture in each tea culture, you integrate this experience with different sensory organs and make it more impressive. How the individual tea varieties look when brewed, how they look when they are ready to be sold dry are examples of all of them. At the same time, the experience of grinding even matcha tea with the traditional method is provided. Also, from the screens in the rooms, it is possible to learn the details of the video narration and brewing methods related to which tea culture is being told in which room. When it comes to the terrace part, the vast Makinohara tea fields, especially if it is the harvest season, take the experience to a different dimension. Not only that, but also theanine, caffeine and catechin in tea leaves are given the opportunity to examine with a microscope. In another area, there are examples in which alternative sectors tea is used. For example, you can smell and examine the samples of the tea plant in aromatherapy, and you can also buy it if you want. At the end of the museum section, there is a restaurant and souvenir section. There are many examples of how tea can be used in food and drink in this area. You can try what you want to try by enjoying the Japanese tea garden there. For example, in green tea ice creams, it is highly classified. You can find it from mildly sweet to the most bitter green tea flavor. Many kinds of tea equipment are also available in this shop. As a result, in order to enrich the tea experience, both application and enforcement were included, and this museum was developed to provide a better experience by using technology. Moreover, by establishing this experience in the middle of the tea plantations, this tea experience has become quite impressive and memorable, with or without the harvest season.

In Rize, Turkey, there are restaurants, a tea museum, and tea shops in traditional buildings at the so-called tea market. It is possible to find and taste all kinds of organic or normal, black, green or white teas produced in Turkey. On the other hand, you can experience tea-related exhibitions and movie screenings inside the huge teacup building. At the Atatürk Tea and Horticultural Research Institute, which was

established next to the tea fields, it is possible to observe how and with which machines the tea is processed.

To sum up, as seen in both examples, has taken a simple tea drinking experience to a different dimension. A whole flow of experience, from material to experience, has been designed, better equipped, more impressive, by utilizing every potential from every source related to tea.



CHAPTER 5: OPPORTUNITIES AND TRENDS IN TEA SECTOR IN TURKISH AND JAPANESE TEA PRODUCTION

5.1 Healthy And Beneficial Drinks For All Ages

*“If you are cold, tea will warm you;
if you are too heated, it will cool you;
If you are depressed, it will cheer you;
If you are excited, it will calm you.”*

William Ewart Gladstone

Tea was first accepted and used as medicine. While it has been believed to be beneficial for health since then, these benefits have now been scientifically proven. Tea is known for giving energy, increasing focus and keeping it fit, especially to begin with, which made it popular for monks to notice and use in the early days. Not only these, tea has many more benefits. First of all, tea is a great source of antioxidants. For this reason, it provides good support against cardiovascular diseases and cancer diseases. It is also beneficial for dental health. And it also has a relaxing effect. The fact that it increases the metabolic rate and provides fat burning has also been found in studies related to tea. (Rana, 2022; Kacar, 2010, p.318)

Tea, which has been believed to have medicinal qualities since ancient times, was first used by Chinese monks, and was consumed both as an aid to meditation and as a medicinal product.

“Tea may be the first Chinese herbal medicine (CHM) used by Chinese people in ancient times. Tea drinking has many benefits to our physical health via its antioxidant, anti-inflammatory, immuno-regulatory, anticancer, cardiovascular-protective, anti-diabetic, and anti-obesity activities.” (Pan et al., 2022)

Tea leaves as well as the resulting beverage tea are known to possess high amounts of polyphenols, especially flavanols, the so-called catechins. Many invitro and in vivo

effects of tea polyphenols have been reported including antioxidant, anticarcinogenic and hypolipidemic properties. (Sharma et al., 2007, p.785)

5.2 Gastronomic Quality And Variety In Production And Consumption Of Tea

In Turkey, in Japan and even wherever tea is produced and consumed, the variety of tea is very high today. In each type of tea that comes across the consumer, there is the opportunity to find varieties that are both gastronomic quality and organic or normal. When looking at green tea in Japan, the quality of green tea is affected by each criterion, from the time of leaf collection to the production processes. For example, while the quality of the tea leaves in the first harvest in spring is very high, it can be understood that if it is collected by hand, it will be a high quality tea. In addition, for example, even matcha green tea used in the tea ceremony can be used in different qualities depending on the formality of the ceremony. Therefore, the teas used are presented to the attention of the consumers with a lot of brand options in different quality, suitable for different budgets. The same is true in Turkey. For example, hand-harvested white tea, which is very laborious to produce, and the harvest period is very short, is a very expensive tea in Turkey. However, although black tea is more affordable, it is possible to see black tea in quality, suitable for every budget or expensive. Although ÇAYKUR supplies a large part of the tea need in Turkey, the diversity in tea has been further increased with the contribution of companies in the private sector, and it is offered to consumers from different segments and different tastes.



Figure 21. Japanese Tea Varieties in Different Brands

Tea consumption began to increase considerably in diversity. Consumption of tea appear in quite a variety of ways; hot or cold brewing, flavored teas such as peach

flavored tea, fermented teas such as kombucha, as well as bubble tea, which is brought to our lives as a new trend by new generation tea chain cafes.



Figure 22. BigBang Bubble Tea, Izmir (Source: Bigbang Tea Shop, 2022)

5.3 New Opportunities In Tea And Tea Tourism

If we look at the tourism areas in the world, tea tourism is quite new in this regard. Tea tourism has been discussed and planned since the beginning of the 21st century.

“Tea tourism is a wonderful recreational experience to the tourists. Walking through the tea plantation, the process of tea plucking, the cultural festivals of the tea tribes, and staying at the luxurious tea bungalow provides a unique tour experience.”
(Sarmah, 2020, p.4341)

In regions where tea is produced and consumed, tea tourism primarily both provides added value to the region and supports the development of the region from a social point of view. While experiencing a different tea culture in each region or country, it supports the promotion of national identities and regional values. In order to experience the tea culture of a place, there is a coordinated picture with many different

sectors in that region as a whole. Accommodation, food, interesting routes, sightseeing tour planners, museums, factories, tea gardens, tea houses are some of them in this table. (Ng et al., 2022)

From the point of view of tea tourism and tea, information technologies, which are the biggest part of today's world, create new opportunities in this field. When we look at the studies, it is seen that the internet age can open new doors and create opportunities in this field. It has the power to both develop tea tourism and play an important role in the dissemination of tea experiences, cultures and other related regional values. Tea tourism has certain specific features. The first of these is that it covers a certain period or periods. Harvest time is an important process in terms of tea tourism. Tea tourism provides people with different tea experiences in each region throughout the year, but the harvest seasons are more specific dates in terms of attracting tourists. While people have traveled to that region, they want to experience all the tea-related experiences together, so the dates that will give the opportunity to experience all the experiences are certain. At the same time, certain tea tourism remained in specific locations among certain regions. It is difficult to attract tourists to those regions due to the difficult accessibility to some regions. The internet can play a role in spreading tea tourism to a wider area than the more known regions.

“With the help of the Internet platform, it can greatly change the regional limitations of tea culture tourism. Through computer technology, the construction of network virtual tourism platform, coupled with the use of a wide range of three D of technology, for tourists to build an online tourism, online learning platform, can greatly improve the tourism industry by limitations.” (Deng, 2021)

5.4 Additional Use Of Tea In Food Production And Cosmetics

Even though tea is extremely popular as a beverage today, it is also very popular both for coloring food and for making tea flavored products. It is a product that is used not only in food but also in the flavoring of beverages such as coffee. It has become possible to find many green teas, especially matcha flavored coffees, even in chain coffee shops that are growing and spreading around the world. When we look at the food, we see a lot of tea in patisserie products. Although there is no example of tea-

flavored snacks in Turkey, it is quite popular in Japan and its product range is very wide. It's easy to find green tea brownies, cookies, marshmallows, chocolate, crackers or mochi, traditional Japanese snacks. People especially prefer to consume green tea products. After the benefits of tea were scientifically revealed, people's tendency to tea and tea products increased. For this reason, companies or studies that have started new searches in the food sector have started. For example, according to the Development of green tea infused chocolate yoghurt and evaluation of its nutritive value and storage stability study,

“The yoghurt industry is presently booming with the introduction of new tart flavors in the row while green tea is emerging as a proven health-beneficial drink in the market. An amalgamation of the two brings in a healthy, tasty and filling platter in today's food souk. Besides, addition of a hint of chocolate will help to enrich the flavor of the product by masking the bitterness of green tea.” (Chatterjee et al., 2018, p.237)

Since the past, the health benefits of tea have made this beverage the reason of choice. One of its benefits has been considered to be beneficial for the skin thanks to the catechins it contains. For this reason, tea has created a very wide application area in the cosmetics sector. Green tea contains plenty of antioxidants and affects the microvascular system. For this reason, it is widely used in anti-aging products. (Arct et al., 2003, p.117)



Figure 23. The Matcha Bundle (Source: Bokksu Boutique, n.d.)



Figure 24. Tea Cosmetic Products (Source: People, 2018)

CHAPTER 6: CHALLENGES OF THE TEA INDUSTRY IN TURKISH AND JAPANESE TEA PRODUCTION

First of all, it should be noted that tea cultivation and production can be done under certain conditions. The basis of these birds is the climate and soil. Climate change, which is one of the issues that the world faces the most today, has the power to directly affect this area, like many other areas. If we look at tea agriculture around the world, 60% of the production is provided by small farmers. (Food and Agriculture Organization of the United Nations, 2022) In this case, the livelihoods of many farmers are at risk. Global warming greatly affects tea production and is an influencing factor on tea quality. Changes in soil quality, precipitation and temperature are all factors that affect the tea industry. Proposals for solutions to these problems or various investments have been considered by the FAO Intergovernmental Group (IGG).

“Adaptation measures recommended by the FAO Intergovernmental Group (IGG) on Tea, include planting drought and stress tolerant tea cultivars, diversifying production, intercropping tea with other tree crops, organic cultivation and investing in water conservation technologies.” (Food and Agriculture Organization of the United Nations, 2022)

6.1 Demographic Changes In The Tea Production Regions

The fact that tea is the most consumed product after water creates a significant employment area for the regions where tea is produced and developing countries, and it is a product with high potential in terms of export. Tea production is a demanding and time-consuming industry. Rural areas are the places where tea is produced. Producers here have been affected by their earnings lately.

“Low prices are affecting the sustainability of the tea sector, with working conditions and the livelihoods of plantation workers and small-scale farmers in tea producing countries under pressure.” (Wal, 2008)

For the Turkish part of this study, a visit was made to the tea production sites in Rize and interviews were made with the producers and factories. The meeting with the producers in the field of organic tea agriculture in Çamlıhemşin proved this situation. In addition, the producers in Çamlıhemşin and the population living in that area were quite old. When asked about this situation, they said that young population and families with children migrated to cities so that children could have a better education, and sometimes they came to help during the tea harvest season. It was also told by domestic producers that they went to cities to create different job opportunities. Therefore, as a result, due to the rural areas where tea farming is carried out, as well as the fact that tea farming presents difficulties in making a living, it is concluded that there are demographic changes in the tea producing regions.

6.2 New Tea Marketing Models

According to the definition of American Marketing Association,

“Marketing is the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large.” (American Marketing Association, 2017)

Today, marketing has transitioned to a different dimension and appears as digital media. Digital media or social platforms have further increased the competition between companies. Firms tend to aim not only to gain customers but also to retain the customers they have won. Therefore, companies aim to both place the company in a certain position and acquire loyal customers with different marketing strategies.

“Service organizations have long recognized the importance of the customer experience for customer satisfaction and loyalty. An experience occurs when a customer has any sensation or acquires knowledge from some level of interaction with the elements of a context created by a service provider.” (Pullman and Gross, 2004, p.553)

Experience design plays a good role in acquiring loyal customers in the tea industry, be it local or international companies, and it is quite popular.

“Experience design, an approach to create emotional connection with guests or customers through careful planning of tangible and intangible service elements, has gained popularity in many hospitality and retail businesses. With ever-increasing competition, service providers seek to develop loyalty by aggressively designing, continuously innovating, and managing their customer experiences.” (Pullman and Gross, 2004)

If we look at the marketing strategy of the Lipton brand, the company positions itself on quality and ease of use, while at the same time it shows itself with the slogans "made with 4000 hours of sunshine" or "love your heart", which emphasize natural, healthy and fresh. Advertisements of the brand with these slogans took place in digital media. In addition, the company has made agreements with many actresses and actors to increase its credibility and awareness. (Bhasin, 2019)



Figure 25. Lipton Tea Ad Campaign (Source: Lipton, n.d.)



Figure 26. Lipton Tea Ad #2 Rare 2022 "Love Your Heart" (Source: Ebay, n.d.)

6.3 The New Trend In Tea Experience : International Influence And The Growth Of Chain Cafes

Trends such as brewing techniques, flavoring, cold or hot brewing, or fermented tea products such as kombucha create a new opportunity to enrich this experience and tea tourism. At the same time, tea cafes that offer a variety of teas and make some teas a trend in certain consumer groups have increased considerably today. With international influence, tea began to take its place in chain cafes just like coffee, in countries such as Japan and Turkey. These tea cafes both offer different types of tea in stores and offer ready-to-drink packaged products in another popular tea product today. In some tea cafes, freshly prepared and ready-to-drink fully closed packaging is made in front of the consumer. Today, the increase in tea consumption of people who are conscious of the fact that tea is good for health, and the tendency to new tea trends in the young section with the international influence and chain cafes, has made a very strong increase in tea consumption.

6.4 Consumer Attitude To Tea As A Food Value

Tea has a wide consumer segment in the cultures where it is produced and consumed. Consumer behavior can change depending on factors such as the economic power, culture, background, psychological moment of the person. In terms of tea, many kinds of tea options are presented to the consumer today. Accordingly, consumer behavior is affected by features such as brand, price, reliability or the aroma of tea. (Ghosh and Ghosh, 2013)

There are basically four factors that affect consumer behavior towards tea. These are cultural, social, personal and psychological factors. Since the cultural factors, habits and consumption patterns are different, there will be differences in choosing the products, as the values are also different. Second, the social factor is about how the consumer is affected by the habits and choices of other consumers in their social environment. Therefore, the consumer's attitude towards tea is affected socially. Another factor is personal. Factors such as a person's background, lifestyle, economic power affect their attitude towards tea or the choice of tea products. Finally, the psychological factor. The psychological factor can be directed by external factors such as advertising. Therefore, in this case, it affects the consumer's attitude towards tea.

CHAPTER 7: THE OVERVIEW OF THE TEA DESIGN COMPONENTS

Tea is the second most consumed beverage in the world, it has a place in different cultures and at the same time it is a cultural element in different cultures. The production and consumption of this product, which has a place in many cultures, varies from culture to culture and even from region to region. At the same time, the type of tea also changes. While black tea is popularly consumed and part of the culture in Turkey, green tea is consumed in Japan. While sencha is popular in daily life as green tea, matcha is used in tea ceremonies. If we give an example to other cultures, Assam tea is one of the special teas in India. While the types of tea and their preparations vary from culture to culture, the tea making equipment used also differs.

CHAPTER 8: SERVICE AND PRODUCT DESIGN OF TURKISH TEA

The human brain looks for a way to make sense of everything it sees around it. When it finds a sign to make sense of something around it, it continues smoothly and completes the picture on its own. The products we use in our daily lives, such as kitchen appliances, lamp switches or stationery products... Well-designed products give us clues on how to use them. It is easy to understand and use.

“The human mind is exquisitely tailored to make sense of the world. Give it the slightest clue and off it goes, providing explanation, rationalization, understanding. Consider the objects books, radios, kitchen appliances, office machines, and light switches that make up our everyday lives. Well-designed objects are easy to interpret and understand. They contain visible clues to their operation.” (Norman, 1988)

Well-designed products are unobtrusive while responding to needs, and while they become a part of daily life, they begin to enter the culture of the society. "These products, which were designed close to the ideal in the beginning, fulfilling the expected function perfectly, whose form has matured over time and whose subject is often lost, become the property of the society and become indispensable objects of our social daily life. The origin of these designs is so deep that it is often impossible to reach the designer. the secret designer is considered to be the lifestyle and customs of that society." There are such products in Turkish tea culture. If we need to start with a product whose design has defied time and whose designer could not be found, but which has managed to become a part of the culture, it is necessary to start with a thin-waisted tea cup and saucer.

Tea Cup

Although there is no clear information about when and by whom the Turkish style tea glass was designed, according to some discourses, although it is thought that the thin waisted tea glass was produced in Turkey's first glass factory, Beykoz Paşabahçe Glass Factory, which was established in 1935, when we look at the Hoca Ali Rıza's Semaver, we can clearly see the tea glass item. Since Hodja Ali Rıza, the painter, lived between

1858-1930, it is understood that the story of the thin-waisted glass actually dates back to these times. It is estimated that it was during this time period that tea gained popularity in Turkey and gained a strong place in social life, and that the thin-waisted tea glass became a cultural element by gaining a "Turkish identity".



Figure 27. Hoca Ali Rıza, “Semaver” (Source: Akcay, 2020)

With the development of the glass industry with the industrial revolution, glass cups began to show themselves. The tea glasses, which were costly due to the design at that time, were redesigned and produced without a handle. “Glass cup emerged with the glass industry that developed after the great Industrial Revolution that started in Europe in the 1850s; but it had a foot, a handle or a handle. That is, it was difficult and expensive to manufacture. In the glass factory established in Beykoz in the 1900s, the foot, handle and handle were removed for the first time and a tea glass similar to today's emerged.” (Küçükerman, 2009)

Considering the design of the Turkish tea glass, it is designed in detail to increase the pleasure of drinking tea. In Turkish tea culture, the ratio of brew and water is very important. Some people drink the tea light, some drink it with a strong brew. The fact that the tea glass is transparent allows you to easily adjust and see the brew rate of the tea. The thinning of the middle part of the tea glass, that is, the thin waist, provides the design of the tea glass to sit comfortably in the palm. This situation makes it easier to

feel the warmth and to drink with the expansion of the glass towards the mouth. Thanks to this wide mouth, both the drinking part cools down easily and the scent of the tea is felt easily. (Güneş, 2012, p.237)



Figure 28. Thin-Waist Tea Glass

There are regional differences related to the presentation of tea in Turkey. Erzurum region can be given as an example for this. After a piece of sugar is dipped in tea and placed under the tongue, tea is drunk. The sugar under the tongue ends with the tea. (Tezcan, 1987) However, since people in other regions mix sugar into tea and drink it, we come across another product here, the teaspoon.

Glasses are generally divided into three in Turkey: "thin waisted, Lale and Ajda". (Gürsoy, 2005)

"The tulip-shaped tea glass is considered to be a widely used, culturally valued and emotion laden industrial product for the everyday lives of people living in Turkey." (Erol and Leblebici Basar, 2021, p.492)

Although the tulip-shaped tea cup appeals to a wide audience, another design that is gaining popularity today is the Ajda model. If comparing the design of the Ajda model tea glasses with the thin-waisted tea glasses, the bottom side is more bulging. It is

fuller and more enveloping when handled. This design gives the possibility to put more tea.

Teaspoon

It always sounds the same in coffee shops, tea conversations at home or during a tea break at work. The sound of the teaspoon hitting the glass, used to stir the sugar in the tea. This sound is almost a part of tea conversations. A teaspoon is used to mix the tea when sugar is added, and it is also used as a kitchen measure with its 1.75 cc measure.



Figure 29. Thin-Waisted Tea Glass and Teaspoon

The teaspoon is also used for a different purpose in Turkish culture apart from its own purpose. In Turkish culture, the host always refills the guest's tea as it runs out, until the guest says he or she doesn't want to drink any more tea. Instead of verbally expressing that the guest does not want to drink tea, they use another way embedded in the culture. Although there are regional differences, putting a teaspoon on top of the finished tea glass in some regions means: I don't want to drink more tea, that's enough for me.

Saucer

Turkish tea glass is unthinkable without a saucer. If today's tea plate models will be examined, each of them is produced in different materials and forms. However, there is such a model that encountered it quite often in coffee houses and tea houses. When it comes to tea plates, the first thing that comes to mind is this model "Persian Tea Plate", in other words "Nalbeki". As the name suggests, it is thought to have come to Turkey from Iran. The designer of this saucer is unknown and it is a timeless design. Although it is thought to come from Iran, this model comes to mind when Turkish tea culture is mentioned and the subject of the tea plate is in question. This tea plate model, which has managed to become a part of the culture, is red and white in color and is made of melamine. Melamine is a heat resistant material. While this tea saucer prevents hand burns and provides comfortable carrying, the red intermittent patterns help the tea to appear in its ideal color. The spaces and gaps left in white prevent the tea from appearing too steep, so that the tea does not appear over-infused and bitter. Another task of the tea saucer is to create space to put the teaspoon. After mixing the tea, the teaspoon is put in the tea saucer.



Figure 30. Porland Porcelain Persian Red Gilded Tea Plate (Source: Porland, n.d.)

Teapot, Infuser and Samovar

The teapot, which is an inseparable fixture of Turkish tea culture and is always kept in different sizes in every Turkish kitchen, consists of two separate parts. Today, there are many examples of teapots produced with different materials. Teapots made of aluminum, copper, glass, steel or porcelain are very popular, as well as electric teapots made of a combination of several materials with the developing technology today. The upper part of the teapot is used for the brewing process and the lower part is used for boiling water. In both parts, there is an ergonomically designed pitcher and handle that will provide comfortable use between the hand and the glass. The lower part of Turkish teapots is larger than the upper part. While the large part at the bottom boils the water, it also keeps the tea being brewed at the top warm. On the upper side, the intense brew of the tea is brought to the desired color and consistency with the boiled water after it is poured into the glass at the desired rate.



Figure 31. Examples of Turkish Teapot Types

The word samovar comes from Russian and means "self-boiling". This product, which is used in many countries, especially in Russia, is also used extensively in our country. Despite the heavy use of the samovar traditionally, electric samovars are frequently preferred in homes today. It is much preferred because of its large volume, Turkish society's fondness for tea and perhaps because of the consumption of tea at all hours of the day.



Figure 32. Korkmaz Electric Samovar

Tea Strainer

Roasted black tea powder is used in Turkey. After the tea is brewed, the ideal consistency of the tea can be understood from the collapse of the tea powder in the teapot. Although the tea particles have settled to the bottom, some tea particles may pass into the glass while infusing the tea glass. To prevent this, a tea strainer is used. The ideal tea is called the color of rabbit blood. In order to achieve this color, the ratio of brew and water is very important. But not only that, the tea should appear clear and without any particles. At this point, the tea strainer takes on this task. Some teapots have its own strainer inside the product in the infuser section, or there is a section where the tea powder is placed, which functions as a strainer. While these strainers may be sufficient for some products, an extra tea strainer is required as the strainer part is not dense in some products.

CHAPTER 9: SERVICE AND PRODUCT DESIGN OF JAPANESE GREEN TEA

Product experience is evaluated under 3 different headings in human product interaction. Human product interaction can be considered tool-based, non-instrumental, or even non-physical. The experience that will be evaluated as an instrumental, for example, the teapot used while brewing tea can cause discomfort, it is the result of interaction with a physical product. Secondly, this is a point that is not dependent on a vehicle, that is, the use of the product does not directly contribute to its operation. For example, playing with the texture of the product. For example, teacups, which are a reflection of the wabi sabi philosophy underlying Japanese tea ceremonies, do not have a perfect or symmetrical form. While you are looking for the perfect in the imperfect, you feel that imperfection when touched, and touching it attracts attention. Non-physical interaction, on the other hand, is based on the fact that the product can be understood without using it, or the outcome of its use is predictable. As a result of the lived experience, another emotional experience emerges. For example, it is an experience to find or try to find inner peace after a calm ceremony without having to think about the next step in the tea ceremony. The experience is shaped by the characteristics of the user, namely cultural values, background, gender, age, skills or personality, and the characteristics of the product, namely color, texture, shape. (Desmet and Hekkert, 2007)



Figure 33. Japanese Tea Ceremony Equipments in Fujinokuni Cha no Miyako Museum

The tea equipment used in the Japanese tea ceremony is called doughu, literally, tea tools. Whether it's a long formal tea ceremony or a short informal tea ceremony, a lot of tea equipment is needed. The tea ceremony is not just about making tea with tea equipment. The environment where the tea ceremony will take place, the decorations in the environment, and even the view that welcomes you from the window is a part of this concept.

Tea House

Ambiance is very important in Japanese tea ceremonies. Since the tea ceremony is a calm and attention-seeking experience, the area that will provide this atmosphere has been carefully thought through and designed accordingly. Chashitsu is the name given to a house or room specially designed for the tea ceremony. This term can be used to indicate the room where the tea ceremony is held, where the guests are hosted, or it can be used to indicate other parts of this concept, for example, it can refer to the area up to the roji garden, which leads to the place where the tea ceremony will be held. Roji signifies the garden path leading from the tea room. This term means damp ground. Those who will attend the tea ceremony are expected to pass through the garden and get rid of their thoughts before the ceremony. In short, it is a passageway between a stressful life and a tea ceremony house that plays a relaxing role. (Acar,

2020) Tea houses are usually small and made of wood. They are organized on the basis of simplicity, which is the basis of Zen philosophy. The floor of the tea room is covered with a Japanese-style flooring traditionally made of rice straw called tatami.



Figure 34. Japanese Tea Rooms in Fujinokuni Cha no Miyako Museum



Figure 35. Japanese Tea Room in Fujinokuni Cha no Miyako Museum



Figure 36. Roji Garden in Fujinokuni Cha no Miyako Museum

Borrowed Scenery

One of the attention-grabbing details in tea houses is the magnificent views or the carefully designed Japanese-style gardens when viewed from the window inside the tea house. These magnificent, variable landscapes that can be seen from tea ceremony houses or from the windows of their rooms, changing at any time according to the seasons and time of the day, are part of the concept. The concept representing these scenes accompanying the tea ceremony is known as Shakkei. This concept, which is called Shakkei in Japanese, means borrowed landscape.



Figure 37. Borrowed Scenery in 2018 - Mount Fuji View from Fujinokuni Cha no Miyako Museum

The Japanese tea ceremony actually takes the tea drinking experience to a different dimension. In this way, a simple tea drinking experience has become both an art and a social property. Each complementary part of the Japanese tea ceremony experience, which has become a social experience, may change according to the season or situation. The tea equipment used in the Japanese tea ceremony is also like that.

Japanese Tea Ceremony Utensils

Chasen - Tea Whisk

Chasen is a tea whisk made from a single piece of bamboo, which is used to froth the matcha tea with the hot water after the matcha powder, which is in the form of a very fine wire, is used to mix it with water.

Chashaku - Tea Scoop

Made from a single piece of bamboo, this equipment serves to get enough of matcha powder. It can also be made from different materials other than bamboo. For example, it can be made of various woods, metals, ivory or glass.



Figure 38. Tea Whisk, Tea Bowl, Tea Scoop and Tea Vessel

Chawan - Tea Bowl

These are the bowls used to serve the matcha green tea to the guests after it is prepared. These bowls come in many different styles and sizes. While shallower bowls are used to cool the tea more easily in summer, deeper bowls are used to make it harder to cool in winter. These bowls attract attention with their imperfections and irregularities. It is even possible for us to witness the art of Japanese kintsugi in these bowl samples. The art of Kintsugi is the art of repairing broken bowls with resin mixed with gold. This art is actually based on seeking perfection in imperfection.

Natsume - Tea Vessel

Wooden storage container used to store and present matcha tea powder. Today, there are also those produced in different materials.

Kama - Kettle

It is the product used to obtain the boiling water used in tea making. At the beginning of the tea ceremony, the lid is opened when tea making is started, and it is closed when the ceremony is over.

Ro - Sunken Hearth

This built-in hearth is used on cold winter and autumn days. In tatami flooring, a space is left to insert the kama used to boil water. Kama is placed in a box-like area so that it heats up fast and cools down slower.

Hishaku - Water Carrier

It is the equipment used to take hot water from the teapot or cold water from the water bowl in the tea ceremony. This bamboo water ladle used with the ro, which is a fixed submerged stove, and this water ladle used in other kettles are used in different sizes.

Chakin - Hemp Cloth

It is the cloth used for the ceremonial cleansing of the tea bowl after guests drink the tea.



Figure 39. Japanese Tea Ceremony with Sunken Hearth

The flow of the tea ceremony begins with the host bringing the tea sets to be used in the ceremony. Dessert is served before matcha tea is served to guests. Wagashi is served for dessert. Wagashi is a traditional Japanese confection with different varieties. Afterwards, the host prepares and offers tea from powdered green tea, or matcha, to the guests. Matcha tea has a sharp aroma and a refreshing taste. There are some important points in the tea ceremony. First of all, one moves calmly, gently and gracefully throughout the ceremony. It is an important issue to respect the ceremony and the guests as well as the tea utensils used. Certain rules must be followed in tea ceremonies. It is important to maintain silence and attend the tea ceremony with appropriate attire. Although the clothes of people who want to experience this sleep in tea ceremonies organized for touristic purposes are not chosen for this experience, it is quite common to wear kimono in tea ceremonies. The kimono is a T-shaped traditional Japanese dress with a straight line that reaches the ankle, with a collar and long sleeves. During the tea ceremony, all movements and events are performed within a certain etiquette and grace. Holding the tea bowl, mixing the tea, and putting it back after drinking the tea are all done by following the rules. (Gürsoy, 2005, p.67)

CHAPTER 10: SEMIOTICS OF COMPARATIVE EXPERIENCE DESIGN: TURKISH TEA AND JAPANESE GREEN TEA CULTURES

Tea is a product beyond being an agricultural product, the most consumed beverage after water, and even providing added value to countries. First of all, it is a product that has been produced from a single plant and has become an integral part of cultures while being a part of new experiences as borders cross the world. As it continues to spread from culture to culture, from country to country, tea is a product that has been re-interpreted, provided intercultural interaction, and can also become traditional everywhere while re-developing. For this reason, tea has become, above all, a cultural element. Therefore, tea is actually an item that has great potential to be a sign or a carrier of meaning. Tea contains many signs, not a single sign action. Signs accompany a larger system and are part of the system they accompany. (Kull, 2002, p.329)

Tea, which started in China and spread to the countries of the world, almost all of the words used for tea are divided into three broad groups when looking etymologically: te, cha and chai. When looking at the different words used to describe tea in the world, we see that it is divided into two main groups: "te derivative" and "cha derivative" Global regions with a history of land trade via the Silk Road, while defining tea with the derivative of 'cha', sea trade with certain southeast regions of the Chinese Empire, it is clearly seen that most of the global maritime regions with a history, like Europe, define it with the derivative 'teh'.

Tea, which is also a cultural element, has a significant role in every culture. The experience from brewing tea to consumption is different in every culture. At the same time, the tea equipment that is a part of the tea experience and even the type of tea consumed differs to reflect the cultures. Tea is a social experience when looking at it in a cultural context. As it is accepted as one of the signs of hospitality in Turkish culture, it also aims to provide the bond between the host and the guest in Japanese culture. While Turkish tea is a classless beverage, a liquid consumed by people of all statuses and provides class cohesion, Japanese green tea became popular in the Japanese religious classes then with the production of tea cultivation in Japan became

a popular beverage of the royal and elite classes. Like this cultural difference, the service, presentation, experience and products used for tea differ. This study aims to compare cultural similarities and differences of two societies over this shared drink with respect to experiences of and around it.

Tea is an important unit of cultural codes both in Japan and Turkey. In this study, the tea issue between two countries, Turkey and Japan, through the system in which the indicators are arranged, that is, the codes were discussed. These mentioned systems are subject to rules accepted by everyone in the society using the codes. This is because it is often studied to highlight the social dimension of communication. While discussing the comparative semiotic experience design within the framework of Turkish tea and Japanese Green Tea, the basic features of the codes in John Fiske's "Introduction to Communication" book were utilized. These features were examined in the context of Turkish Tea and Japanese Green Tea Cultures.

“In this book, though, we concentrate on the second category of code. Indeed, I use the word code to mean signifying system. All codes of this type have a number of basic features.

- 1. They have a number of units (or sometimes one unit) from which a selection is made. This is the paradigmatic dimension. These units (on all except the simplest on-off single-unit codes) may be combined by rules or conventions. This is the syntagmatic dimension.*
- 2. All codes convey meaning: their units are signs which refer, by various means, to something other than themselves.*
- 3. All codes depend upon an agreement amongst their users and upon a shared cultural background. Codes and culture interrelate dynamically.*
- 4. All codes perform an identifiable social or communicative function.” (Fiske, 1982)*

Examining these features in the context of Turkish Tea and Japanese Green Tea Cultures:

1. They have a number of units (or sometimes one unit) from which a selection is made. This is the paradigmatic dimension. These units (on all except the simplest on-off single-unit codes) may be combined by rules or conventions. This is the syntagmatic dimension.

An integral part of traditional Japanese culture for centuries, the Matcha tea ceremony, a quiet celebratory tea ritual performed with beauty, is a binding experience of attention, respect, and focus. During the Muramachi period, about 600 years ago, a priest Juko Murata created the concept of wabicha. Wabi-cha is a style of Japanese tea ceremony that emphasizes simplicity. It includes some tea making and drinking etiquette. If looking at the matcha ceremony rituals; Today, levels of formality can vary from meeting to meeting. But matcha ceremonies usually consist of a series of events and utensils. Examples of matcha ritual are a small bowl of chawan (茶碗), bamboo whisk chasen (茶筌), tea ladle hishaku (柄杓), linen cloth chakin (茶巾), sunken hearth ro (炉). The host, the matcha itself, and the sweets hand together bring the objects into the room. Before drinking tea, dessert is always served. In tea ceremonies, wagashi is usually served as a dessert. In the context of the Japanese tea ceremony, wagashi is served to accompany and complement the bitter taste of Matcha. Wagashi is always consumed before Matcha is served and never together. There are a number of successive processes in the preparation of Turkish tea, too. Different equipment from Japanese tea is used in the production of Turkish tea. There are pots, one small and one large, that sit on top of each other for brewing. Tea is mostly made with the traditional glass. The traditional tumbler glass, in which tea is served, has no handle and is narrower in the middle than at the top and bottom. On the other hand, in Turkish culture, tea is a beverage that is generally consumed with some foods. When people go to visit, food prepared for them is brought in front of them and tea is served with them. At the same time, in Turkish culture, tea is a beverage that can be drunk at any time of the day and in any environment. For example, it is an integral part of Turkish breakfasts. Of course, some processes are followed in its production, but it does not offer a production and drinking experience equipped with many rules as in Japanese culture.

2. All codes convey meaning: their units are signs which refer, by various means, to something other than themselves.

This feature is very clearly felt in Japanese tea culture. When looking at this feature in the context of Japanese tea culture, seeing very clearly that matcha green tea is much more than a beverage in Japanese tea culture. The matcha tea ceremony has been an integral part of traditional Japanese culture for centuries. The matcha tea ritual, a quiet celebration of grace and beauty; It is a binding experience of attention, respect, and focus. During the Muramachi period, about 600 years ago, a priest Juko Murata created the concept of wabicha. Wabi-cha is a style of Japanese tea ceremony that emphasizes simplicity. It includes some tea-making and drinking etiquette. Etiquette includes how to make the tea and mingle with humility and complacency. This simple and quiet style is called a wabi. Wabi is the basic idea of Japanese sado. What is called sado or chado is also called the tea ceremony, or simply the way of tea. It is a very stereotyped way of preparing green tea. Chado goes far beyond the ceremony of preparing and presenting tea. It is seen as a real art that requires fine precision and extensive knowledge. Sado is also a concept that encourages questioning the purpose of life and valuing nature at the same time. Also, The influence of Zen Buddhism is predominantly seen in the tea ceremony. Zen philosophy was born in India, developed in China, and arrived in Japan in the 11th century. The purpose of the ceremony is to interact with nature and enlighten the soul in this way, rather than tea making and serving. Zen is difficult to define, but it expresses awareness and the idea that simple actions can lead to the awakening of our souls. There are many similarities between the basic principles of the tea ceremony (harmony, respect, tranquility) and zen philosophy (awareness, temporality, acceptance). If looking at the Turkish tea culture, since tea is a social phenomenon, it signifies the indicator of hospitality and friendship. Offering tea to or to others is a part of Turkish culture and means more than just drinking a beverage. In this sense, tea is also a social experience, since it is a beverage that is usually drunk with others. This situation is also reflected in the tea equipment used. In addition to the different sizes of teapots which is called çaydanlık, drinking tea with large groups is a very common social experience, so there is a tea making equipment called a semaver.

3. All codes depend upon an agreement amongst their users and upon a shared cultural background. Codes and culture interrelate dynamically.

Japanese green tea became popular in the Japanese religious classes then with the production of tea cultivation in Japan became a popular beverage of the royal and elite classes while Turkish tea is a classless beverage, a liquid consumed by people of all statuses and provides class cohesion.

4. All codes perform an identifiable social or communicative function.

Drinking tea should not be thought of as just consuming something, it brings people together and creates a powerful social experience. This situation is similar in Turkish culture and Japanese culture. In Japanese tea culture, the tea ceremony is mostly about the bond between host and guest, but is seen strictly as a meditation activity, as the great founder Sen no Rikyu called tranquility as one of the main elements of the tea ceremony. Turkish tea offers an experience that is suitable for every occasion and every time and brings people together.

To sum up, tea is a cultural element, and has a significant role in every culture. The experience from brewing tea to consumption is different in every culture. At the same time, the tea equipment that is a part of the tea experience and even the type of tea consumed differs to reflect the cultures. Tea is a social experience when looking at it in a cultural context. As it is accepted as one of the signs of hospitality in Turkish culture, it also aims to provide the bond between the host and the guest in Japanese culture. While Turkish tea is a classless beverage, a liquid consumed by people of all statuses and provides class cohesion, Japanese green tea became popular in the Japanese religious classes then with the production of tea cultivation in Japan became a popular beverage of the royal and elite classes. Like this cultural difference, the service, presentation, experience and products used for tea differ.

When examining both cultures, we come across 2 results. The first is tea specific, the second is generic. Tea Specific, If we look at how it emerged and spread historically, while tea is a class beverage in Japanese culture, it appeals to all segments of society in Turkish culture. In addition, Turkish tea culture has the power to bring people from different segments together. Secondly, when examining Japanese tea culture generically, a more formal and strict coding is encountered, while more informal and various coding is encountered in Turkish tea culture.

CHAPTER 11: FUTURE OF TEA EXPERIENCES IN THE FRAME OF EXPERIENCE DESIGN

If looking at the future of tea experiences within the framework of design, we come across a very big picture. Apart from being a simple tea ceremony in its own right, there are examples in many countries where more comprehensive experiences are designed by looking from a larger window in connection with many different tea sources. By tea sources, the adventure experienced in the field where the tea is grown, the processing processes after the tea reaches the factory after the harvest time of the producer in this process, and all the processes in which the end product is experienced until the user comes to the fore are evaluated and started to be presented to the user to a certain extent. If looking at the future, this big picture can be made to work like a machine wheel. In the regions where tea is produced and consumed, every element related to tea or related to tea tourism is tried to be made to work in a coordinated and interconnected manner. According to the Nakai Organic Tea Garden in Kyoto,

“We need to design the town. Model would be Napa Valley, CA. Implement certain types of unification of tea farms for tasting tours like having a factory cafe for each tea farm and people can go around for tasting. Implement mobility in the town like electric vehicles. We have to have nice accommodations to stay. We have to have good restaurants. We have to have some attractions like heat air balloons, zip lines, giant swings at the top of tea fields etc. We have a lot of precious nature. Finally, we have to have something that nobody does in the world. Pesticides-free, fully organic tea village. That is a real teatopia. Wazuka is so beautiful and has so much potential but we are using very little of its potential. We can make the teatopia a true teatopia.”

Another issue is digitalization, which has become a part of today's world. Today, many tea experiences and tea tourism have been enriched by making use of technology. For example, if you want to attend a traditional tea ceremony in Japan and learn about this culture firsthand, you don't need to know the language. The system related to this is provided by utilizing the services provided by technology. Or, while visiting the museum, it is possible to experience another dimension of tea from digital screens interactively. Many tea businesses have already started to give small signals about the

future of this situation. (Maikoya, n.d.; Kudan Institute of Japanese Language and Culture, n.d.) For example, some tea schools have opened reservations for the tea ceremony experience to experience it online. Another issue is virtual tea courses. It seems that we will see the tea-related course or ceremonial experience much more intensely in the new virtual environment in the future.



CHAPTER 12: CONCLUSION

Tea, obtained from a single plant, is a beverage that has become an inseparable part of cultures where it is a different experience to make and consume in each culture where it is produced and consumed. When looking at its consumption historically, it starts as a medicine, and in Japanese culture, it appears as a class beverage consumed by religious, noble and upper class people. On the other hand, tea, which provides a purely social experience in Turkish culture, is distinguished as a completely classless beverage that has become a social property. Tea, which is the most consumed beverage in the world after water, has been a value in both Turkish and Japanese culture and also means much more than a beverage. Tea is seen as an element that symbolizes hospitality in Turkish and Japanese culture and helps the bond between the host and the guest. And also, tea carries traces of the culture it is in, bringing the experience of tea to a different dimension. In Japanese culture, the expression *ichi-go ichi-e* is rooted in Japanese tea ceremonies to evaluate every moment with the emphasis that it will not be repeated and to live the moment. This expression emphasizing temporality means "just this time". In other words, it shows that the experience to be lived is unique and momentary. Each preparation for the Japanese tea ceremony and the tea experience after it is done with great care and awareness. The tea ceremony is carried out with utmost seriousness, respect and care in order to create a bond between the guest and the host, to achieve inner peace and to be aware of the beauty of every unique moment and transience. Silence is a value in traditional Japanese culture. Tea ceremonies are filled with silence. Those in the tea experience listen to the sound of bubbling water, the sounds of the equipment used in tea making, and the transience in nature while living that moment. The tea experience in the ceremony actually includes the interaction between human and environment rather than human-human interaction. When Turkish culture is compared, the opposite is the case. In the atmosphere, not the silence, but the voices of the deep conversation with tea echo. Human-human interaction is established through the tea experience. In fact, it can be called a kind of communication design. When Turkish and Japanese tea cultures are compared, the service, presentation, experience and products used of tea are also different, just like this cultural difference. In Turkish culture, tea is timeless as well as classless. It is a must for Turkish breakfasts, there is always tea at the desk when starting work, tea is

offered at meetings, tea is indispensable for conversation when you get together with people, or simply the shopkeepers offer you tea while shopping. At the same time, in Turkish culture, people drink tea when they are happy or sad so that they can take away their grief, that is, it is a drink that is drunk under all circumstances. In Turkish culture, there are special days when women meet at certain periods and chat together over tea. People share their lives, experiences, troubles and happiness with each other over tea and food. Considering all these, tea in Turkish culture can be considered as both an emotional experience as well as social experience. Also, it can be a physical experience because of the human product interaction, and a mental experience because people share their past, future or dreams with each other in the atmosphere created by tea. In Japanese culture, the tea experience is an emotional experience as it is aimed at finding inner peace with awareness as much as it is a social experience. Respect for the environment and the equipment used is as important as the guests in the Japanese tea ceremony. The tea ceremony, which is a nutrition experience, is also a physical experience of human product interaction with the equipment used in tea making during the ceremony.

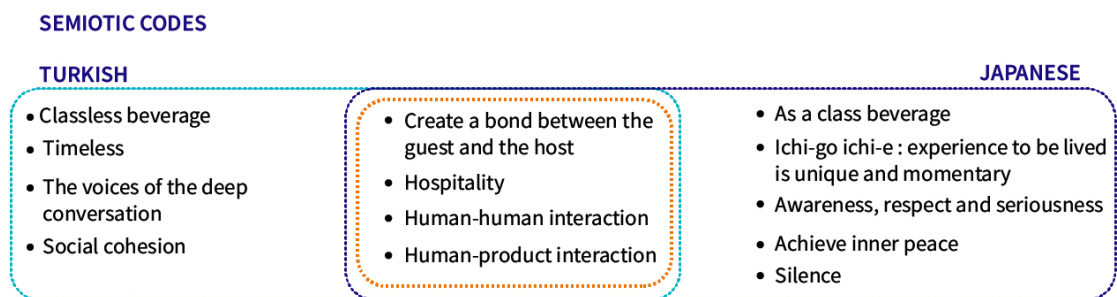


Figure 40. Semiotic Codes

To sum up, When tea experience is compared in terms of design and experience in Turkish and Japanese cultures, Turkish and Japanese cultures have common features as well as very different or vice versa features. These differences are due to the different cultures and make each tea experience unique. The tea experience, which is a social experience, shows that it carries traces of culture in this way. The process from brewing tea to serving is an extension of the culture of every country. Each element in the context of tea referring the aim which the bond between the two countries, basically

between the guest and the host. Although the Japanese tea ceremony is aimed at simplicity, it is actually a more intense and complicated process in terms of the tea ceremony and its meaning. In terms of experience design of Japanese tea houses, it is seen that both interior and exterior spaces are designed according to certain standards in terms of being a part of the concept of tea ceremony, but Turkish tea houses are developed with a focus on tea without a certain standard. While tea was a class beverage in the past Japanese culture, it appeals to all segments of society in Turkish culture from past to today. Turkish tea culture has the power to bring people from different segments together but just as in Japanese tea culture, even tea schools are divided on this issue. In the light of the information obtained as a result of the study; When examining Japanese tea culture generically, a more formal and strict coding is encountered, while more informal and various coding is encountered in Turkish tea culture. Considering cultural indicators in product design and development of experience design and semiotics and making designs that will meet the cultural needs of all kinds of packaging or promotion to be used in increasing the production and consumption cycle of tea are important. The functional design and structure of the product is country-specific and ensuring the availability of products and the suitability of tea in the brewing and serving process (simplicity and conformity to cultural expectations) at every stage of the design phase should be considered. Issues such as the preference of a design that supports and enhances the meaning of cultural heritage have been identified as factors that ensure success.

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APPENDIX

Interview With The Organic Tea Producer In Turkiye

The following questions have been prepared to be asked to the producer to be used in the comparative experience design study for service and product design of Turkish Tea and Japanese Green Tea Cultures.

Participant: Hatice Hanım, organic tea producer in Camlihemsin

QUESTIONS

1. What types of tea do you produce?

We produce and collect the tea leaves used in the production of 3 types of tea, black tea, organic black tea and white tea, and give them to the factory.

2. How many harvests per year?

It is harvested 4 times in the coastal part and 3 times in the mountainous part of the year. If the climatic conditions are not suitable, the annual harvest can be done in the mountainous area.

3. Are there any tools used while harvesting or are the tea leaves collected by hand?

The first bud of the tea used in making white tea is harvested by hand. It is difficult to collect and takes time, so it is valuable. However, tea scissors are used when harvesting black tea. A new collection device has started to be used now, the rechargeable tea maker. However, the rechargeable tea maker can be used on flat terrain. Since our production place is mountainous, we cannot use it.

4. Is the harvest done at a certain time of the day?

Harvest is done early in the day. It is not done in order not to tire the collector when the sun is overhead at noon. If the teas could not be collected, the collection continues in the evening. The factory determines the day when he will come to buy the teas. For

this reason, in order not to keep the tea waiting, we follow the calendar of the factory so that we give it immediately on the harvest day.

5. How is the regeneration of tea plantations ensured?

The tea factory demands that 1/7 of its tea field be pruned every year. After sprout, tea can be collected from the pruned side in the second shoot, not the first shoot.

6. What determines the quality of tea?

The quality of tea is determined by the soil, being fresh (picking and selling on the same day), and not burning. By saying that it will not burn, if the tea does not go to the factory immediately after it is collected, but is kept in the scholars' places, tea leaves are laid so that it does not burn. In this way, the quality is preserved.

7. Does the type of tea change from region to region or from producer to producer?

Yes, it is changing. The tea we produce is considered organic. In some regions, normal black tea is produced. Even the fertilizer used is therefore different. For example, organic tea producers like us are prohibited from using fertilizers with chemical content. If detected, production permits are revoked.

8. Is there a product that is used as a supplement in tea production or does the fertilizer used affect the quality of the tea?

Fertilizer, of course, affects the quality of tea. The fertilizer used varies from producer to producer, depending on the type of tea. Fertilizer is given twice a year. The first is like March-April, and the second is after the first exile.

9. The only tea known as “tea with snow on it” is in our country. What are the climatic conditions required for tea production?

It does not give new sprouts in winter, but it does not shed on leaves. It always stays green. It is said that it snows on it. However, it is not the tea that snows on the tea given to the factory.

10. How long does it take to go to the factory after the tea is picked?

What is desired is to go to the factory on the same day as soon as it is collected. Experts come from the factory with an interval of 1 day. However, if the factory is very busy, it can wait a few days. In these cases, we keep the tea spread in the places of scholars.

11. Does the time it takes to go to the factory after the tea is picked affect the quality or taste of the tea?

Yes, it does. If the tea waits, it will creep. It may burn if not stored properly. Factory doesn't buy burnt tea anyway.

12. Where is the tea stored after it is collected until it goes to the factory?

There are places where the tea is laid and stored, called the scholar place, where it is kept.

13. How to preserve the tea? What are the features of the kept place?

Tea is kept in special rooms for tea leaves which is "alim yeri". It is a place where the briquettes are placed at intervals and the window is small, but it is airy. In this way, when the tea is laid, it can be easily stored and prevented from spoiling.

14. Do you have any information about the process of the tea when it reaches the factory?

After the factory buys it from us, the producers, the tea is dried. The producer cannot make tea from its own product, that is, it cannot dry it. That process is not about us.

15. There are many ways to brew tea. How to brew tea in the best way?

The method of making varies according to the type and amount of tea. In the Black Sea, we want the bitter taste and aroma of tea, so there is a minimum of 20 minutes of brewing time. I put the water under the teapot and put the desired amount of tea on it, then let it sit for at least 20 minutes after brewing. The leaves of the tea should go under the water.

16. How often is tea consumed in the Black Sea? Or does it have a certain time to be consumed?

Tea is consumed very often in the Black Sea. It does not have a certain time, it is always consumed.

17. Tea adds an economic value to the place where it is produced and consumed, but it is also a cultural element. What are the criteria that make tea a part of culture? We collect tea in the field, we get tired, we go home and drink it to relieve the tiredness. When we are sad, we drink because it takes away the sadness. When the guests come, we do not even ask if they have time to drink, we offer them immediately. In our places, coffee is not served much, tea is always offered to guests.

18. What are the traditional tea preferences in Turkey? To what extent are these flavors changing in the face of increasing international influence and the growth of chain cafes?

Here in the Black Sea, we don't like fragrant tea with bergamot or something. We love Rize tea. We want to get the bitter taste and aroma. As a manufacturer, this influence did not reflect on us.

19. How is the calculation of how much tea is produced? Are these quantities recorded for each producer?

Tea experts come from the factory. The teas are weighed and processed for the producer's account. What we call the producer's account is the "Tea Wallet". In the past, the tea wallet was in the form of a notebook. Nowadays, a smart system has been adopted. Our tea wallets are located on the smartphone. The tea is weighed and entered into the system by the expert. When you log in to the system, money is automatically deposited into our bank account.

20. Is there any work being done for the promotion of tea or tea tourism? For example, when I was in Japan, there were trips to tea manufacturers and tea factories there. In addition, all these processes were explained in great detail in the tea museum. Is there a similar situation in our country?

While the tea harvest is being done, there are many people who come to us and ask. We like to explain and help, but there is no specific program as far as I know.

Interview With The Organic Tea Producer In Japan

The following questions have been prepared to be asked to the producer to be used in the comparative experience design study for service and product design of Turkish Tea and Japanese Green Tea Cultures.

Participant: Nakai Organic Tea Garden, Kyoto

QUESTIONS

1. Could you give some information about Nakai Organic Tea Garden?
(establishment, location and general information)

Organic Japanese tea farm company since 1989, located in Wazuka, Kyoto, Japan.

2. How many different teas does Nakai Organic Tea Garden produce? / What types of tea do you produce?

About 13 teas. Matcha, gyokuro, sencha, kabuse, fukamushi, kukicha, Japanese oolong tea, Japanese black tea, aoyanagi, genmaicha, kyobancha, hojicha, Kuki hojicha.

3. What is the tea potential of the Kyoto region?

High Quality not quantity.

4. How many harvests per year?

3 harvests per year.

5. Are there any tools used while harvesting or are the tea leaves collected by hand?

Both Trim machine and collected by hand.

6. Is the harvest done at a certain time of the day?

When the sun sets.

7. What determines the quality of tea?

Safety first.

8. There are many ways to brew tea. How to brew tea in the best way?

Brew in Kyusu.

9. How long does it take for the tea plant to reach maturity?

4-5 years.

10. What are the main processes of tea production?

Steaming and rolling.

11. What are the most important factors to be considered during production?

Safety, not contaminate the tea.

12. How is the calculation of how much tea is produced? Are these quantities recorded for each harvest?

Yes.

13. What is the minimum and maximum time for the tea from the place of harvest to the factory and what does this time change?

The minimum 5 minutes and the maximum 15 minutes. Oxidation.

14. How do you aim to increase tea tourism?

We need to design the town. Model would be Napa Valley, CA. Implement certain types of unification of tea farms for tasting tour like having factory cafe for each tea farm and people can go around for tasting. Implement mobility in the town like electric vehicles. We have to have nice accommodations to stay. We have to have good restaurants. We have to have some attractions like heat air balloon, zip line, giant swing at the top of tea fields etc. We have a lot of precious nature. Finally, we have to have something that nobody does in the world. Pesticides-free, fully organic tea village. That is a real teatopia. Wazuka is so beautiful and has so much potential but we are using very little of its potential. We can make the teatopia a true teatopia.

Interview With The Caykur

1. What types of tea do you produce?

A total of 220 types of dry tea are produced. While these teas are being created, 4 kinds of quality teas are mixed together.

These;

1. Quality tea: To infuse.
2. Good tea
3. Bad tea
4. Powdered Tea: To achieve the volume of the package.

2. How many different teas does Çaykur produce?

There are two types of tea in total: black and green tea. At the same time, these teas are divided into two as organic and non-organic.

3. What is the tea potential of the Rize region?

Rize's tea potential is very high, and it can meet more than half of the country's tea needs.

4. What is the number of tea producers working in the Rize region?

According to the CAYKUR General Directorate of Tea Enterprises 2019 Sectoral Report; A total of 199,645 producers (wallets) appear on a total of 785,693 decares of tea area across the provinces of Rize, Trabzon, Artvin, Giresun and Ordu.

5. How many tea factories are there in the Rize region other than Çaykur?

According to the CAYKUR General Directorate of Tea Enterprises 2019 Sectoral Report; While there are 33 factories belonging to CAYKUR with a total tea capacity of 6595 tons in Rize, there are 183 other tea factories that create a total tea capacity of 14035 tons in the private sector.

6. How many CAYKUR organic tea producers are there?

According to the CAYKUR General Directorate of Tea Enterprises 2019 Sectoral Report; There are 11827 organic tea producers in a total of 38,062 decares of tea area.

7. What percentage does Rize meet the country's tea production?

According to the CAYKUR General Directorate of Tea Enterprises 2019 Sectoral Report; If we look at the number of tea fields and producers in Rize, Rize meets the need of approximately 67% in terms of tea area and approximately 63% in terms of the number of producers.

8. What is the most expensive type of tea sold and its methodology?

The most expensive tea sold is white tea. It is expensive because its cultivation and production process is quite laborious.

9. Do you have any data on annual tea tourism?

Tea data shared with everyone is available on the CAYKUR web page. Statistics, activity and R&D reports and documents are available under the title of publications on the CAYKUR website.

10. The countries you export and their quantities?

According to the CAYKUR General Directorate of Tea Enterprises 2019 Sectoral Report; *“There is an export potential of 5,000 tons of packaged tea in the European Union and other European countries. In 2019 tea was exported to countries such as Germany, United States of America, Afghanistan, Australia, Austria, Germany, Belarus, Bosnia and Herzegovina, Bulgaria, United Arab Emirates, Georgia, Gambia, Czech Republic, Palestine, China, England, Albania, Saudi Arabia, Kuwait, Qatar, Netherlands, Singapore such as Turkmenistan, Japan, Kosovo, Russia, Greece, France, Switzerland, England, Ireland, Japan, Qatar, Kazakhstan, Kuwait, Macedonia, Mongolia, Malta, Moldova, Romania, Kyrgyzstan, Canada, Jordan, France, Ukraine, New Zealand.”* (CAYKUR, n.d.)

11. How long does it take for the tea plant to reach maturity?

4 years.

12. What are the main processes of tea production?

There are five main processes for black tea, namely withering, rolling, oxidation, drying and sorting.

13. What are the most important factors to be considered during production?

Time is very important for tea quality. Tea leaves should undergo oxidation at the right rate.

14. What is the minimum and maximum time for the tea from the place of purchase to the factory? And what does this time change?

After the tea is collected, it should be delivered to the factory as soon as possible. If the tea needs to be kept waiting, the tea is laid in a thin layer in special rooms. Duration affects the quality of tea.

*Tea Product And Producer Data In 2021 By Provinces And Districts Of Turkiye
According To Caykur*

PROVINCE	DISTRICT	TEA AREA (DECARE)	NUMBER OF PRODUCERS	TOTAL AMOUNT OF TEA(KG)
RİZE	ARDESEN	72.603	14.434	142.720.966
	CAMLIHEMSIN	14.001	3.451	24.706.445
	CAYELI	82.774	20.184	114.980.080
	DEREPAZARI	19.370	5.201	40.827.617
	FINDIKLI	41.468	6.707	79.178.065
	GUNEYSU	39.163	8.892	58.673.395
	HEMSIN	3.675	1.461	2.097.781
	IKIZDERE	4.416	2.283	5.601.625
	IYIDERE	18.744	5.612	44.726.664
	KALKANDERE	40.486	11.436	86.875.667
	MERKEZ	126.195	33.318	212.328.119
PAZAR	66.426	15.445	120.419.927	
ARTVIN	ARHAVI	24.759	6.367	43.293.995
	BORCKA	21.220	4.214	31.045.278
	HOPA	25.257	5.701	49.370.483
	KEMALPASA	20.486	3.280	36.074.814
TRABZON	AKCAABAT	0	0	
	ARAKLI	7.416	3.060	11.153.378
	ARSIN	6	2	3.585
	BESIKDUZU	844	544	919.792
	CARSIBASI	89	44	41.934
	CAYKARA	752	463	1.694.084
	DERNEKPAZARI	2.236	1.316	4.036.812
	HAYRAT	26.951	7.302	58.954.542
	KOPRUBASI	824	428	434.190
	OF	82.271	23.487	210.406.432
	ORTAHISAR	4.433	1.418	5.979.327
	SÜRMENE	21.823	8.802	29.685.424
	VAKFIKEBİR	3.544	1.128	3.874.113
YOMRA	266	74	198.413	
GİRESUN	BULANCAK	7	3	3.965
	CANAKCI	2.317	1.005	3.279.431
	DOGANKENT	22	11	6.655
	ESPIYE	473	238	637.732
	EYNESİL	6.390	3.040	12.907.209
	GÖRELE	806	411	715.714
	GÜÇE	1.859	684	3.849.681
	KESAP	37	23	18.113
	MERKEZ	2	1	1.161
TİREBOLU	4.523	1.885	6.687.202	
YAGLIDERE	0	0		
ORDU	FATSA			
	MERKEZ			
	PERSEMBE	67	26	36.194

***Main Tea-Producing Prefectures And Characteristics Of Production Data In 2019
Of Japan According To Ministry Of Agriculture, Forestry And Fisheries***

Rank	Prefecture	Growing Acreage (in ha)	Production Volume (in tons)	Characteristics of Production
1	Shizuoka	15,9	29,5	Sencha and deep-steamed Sencha
2	Kagoshima	8,4	28	various types of Sencha
3	Mie	2,78	5,91	Japan's largest producer of Kabusecha
4	Kyoto	1,56	2,9	Japan's largest producer of Gyokuro and Matcha
5	Fukuoka	1,54	1,78	Kabusecha
6	Miyazaki	1,38	3,51	Sencha
7	Kumamoto	1,22	1,27	Japan's third largest producer of Tama-ryokucha
8	Saitama	843	881	Sencha
9	Saga	749	1,24	Japan's largest producer of Tama-ryokucha
10	Nagasaki	737	693	Tama-ryokucha
11	Aichi	517	832	Matcha
Total		40,6	81,7	

(Ministry Of Agriculture, Forestry And Fisheries, 2020)