A design-based approach for the valorization of tea landscapes in Japan

Drinkscape.
Drinkscape:
A design-based approach for the valorization of tea landscapes in Japan

"If a man does not have tea in himself, he is incapable of understanding the truth and beauty."

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如果一個人內心沒有茶，他就不會理解真理和美。

日本的名言
PART1

The Japanese identity of rural space

1 / / Drinkscape experience_Japan Side

1.1  The team - Introduction
1.2 Polito - KIT, working together

A. Story telling
1.3 Travel Diary _ the experience
1.4 Perceptions

B. General Context
1.5 Wazuka District history
1.6 Relation environment / villages

2 / / Data elaboration

2.1 Scale of intervention
2.2 Analysis
2.3 Yubune in Yubune

3 // Tools for urban analysis

3.1 Japanese sense of Space: searching for MA
3.2 Methodology to approach the study of Urban morphology

2 // INDEX

Table of contents

PART2

A sensible approach

5 / / From production to shared knowledge

5.1 The coming future of Yubune
5.2 The italian UNESCO case study
5.3 Yubune state of art

6 // Learning from the settlement

6.1 A sensitive method for Yubune

7 // A flexible system

7.1 Scattered approach

8 // Design proposal

8.1 Urban strategy
8.2 Temporal strategy
8.3 Strategy of functions
8.4 Masterplan's scenario
8.5 Views

9 // Conclusions

INDEX

Table of contents
ABSTRACT

Yubune area 湯船 - in Uji 宇治 - and Langhe-Roero and Monferrato area - in Italy - are recognized for the production of tea and wine respectively; these two places stand out for their landscapes. The plantations of tea and wine produce a peculiar landscape that tells us a past story, with tradition and culture. The Japanese area Yubune 湯船, is located between two ancient capitals, Kyoto 京都, and Nara 奈良. Green tea is now ubiquitous; it is the most common beverage and an important part of Japanese food culture. On the other hand, Langhe-Roero and Monferrato area located in Piedmont, between Turin and Milan; this area evokes culture and art, history is present everywhere, from ancient Roman time up to modern art, passing throw XVIII Century - when Piedmont was the heart of Savoy Kingdom.

After the introduction of the major features of the sites, this thesis aims to study the identity and rules of Japanese rural villages and the current dynamics of urban transformation that can be recognized and reused.

The goal is to identify the peculiarities that define this territory to interpret the historical conditions and importance of the rural villages in the region. Thanks to such analysis it will be possible to propose a new urban mixture, taking into account the historical context and seeking the benefit for the people and their economy. The propose of this manual is to transform the village in order to manage the unexpected flow of tourists that this region will have to face. Due to these considerations, the first step of the thesis develops a system of reinterpretation of the spaces at urban and suburban scale in the village of Yubune 湯船. It creates a system of norms and codes that will govern the settlement. They become planning tools to approach the village in some specific scenarios, always respecting the heritage.
The second part of the thesis analyzes the impact of the awards and World heritage classifications: they recognize the potential and the peculiarities of territories as a fundamental condition. The Italian example is a confirmation of the positive influence on the surrounding places in terms of management and economic improvement of the areas. Nevertheless, there can be problems if the places are not prepared to face such a transformation; the positive implementation could instead become a real risk for the environment and the identity of the area. A flexible and sensitive approach is fundamental to preserve the heritage and the special conditions of the place without upset the settlements.

The last part of the work is focused on a proposal for the rural settlements in order to protect the identity of the place. The approach proposed is based on three main strategies to ‘prepare’ the village at different levels: Urban, temporal and functional strategy. The first action defines a wide network of public spaces to connect the village between his free not-defined spaces and the existing streets. The second one divides the village into three steps from the historical center to the last extension of Yubuné, to obtain a feasible approach. The last strategy - the functional one - proposes the tools to define a scenario for the village. This step mixes the intrinsical characteristics of the settlement and functions of hospitality/touristic sectors. In fact, the requirements of those functions identify some common aspects with the typologies that are in Yubuné; the keyword that better defines the approach is “flexibility”. Indeed the design method proposes one of the possible scenarios, not the only one: the possibility of matching between functions and typologies permits to have more than one buildings able to host different services. In this way, the improvement of the village has several ‘B plan’, to guarantee the correct development of the transformation without interruption or failure.
The Drinkscape program is promoted by the Politecnico di Torino, DAD and DIST Departments (PoliTo) in collaboration with Kyoto Institute of Technology (KIT) with the goal of making a strong connection between two cultures with many differences but, at the same time with a common interest: the study of architecture and urbanism.

The team is composed by six students from the Politecnico di Torino who are attending diverse master’s degrees programs, together with 13 professors, with the propose to make up a multidisciplinary team that can be able to have several perspectives and visions not only in an educational way but most importantly being able to construct a cultural frame that involves people and their heritage.

From the very beginning, all students shared the common interest of investigating and understanding an unknown culture that has been respectable and very fascinating for hundreds of years in the following aspects: Urbanism, Architecture, Design. The positive approach of the participants permitted to create a stimulating atmosphere in which share the different competences and experiences. The teams have a common goal: understanding and approaching the heritage of each culture respecting ‘the past’ and using the design as a tool of reinterpretation for architecture and spaces, to provide useful tools for the rebirth of the sites.

Members of the team
Professors:
Politecnico di Torino Coordinators:
The team - Introduction

involved the preservation of the heritage and encouraged understanding what makes so special these two places.

The aim of the program is two-fold to address and respond to the context’s specific conditions and challenges, and to help configure common activities for a renewed territorial development agenda. The topics that we will investigate are: the way buildings are designed to foster new behaviors; the redefined role of architecture in relation with the food issues, in terms of production, provision, consumption and their location for hand down the culture of the production and to reactivate core realities of that commodity.

The approach also considers the relation between the urban and the rural environment with the focus on resilient development, environmental protection and the optimization of resources. The idea was to analyze two places that have such an impact on the culture of these two countries through a multiscalar and multidisciplinary approach, involving the exploration of landscape, buildings, infrastructures, natural resources, and culture in two types of the cultural landscape. The Drinkscape program was developed through a set of activities that includes a visit to the area in Yubune 湯船 area in order to make recognition of the place, the landscape, and tea production.

1.2 The propose of this workshop was to explore and analyze different backgrounds that characterized two situations in parallel: the Italian Langhe-Roero-Monferrato area and the Japanese one in Yubune 湯船 area. The goal was to establish a relation between them and to discover if they have a connection or not.

The efforts have concentrated on the supply and consumption of these two urban and rural areas and focused in particular on the increasing cultural value of productive landscapes and traditional agricultural practices. They also involved the preservation of the heritage and encouraged understanding what makes so special these two places.

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The Webinar meetings were composed of lectures and expositions about 3 main themes of investigation to describe in a deeper way the two realities: Architecture, Landscape and Systemic design. The goal of this webinars was to prepare both teamwork about the subjects we were going to treat before the site overview. These webinars were scheduled for the end of February 2019 - for the Japanese project area - and the end of September 2019 - for the Italian site. This method was very interesting and useful for the physical and cultural distance that exists among the two parts. The approach has permitted to have personal visions and scenarios about the area: once arrived on the areas, we could distort and further modify or confirm our hypothesis.

1.3 The design studio started with some webinars, readings and some conversations to allow an exchange between the Italian and the Japanese side. This type of meeting has been carried out, with a multidisciplinary approach among professors and students, 360-degree research on the production, supply and activities related to wine and tea. Among other topics it was very important to focus on what are the impacts of an ‘environment of the production’: effects, changings and influences on the morphology and architectural aspects.
First Steps: Tea Tour and Tea Ceremony

On the first day we met at the main gate of the Kyoto Institute of Technology at 9:00 am. The first stop was the Tea Ceremony House in Uji City, in which there was the possibility to do Tea testing with seasonal sweets. The idea of this experience was to enjoy and learn about the traditional way of making and drink tea, while the Japanese people explained every step of the ceremony and made us part of it.

The building was composed of two parts, the Sankyuan Uji Tea Laboratory and the Taihoan (Uji City Municipal Tea Ceremony House).

The Sankyuan Uji Tea Laboratory have some objects exhibited such as letters, teapots, tea utensils, and Uji millstones of various regional daimyo warlords, which have been passed down by the family of Kanbayashi Sannyu, a teacher of the tea ceremony in the early Edo Period (1603-1868), who served tea to the Shogunate (Emperor).

Afterward, we headed to Mr. Koichiro Yamamoto house, that before was a tea production establishment and nowadays is a museum full of antic Tea instruments: each of them tells us history. Most of the tools are remains of the ancient tea production that Mr. Koichiro Yamamoto used for his own production before the modernization of the factory.

Nowadays he has become a Tea Master; he is to tea what a sommelier is to wine: he is an expert that can identify the drink’s origin, aromas, texture in order to identify if the Tea has a good quality or not.

Moreover, we visited in which he showed us a video of the tea production process and taste homemade Matcha Tea, consequently, we moved towards to Uji Sou Kokoro, a typical...
Japanese restaurants that serve dishes that combined a lot of magnificent flavors: it puts them into small pieces, as a result, a big dish with different appetizers in it.

Afterward, we visited Yuyadani district in Ujitawara Town, Uji, Japan; Japanese people called it "the birthplace of Japanese green tea". This place is surrounded by unspoiled nature and it is decorated with a long history. This area for the peculiarity of Tea landscape has been recognized as UNESCO heritage; additionally, it was registered as the first of the Scenic Property of Kyoto Prefecture. This tea field is used in many different tea places as a promotion in Kyoto. It takes between 10 and 15 minutes to walk there from the nearest bus stop 'Wazuka Takahashi'. Among the tea fields, there are new and old houses surrounded by cherry blossoms and tea fields that go through winter in spring.

We visited some specialized Tea stores, one of them have a traditional Tea temple, and the owner gave us a tour and explained each detail of the ceremony and its meaning.

Last but not least, we had a special dinner, both students and professors that is called Shishinabe. It consists of having a big cooking pot in the center of the table with boiling water and add Miso (a traditional Japanese seasoning produced by fermenting soybeans with salt and koji), together with some vegetables and meat all cooked in the pot; the result was an excellent soup for the season; all this in a typical house that the district of Yubune 湯船 allow us to stay for one night, called 'Yubune village house'.
Second and third step:
Interviews & surveys

To sum up, the second day was all about doing the recognition of the area, surveys, and interviews with the locals. Our principal interest from an architectural view was to know more about the old houses and how they were composed; thanks to the survey we also were able to identify the different elements that make up a traditional Japanese factory house.

That day we divided the work into the respective groups of interest; in our case, we focused more on these aspects: typology, parcels, house function, barriers, paths, building status, distances between the houses and their surroundings.

In other words what we were trying to do was “giving coherence and organization to the jumble of buildings, streets, and spaces that make up the urban environment”. Therefore we were very interested in the visual of the landscape and the first impressions we had of the village.

Finally we had a general discussion in which both professors and students had to choose a word that was able to describe their perception of the place. The first words that were chosen were: fragmentation, axes, versatility, traditional, order, experience, scale, and chain.

Overall the discussion was really interesting and productive for us, thus it makes us understand which was the main structure that compounds the village in terms of elements.

It is clear that the visual impact that both tourists and locals have of the village is essential for us to make decisions about the intervention that would take place later.
Fourth and last step:
Preparation & Presentation.

The last two days consisted of putting together all the knowledge we gathered from the people that live in the village, the professors and our own perceptions. Measure after measure, question after question we understood more and more about the characteristics of this fascinating culture. Like other cultures, also the Japanese one has a peculiarity in the ratio with spaces and their uses. In particular, the sequence of the inner spaces and the open spaces that compose the traditional wooden houses. Furthermore, the main objective of this last stage was to create questions and answers according to the necessities we discovered in the survey of the village. At this moment we only had one question clear: do these villages have the same characteristics of the others that are in the same district?
The overview’s site was fundamental to understand and remark what we discussed for several weeks, during the meetings and webinars between Italian and Japanese teams, before our departure. We made an initial comparison between the two places (Cellamonte and Yubune 湯船) and we throw out some key points; when we were on site we felt the need to re-discuss some hypothesis, in order to underline the focus of the investigation. The possibility of walking through the village allowed us to analyze and focus on aspects that were not perceivable.
from the distance. The overview’s itinerary was composed of an internal trip, through the three areas, from the oldest to the most recent one, individuated by the rivers’ paths.

Area 1
From the traditional Japanese house in which we were hosted, the path went into an ex-warehouse and productive complex to the main house of Maeda 前田 family, one of the two most important families of Yubune 湯船, and also the owner of many village properties. An area characterized by a deep relationship with traditional aspects, as if time had stopped.

Area 2
A transition part, with many additions, composed of contemporary materials and furniture, facing traditional Japanese houses. A transition area between the two sides of the Watsuka river 和束川, between the oldest and the newest part.

Area 3
The last area of expansion is where there are many contemporary houses, and in which it is possible to notice that in this part the houses were constructed with different materials and new forms of construction.

During the itinerary, some peculiarity of the settlements helped us to understand better some ‘rules’, that from Italy were not so clear. These characteristics came to our eyes spontaneously, such as subjective impressions, thanks to the possibility of living those spaces.

In the following pages, some keywords represent the impressions of the experience, to create a frame as complete as possible of the journey.
"SPACES"

The conventional spaces that in West cities are so common, like squares, areas where people meet each other, or spaces in which to organize events, are not so popular in Japanese environment. Also in the last decades, when Japan started the relation with Western culture, there have been so many attempts to establish western-style spaces. These places have been transposed by Japanese culture like unintelligible areas and because of that they became unused spaces. The so-called public space in Japan, and in particular in Yubune Iwakura 湯船岩倉, is principally represented by gardens and temples. With a prevalent position, on the side of the hill, the holy temple of Yubune Iwakura 湯船岩倉 dominates the whole village, connected by stairs at the main road. In Yubune Iwakura 湯船岩倉, there are many other holy places, individuated with portals, headstones and sacred shrines that are totally fused with nature, environments and tea plantation.
The environment was deeply modified by tea plantations, contributing to shape the identity of Yubune 湯船 and of the whole Wazuka 和束 area, obtaining the title of Japanese Heritage.

This direct relation with the productive area and his supply chain are one of the main characteristics of this place and it is also present in Langhe, Roero and Monferrato areas.

Finally, the architecture spaces are deeply influenced by repetitive rhythms and shapes (Figure 2), with a particular composition of spaces needly in daily life.
The physical division, individuated by the Watsuoka river and束川, separates the village in three main areas.

In the most recent area, the traditional Japanese architectures are juxtaposed to buildings with contemporary material (for instance plastic material panels, metallic roof solutions, exposed concrete or coated) without particular reminders to traditional characteristics.

As we moved away from the historical area, this characteristic is more present.
The composition of single parcels is influenced by the closed relation with the production and tea supply chain. There are limits not so defined, between an agglomeration to another; there is also the possibility of passing across them, from the front to the back and vice versa, in many different ways. The volumes that compose different properties, fragmented in several blocks with different functions, are called clusters, just for underline this peculiar internal distribution.

This aspect introduces a typology reserved only to this particular region, interested in intensive crops like that of tea.

// 'FRAGMENTATION'
The Cluster, that identifies the parcels typology of Yubune's 湯船 settlement, presents many interesting aspects; one of them is the possibility to walk across space, without following the main path. This is a very interesting consideration, since it is too far from the western concept of private property. The space in front of the volume is not considered as an empty area, but it is lived as a sort of public space.

It is possible to make a comparison with the rural Italian environment: the so-called "aia" is the open space in front of the farm, where there are warehouses and where animals can move freely.

Fig. 12
The Ikebana 生け花, the disposition art of cut flowers, it isn’t a distractive practice: on the contrary, is a path of concentration, a strict discipline of the gaze, of gestures, of the mind. It presupposes silence, research the balance of forms, is reluctant to openly show everything and immediately, prefers to suggest and loves the intuition of the unsaid.

It is like Ikebana 生け花 art, that the consideration of the beauty appears to our eyes, such as a secret that we cannot find everywhere but just in specical, tiny, little “protected areas”. This “protected areas” are inside the parcels, in deep contact with the main house, not directly accessible to gazes and people.
Masayuki Kurokawa, one of the most important Japanese architects, has influenced the contemporary design deeply; he exposes a discussion about the theme of beauty, giving “eight manifestations of Japanese aesthetic”. This represents a bulleted list of definition of what can influence the aesthetic, from the Japanese point of view.

The first three definitions explain how details are related to spaces in traditional houses. The details host the “whole” part: they are not part of the totality of the building, but they incorporate the whole “inside”. This thought, applied to a very important building like Sukiya: it is usually in the shape of a hut, used for the tea ceremony, is designed as a microcosm that includes the entire Universe. This space is an architectural example of how details are essential to connect external areas or people participating in the ceremony.

- **Totality in details**: Bi
- **Aggregation of data in parallel way**: Hei
- **Mutual harmony created by the shape of details**: Ma
- **From simplicity to richness**: Fu
- **Shiny by hiding**: Hi
- **In origin, World was harmonious**: So
- **Fluent beauty without resistance**: Ka
- **Distruction is construction**: Ha

Masayuki Kurokawa, one of the most important Japanese architects, has influenced the
Wazuka population is composed of 300 tea families roughly; back in the days this area was selected in the Kamakura period 鎌倉時代 between 1192 and 1333 specifically for tea production and has enjoyed 800 years of history known as one of the main Tea production areas in Uji 宇治. The last people census says that from October 2017, the town has an estimated population of 3,775 and the whole valley of Wazuka 和束 area is 64.93 km. An important feature is that the Watsuka and束川 river flows through the center of the valley, which means that the majority of the territory is surrounded by mountains and slopes and the 76% of this area is a forest. Unfortunately nowadays Uji 宇治 tea comprises only 4% of the tea produced in Japan, and the half of this amount in the Wazuka 和束 tea area. The positive thing is that they are also doing crops for rice among other agricultural products for a while now to supply all the Uji 宇治 area and for themselves.

A Zen Buddhist called Shonin Jishin was the first person to start tea cultivation in that area. He began cultivation on Mt. Jubu, where the practice started to spread to the village of Wazuka 和束 and below. Its original function was medicinal for the Zen Buddhist monks; later, the village of Wazuka 和束 itself, along with former villages Kamo-Mura and Koma-Mura, began to reach acclaim within Japan when it won a prize in a national tea exposition in Ueno Park, Tokyo 東京 in 1890.

Over the years the town became a piece of art due to the colors, shapes, and sizes of the tea plantations. The town was designated as the first Scenic Property of Kyoto 京都 Prefecture and considered as one of the most beautiful villages in Japan. Along with the amazing scenery, the town also offers plenty of interesting activities related to green teas such as guided tours, tea picking, plantation experience.

The period is known for the emergence of the samurai, the warrior castle, and for the establishment of feudalism in Japan.
Kyoto
Inhabitants: 1,472,027
Density: 1,778.24 ab./km²

Osaka
Inhabitants: 2,705,262
Density: 12,131.22 ab./km²

Kobe
Inhabitants: 1,526,639
Density: 2,740.73 ab./km²

Wazuka region
Inhabitants: 5,011
Density: 77.25 ab./km²
Moreover, it is important to underline the opportunity to experience a tea ceremony first-hand in Taho-An Uji’s municipal Tea ceremony House. In Yubune (湯船) Wazuka area that is a small village of Yubune, the tea factory has a unique interior and building composition. On the second floor, during the activity years, there was a space for the workers that came in the region for the harvesting. This building has an important position in the village scenery. Furthermore it is fundamental to mention that in Uji (宇治) they had a special style of the gates called Nagayamon to indicate which houses where Traditional Tea producers. Today it only remains one Nagayamon gate and the original was destroyed by the large fire, which broke out in the Uji district area back 1668, and the current gate was rebuilt 250 years ago. However, the house was restored to its original in 1977 in order to be used for the exhibition space of the Kanbayashi Memorial. Anciendly these houses where impressive and big to show the importance of the Tea ceremony. As a result, the descendants of Shunsho Kanbayashi have continued to run tea business into the present day. Tea cultivation in Japan, is a tradition that is believed to be transmitted from China in its beginnings and that nowadays remains in Japan a lifestyle. Today tea is produced in most areas in Japan but especially in Wazuka-cho and Uji, town, which is located at the southern edge of Kyoto Prefecture, the main production area of tea in Uji-cho. It can be reached by public transportation from the JR Kamo Station into Wazuka Yamono-ike Station in 15 minutes and by car from Osaka 40 minute, or Kyoto 20 minute, taking route 5 to Wazuka. The landscape of Wazuka-cho has been made over many years by tea production because of the scenic views of the organized lines of Tea leaves. Tea production in Wazuka-cho is, is famous for its Sencha Tea that is a blending greenish golden yellow leaf; according to Japanese people its savory flavor is very special so they called it ‘the gift of the morning’.

Wazuka-cho area has 4 areas of interest: the first is the Tea Plantation in Shirasu シラス and Ishihara 石原 which are in fact the most famous and known by the tourists, here the harvesting starts at the end of April, and is called Hayabu which means place of early harvest; then there are the Erihara 茶産 Tea Plantations that are the ones that are stretch out on the steep hills. They stand out for the ridges of tea bushes that cover every slope of the hills making a patchwork that becomes a different pattern, because of the diverse inclination that the field has. Tea Plantations in Haryama 檜山 is that was first planted in the 12th century, in Kamakura era 鎌倉時代. In this area, the plants often become trimmed and taken care of many times throughout the year, much more frequently than in any other tea production area.

Afterward, there is the Kamatsuka 茶採取 Tea plantation which is characterized by the fact that they were cultivated by the ancestors with hand spades. This plantation is particularly special because the residence of the farmers and their tea plantations lie side by side and consequently it made the typical landscape of tea production.

In overall, the Landscapes of Uji-cho 茶採取 Tea production includes land usage for plantation, houses, and facilities related to cultivation, production, and distribution of Tea and today also rice. This village also counts with elements that remain from the history and its heritage with a lot of new facilities and new constructions that are interrelated to one another.
Steps for a Tea Ceremony

A Tea ceremony involves the practical and aesthetical matcha preparation of the attempt to connect with the guests, and sometimes with nature at a high spiritual level.

Step 1: The Host Prepares for the Ceremony
The practical preparation starts with choosing the right tools depending on the season and on the part of the day the ceremony will take place. The host goes on by cleaning the tea room (garden, if it’s summertime). If the ceremony will also involve a meal, then the host needs to start preparing it very early in the morning.

Step 2: The Guests Prepare for the Ceremony
Before entering the tea room or garden where the ceremony will be held, the guests have to wait for the signal of the host which will announce them that is ready to receive them. They also need to wash their hands in an attempt to symbolically get rid of the “dust” from the outside world. After the host gives them the signal, they will enter the tea room through a small door which obliges them to bow as a sign of respect to the host and to the preparations she or he has made.

Step 3: Cleaning the Tools
The actual preparation of matcha doesn’t start until the host brings in the tools; he cleans them in front of the guests before using them. These movements can differ from a type of ceremony to another; however, what is always important in all the Japanese tea ceremonies is the graceful posture of the host and aesthetic value of the way things are done during the ceremony.

Step 4: Preparing Matcha 抹茶
After the tools are perfectly clean and displayed, the preparation of matcha begins. Usually, the host adds in the tea bowl three scoops of matcha per guest. After adding the powder, the hot water is also added to the bowl and the composition gets whisked into a thin paste. More water is added afterward.

Step 5: Serving Matcha 抹茶
The host presents the prepared tea bowl to the main guest and then exchange bowls. This first guest admires the bowl then rotates it before taking a drink. The guest wipes the rim of the tea bowl then offers it to the next guest who repeats these movements. These gestures are repeated until the bowl reaches the last guest which passes it back to the host.

Step 6: Completing the Ceremony
After all the guests have taken a drink of tea, the host cleans the bowl that will also rinse and clean the tea whisk and scoop again. The guests need to inspect the tools used in the ceremony after they have been cleaned as a sign of respect and admiration for the host. They carefully and respectfully examine the utensils using a cloth when handling them with extreme caution. After this phase is over, the host gathers the tools and the guests exit with another bowl to complete the ceremony.
There are many types of Tea's such as the Matcha 抹茶, Sencha 煎茶 and the 'Gyokuro' 玉露 and also two types of tea ceremonies in Japanese culture: the first one is 'Chanoya' チャナユ which uses powdered green tea 'Matcha' 抹茶 and the 'Senchado' 千堂堂 which uses infusing green tea 'Sencha' 煎茶. They normally use different tools and methods and their origin is different as well. Tea is very susceptible to the general cultivation conditions since the aroma, taste, and quality can change significantly depending on the harvest season or for the temperature in which they grow up. Originally the tea plant comes from tropical wheatear that's why some of the tea gardens provide warming conditioning equipment to improve the quality of the tea. It is very important the landform of the tea fields: the slope of the mountain on which the cultivations are usually situated, is suitable for drainage and ventilation. Moreover, the depth of the soil must be at least 60 cm for the roots to grow; at the same time, the proximity to a river is fundamental, for a correct and lush plantation. These characteristics are necessary to allow sand humidity: in fact, water will flow much better.

There are 6 basic steps in processing Japanese green tea leaves:

1. The process starts in the field. From there the freshly plucked leaves are quickly brought to the factory and placed in the green leaves preserver where they remain for several hours, resting. While waiting, the air is blown over the top of the leaf to keep it cool.
2. Steaming, to stop the oxidation of the leaf. It is steamed for 30 to 45 seconds, up to 120 seconds for deep steamed teas such as Sencha. After that process, the leaves are left to cool down to room temperature.
3. The leaves are placed in the primary roller/dryer...
where warm, gentle air is blown into it, while mechanical hands toss it in a continuous motion.

4. Tea is transferred to a rotary rolling machine, where it is rolled in a slow, steady circular motion over a grooved bottom plate. Slight pressure exerted on the fresh leaves helps to evenly distribute internal cell juices.

5. After that, the secondary tea roller/dryer further dries the tea and it begins to take on its characteristic shape.

6. This is the final roller/dryer where the tea is put through a series of mechanical paddles that push it back and forth across a grooved plate; it shapes tea into its long-needle style.

The moisture in the leaf is now approximately 13%. The leaf is now called ‘aracha’ or crude tea. All Japanese green tea is processed into aracha first; then it receives the final three steps. In those steps, it is put through the second set of machines that sort, separate, and give the leafs a final drying or ‘roasting’.

These last passages of the refining process bring out and balance the flavor, aroma, and color of the leaf as well as giving it a rich, glossy shine. At this point, the moisture content in the finished leaf has been reduced to 5%.

With the completion of the last three refining steps, the leaf is now called ‘Shiagetcha’ or 煎茶.

Teas such as ‘Gyokuro’ and ‘Sencha’ can be blended to suit the individual taste of their customers, which can vary from one region to another, as they add their unique touch to the finishing.

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1. Establishment process of Chanoya

2. Establishment process of Senchado

Timeline of the establishment of Tea process.
2.1 The Wazuka area is characterized by a strong relation between Tea, its supply chain and the landscape.

The characteristics that we have found in the Yubune Iwakura and Yubune Gonose villages are not unicum but a ‘standardization approach’ for productive and rural settlements that we can observe in the Uji region and principally in the Wazuka area.

In this area, there are many villages, with the same characteristics since Tea and its process of harvesting and consumption affect directly the architectural composition.

We discovered that the aspects that we first analyzed in Yubune workshop’s are also present in other villages around, because of the use the Japanese had given to these lands since the 17th century.

There are 9 settlements in the Wazuka area: Yubune Hakayama, Yubune Iwakura, Yubune Gonose, Harayama, Kamatsuka, Shirasunagai, Eriran, Ishitera, and Shimozima. We visited and studied Yubune Hakayama and Yubune Gonose in depth to recognize the main features that compose these villages and after that, we wanted to prove our hypothesis: have the other 5 villages the same characteristics of the first 3?

The reason why we choose 8 settlements instead of the 9 is that the fifth one (Kamatsuka) was no longer a rural settlement: it already has the characteristics of a growing city thus it already provides fixed services, such as markets, hospitals, and entertainment centers. In Kamatsuka the amount of the buildings is denser, and the spaces for cultivation are mostly outside, without a mix between dwellings, factories and other buildings.

There are also other crucial differences.
Firstly, plots are bigger than in other settlements; moreover, the area presents a lot of services and functions (dwelling, mini-market and parking lot at the same time). In fact, the ‘finality’ of this town, has changed: the goal is no longer the production of Tea but the supply and production of new services for the whole Wakuza district.

A village is a small group of settlements that are usually located in a rural area; in this case, the rural zone is surrounded by tea plantations and nature.

The 8 selected settlements are larger than a hamlet, but they are smaller than a town. This is because these villages were dedicated to the production of Tea; because of that, the buildings and the landscape are strictly linked and influenced by that situation. The village housing, sanitation, utilities, and transportation systems are not as complex as that of a city because it is a smaller entity in terms of land area and population.
Aerial photogrammetry of Kamatsuka grid to individuate cluster’s disposition in the villages of Wazuka region. Isolated of cluster individuated in the village from the biggest to the smallest.
Aerial photogrammetry of Shimozima, grid to individuate cluster's disposition in the villages of Wazuka region.
Isolated of cluster individuated in the village: from the biggest to the smallest.

Area (km²): 0.10 km²
Inhabitants: 50
m.s.l.m.: 105 m.s.l.m.
Aerial photogrammetry of Ishitera grid to individuate cluster’s disposition in the villages of Wazuka region. Isolated of cluster individuated in the village from the biggest to the smallest.

**DATA ELABORATION**

1. Scale of intervention

2. Ishitera 石寺

   - **Area (km²):** 0.35 km²
   - **Inhabitants:** 339
   - **m.s.l.m.:** 130 m.s.l.m.
Aerial photogrammetry of Erihara grid to individuate cluster’s disposition in the villages of Wazuka region.

Isolated of cluster individuated in the village: from the biggest to the smallest.

Area (km²): 0.39 km²
Inhabitants: 338
m.s.l.m.: 150 m.s.l.m.
DATA ELABORATION // Scale of intervention

Aerial photogrammetry of Shirasunagai grid to individuate cluster’s disposition in the villages of Wazuka region. Isolated of cluster individuated in the village from the biggest to the smallest.

Area (km²): 0.18 km²
Inhabitants: 330

m.s.l.m.: 117 m.s.l.m. 20 mt
Aerial photogrammetry of Harayama grid to individuate cluster’s disposition in the villages of Wazuka region. Isolated of cluster individuated in the village from the biggest to the smallest.

**Area (km²): 0.15 km²**

**Inhabitants: 329**

**m.s.l.m.: 240 m.s.l.m.**
7 - 8 - 9 / Yubune 湯船

Area (km$^2$): 0.40 km$^2$
Inhabitants: 300
m.s.l.m.: 230 m.s.l.m.

Technical support of Yubune, in the next pages it will be applied the same approach to analyze cluster’s dispositions but on a different base.
DATA ELABORATION

Scale of intervention:

- Settlement areas
- Temple
- Main road
- Connection temple/village

Settlement areas:
- Temple
- Connection temple/village

500 m
- 0
- 50
- 100

Map showing settlements and roads with a scale of intervention.
DATA ELABORATION // Scale of intervention

A

B

C

D

E
There have been some essential criteria to select the villages:
1. History related to tea production.
2. Proximity to the tea plantations.
3. Proximity to the landscape elements fundamental for agriculture.
5. Village connotation.

The last three villages have crucial importance in the work of the thesis: therefore, the methodology used is analyzed the region based on a subdivision into essentials of the whole area which are not connected to others except by the main road; they are different and Shimozima.

The analysis gave also the possibility to extract the ratio building-space. That approach excludes the influence of "external agents", which can modify the real attitude and conformation of this traditional rural settlements, giving us a writing lecture of the state of art.

The following analysis presents two different supports because the subjects have different importance: Harayama, Kamatsuka, Shirasunagai, Erihara, Ishitera, and Shimozima. They are not connected to others, and they are separated by tea plantations.

2.2. There have been some essential criteria to select the villages:
1. History related to tea production.
2. Proximity to the tea plantations.
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The following analysis presents two different supports because the subjects have different importance: Harayama, Kamatsuka, Shirasunagai, Erihara, Ishitera, and Shimozima. They are not connected to others, and they are separated by tea plantations.
more technical and accurate support was necessary to obtain a complete analysis. Thanks to the analysis of the 8 villages from a global scale into a more architectural scale using the quadrants method, it is possible to conclude that the closeness to the river and the orography of this particular territory were fundamental aspects for the development of these villages.

On the first analysis, we focus on determining the type of settlement that we were investigating depending on the size of the settlements, infrastructures and urban spaces so that we can determine if they were gonna be part of our investigation or not. We aim to analyze the Wazuka and束 district to identify if it presents repetitive spatial organizations. It was fundamental to understand how is possible consider this region: as a box that contains many different objects with different colors or like as container with different sizes objects but made of the same material and colors. This purpose has the ambition to determine the scale of the intervention of a possible design approach to this potential area of Japan.

In the general scale of interventions, it is possible to comprehend that in the 8 villages exist the presence of a Warehouse, a factory, and the main house and a particular spatial disposition in ‘cluster’, to represent the deep relationship that these buildings have established (or set) among them. Does the situation constitute a recurrence or is it just a peculiarity of one village? Is it possible to consider this particular spatial conformation as a sign of identity for the rural settlements of the Wazuka area?

These have been the questions that joined us during the development of the analyses. Considering the information about every single settlement (such as the number of inhabitants, the village area) it is possible to observe the same differences individuated in the previous analysis. Also, these statistic data underline the village Kamatsuka as an outlier. All the villages related to the Watsuka river and completely dependent on the activities of Tea production present a small dimension occupied by the settlement.

This point confirms the lost characteristics of Kamatsuka as a village and helps in excluding it from the rural village’s system of the Wazuka-cho region.
During the phase of perception and description, in the first overview of Yubune 湯船, we noticed that there was a strong influence between the environment and the settlements; such a situation was imposed by the finality that all the village has for the sustenance of the inhabitants. For instance, the strong presence of deep tradition in agriculture of these territories is visible in some peculiar characteristics of the actual village. The streets present a sort of path on one side: it was the irrigation canal for the ricefields and now it is still evident as a trace in the conformation of the landscape.

One important characteristic of Yubune Iwakura 湯船岩倉 is that the rivers divide the village into three different parts: they have special characteristic in terms of morphological and technological aspects, depending on the age of the construction period.

2.3 The Wazuka 和束 area is located in the southern part of Kyoto 京都市 (the eastern part of Sagura 桜) and it is one of the four areas in the South of Japan that produces Tea, which is approximately half of the Kyoto 京都 prefecture production.

Yubune 湯船, as explained in the previous chapters, is composed of three nearby villages: Yubune Hakayama 湯船原山, Yubune Iwakura 湯船岩倉 (where the Drinkscape workshop experience took place) and Yubune Gonose 湯船五の瀬.
Personal elaboration based on the orography of Wazuka-cho region.
This village is ruled by a very practical aspect: the need for water. Back in the days, this environmental aspect was the most important element to guarantee the survival of the entire village, based on agriculture activities. The second reason is purely recent; it derives from the requirement of the Tea plantations, which need a linear envelope for cultivation. These characteristics reflect all the elements that compose the village. The settlement is composed of separated volumes with a common space that linked them together. We will denominate them 'cluster'. They are defined by three categories of buildings, with different positions and dimensions: Main house, Factory, and Warehouse.

1. The Main house is easy to recognize, because it has Southern exposure, to get the maximum amount of light. It is composed of two floors that are supported by pillars made of wood; normally it presents a veranda that surrounds the Tatami rooms and it has an internal private garden. On the ground floor, there are two levels: the first one at the level of the outside court, for the reception room and a portion of the kitchen. The other rooms are elevated of 50cm; they represent the spaces in which the daily life of the family takes place.

2. The Factory is usually made up of two floors that are supported by a wooden structure that permits an internal working space without interruption. The ground floor has a double-height and it is the place for the different elaboration steps of Tea leafs. The second floor is the 'temporary home' for workers that, during the harvesting period, come to the villages to pick up tea in the nearby plantations. It normally hosts a maximum of 10 people.

3. The warehouse is a storage space, usually positioned in a little volume separated from the main house; in some particular case it is connected with a covered external path. It contains working tools for processing and harvesting tea or rice. Normally, there is only one warehouse but in some cases, there are clusters with more than one. The plot that contains these volumes has another peculiarity: the possibility of having access to the property from different entrances. This characteristic does not allow the clear individuation of the main front of the "cluster". It gives the internal courtyard the main distribution role. It becomes a fundamental element for the life of those spaces.

If we isolate and compare this phenomenon to other productive areas, also very far in terms of distances and typologies (such as the Italian situation), it does not present many differences as we could think. The typology of the 'country house', that rules the rural territory in the North of Italy, presents similar aspects to the Japanese case. Infact, it is common to find a parcel surrounded by fields: the production and working spaces are positioned very close to the raw materials, in a very practical way. The buildings are composed of different volumes in which dwelling, warehouse, and workspace are separated and distributed by the central space, the so-called 'Aia'. Like most countryside areas, also the Japanese one was affected by a migrating wave, from the country to the big cities. In fact, in 2015 the population of Yubune was just 330 people. This exodus over the years has contributed to the worsening of the village consistency: many houses are in very bad condition. This situation is very visible in the ancient part of the village, because of the relevant number of traditional houses; the other zones present fewer abandonment conditions and damage to the buildings' envelope. There are also many vacant houses, in which occasionally the owner comes to visit it, to clean the daily life of the family takes place.
or renovate some elements of his old dwelling. Finally, the orography and the characteristics of Yubune area permit to do many activities that are very interesting for tourism, but also for the inhabitants. Yubune village present slopes with Sugi wood, that encircle the different sacred spaces. One of them is underlined by the presence of a holy shrine, while the other is just highlighted by the aggregation of tombstones. These places break the linear developing axes of settlement that goes parallel to the river, with transversal connections to the main road. Furthermore, this village can adopt the route of an important race of mountain bikes, MTB coupe of Japan.
After considering how it is perceived the spatiality and understood the concept of Space in Japan, we tried to analyze how a city in Europe is investigated and on what type of theories that are based on.

It was very interesting to apply some western concept methodologies, to see how they respond in such a distant context as the Japanese one. The theories that we choose, with their innovative approach, obtained a positive influence on the study of the urban city and the way to analyzed a city under a typological point of view.

3 TOOLS FOR URBAN ANALYSIS

Japanese sense of Space:
searching for MA 間

3.1 Approaching a particular culture how is the Japanese one, in which the traditions and the rituals are deeply rooted in all the aspects that characterize societies and daily life, it was important trying to go closer to that philosophy.

From an architectonical point of view, it is important to define how his millennial traditions affect their spatiality and how the rest of the World, with a thought closer to ours, studied and interpreted it. One of the most important aspects around which Japanese architecture moves is the sense of Space.
Space is analogic [...] according to these three postulates:

In real society there are certain relationships of homology between the different aspects, relations that found the identity of this society. A society produces space that is more suitable for her, this space is a condition of her existence.

The spatial organization is based on analogical mechanism.

[...] Space is a too ambiguous thing. At the same time it is product and factor of social relationships, data and condition of perception, result and vector of human action.

Augustin Berque, professor at the École des Hautes Études en Sciences Sociales in Paris, is an orientalist and philosopher. He describes the space as an analogical aspect, with three postulates. He sees it as a relationship between society and the space in which people live, thus defining the notion of spatiality.

There is a link between the community and their activities, that Roland Barthes in "The empire of signs" calls the social organization of the space. It is represented by the relations that the society generates with the territories that could permit a complete integration among the parts, such as a humanization of a 'wild territories'. The orography of Japan is very steep and irregular; more than 70% of the archipelago is composed by mountains and the remaining part hosts about 120 million people.

From a spiritual point of view, taking an example from the Shintoist philosophy, it is possible to go deeper into the relation between the environment and his inhabitants. The particular morphology of the Japanese environment has always influenced the daily life of the community, the typology of sustenance and also the organization of village settlement. Thanks to the consolidation of agriculture, there was the colonization of flat areas and a progressive separation from the mountains territories.

This differentiation established a cut-off between the aspects of sacred and profane, that is deeply connected with the Japanese culture. In fact, the mountain areas, with the coexistence of intimacy and naturalistic respect, take on the meaning of holy dwelling of Gods. This new meaning comes from the belief of an affinity between Gods and highly spaces, hidden by the forest among the sacred area and the village.

It is possible to find this conviction also at house’s scale: in the private gardens usually it is build a little temple devoted to protecting divinity of the house.

The traditional settlement is articulated in a linear way that follows the main road or natural element - like rivers.

The holy shrine located into the depths of the forest establishes religious axis that connects the sacred (hare 陽) to the profane (ke 陰). In this spatial disposition the concept of Space takes some meanings.

It is crucial to face three fundamental concepts: Ma 間, En 美, Oku 奥.
Ma

In Japanese culture, Ma is defined by a close correlation among space and time; the Japanese dictionary defines it as: ‘the gap that exists necessarily between two things that happen’, but also, ‘a room in a house’, ‘a moment of silence in a speech’, ‘the good or bad way in anything comes’, ‘a certain kind of interval in traditional music and dance’. Topics change from music, to theatre and architecture, etc., and they are the result of the wide range of meanings that this word can represent.

“...These ideas of necessity and sequence, connection and movement, obviously introduce the notion of sense. The Ma is indeed a space filled with sense.”

It is very difficult to give to this concept a clear definition; G. Nitschke, architect and director of the Institute for East Asian Architecture and Urbanism of Seika University of Kyoto, establishes the Ma such as ‘the Japanese sense of place’.

In architecture, is considered with the expression ma-dori literally ‘knowledge of Ma’, in sector’s language it is used to define the planimetry of a house and its spatial disposition.

This usage of the word permits us to understand the importance that Ma still has today. One of the most significant aspects of the traditional architecture in Japan is the composition of internal spaces, which does not always coincide with functional purposes. Every single space of the traditional houses - although it may seems illogical or unnecessary - pursues the main goal: the harmony of the whole parts.

Therefore, it is usual to find ‘silent elements’ in terms of need like the engawa (veranda), tokonoma (honor’s alcove) or shoin (study room).

For Japanese culture, architecture is the art of creating a particular Ma in the ‘material form’.

Today again, Ma is searched by the contemporary architects in the attempt to create a space interposed among the inside and outside. It generates a feeling of spatiality without limits between public and private areas.


Sketch of ‘central pillar’ position, that is not coincident with geometrical centre but with the centre of the space, of daily family life.
"...the logic of En 縁 completes Ma 間, connecting her at the outside to other things. It is the definition of the metaphor: to bring beyond".  

F. Fuccello, in his book ‘Space and architecture in Japan’, recognizes in the philosophy of En 縁, the concept of compromise. He underlines three main contexts to which this notion can refer:  

- Buddhist ethics: En 縁 represents a bridge among cause and effect.  
- Social relations: it refers to a bond between people.  
- Architectonic point of view: it represents the sense of transitions through two spaces, from public to private area, from inside to outside.  

In these three different topics, from religion to technical themes, there is a common thread that unites all these voices: connection and separation.

In practice, we can translate it in a ‘buffer zone’ that surrounds the traditional houses, a covered space but still open, similar to the western conception of a portico.

An important aspect of Japanese culture determines the inclusion of some intermediate areas in the spatial composition: there can exist an elevated platform that can damp the general shape of the building, defining a specific area. It is called nooki-shita, literally ‘sphere under the eaves’, a space of exchange, for meeting and for coming in touch with the outside.

“A grey zone between house and garden, obtained from the mixture of white and black: it is not white or black, but a new different color situated among the other two”.

In the traditional architecture, as underlined by F. Fuccello, it is fundamental the ratio organization of each place with the nearby areas. This concept can be found in the relation nature/culture, on a different scale from village dimension to the dwelling:

- Holy wood acts as ‘third term’ between the village and the sacred place in which divinities are.
- The platform or the engawa 縁側 (veranda) taking on the meaning of ‘third term’ among houses and private gardens.

That ‘third term’ is part of two elements that are connected together but cannot be reduced to a single part.

The ‘compromise space’ at the same level of internal tatami floor, allows to have a special point of view. In that position, En becomes part of the private garden, when the shoji (the door that separates the indoor areas) are open.

The result is a ‘visual role with a continuous varied depth of the visual field of the viewer’, (F. Fuccello, ‘Space and architecture in Japan’, 1996).
The concept of *Oku* 奥 contributes to describe space in Japanese culture. In Japanese dictionary takes on the meaning of ‘place situated deeply inside the things’. The application of this principle in architecture has been studied by Fumihiko Maki, a Japanese architect. He noted how space, which comes in touch with the concept of *Oku*, is modified. This aspect, in fact, occurs where the particular orography of Japan limits the usable space. The organization giving the perception of depth and breadth in those areas in which space is scanty. As stated by F. Fuccello, *Oku* 奥 modifies the way Japanese culture expresses both built and natural spaces and also how people live that environments. When it appears, the principle of *Oku* 奥 is always followed by the concept of *okuyuki* 奥ゆき; it represents a relative distance or an impression of that in space, testifying a sensibility to compose the differences between limited spaces.

\[
\text{\ldots if crossed these paths, will often meet a hidden and secret scene not imaginable from the outside. They are perhaps the deeps folds of urban space created by the multilayered limits of private spaces, super-wound and related to each other by the complex topography of the streets, fences, trees, walls etc.\ldots}\]

What F. Maki defines ‘folds’ as an application of Japanese culture: what they intend for Oku is the last space, the heart of space of dense spatial conformations.

These folds, as stated also by F. Fuccello, give at spaces a sense of density with the creation of stratified frontal areas.

The increase sensation of spatiality, at the scale of settlement, can be found applied at the street and his intentionally labyrinthine paths. This typology of solutions aims to emphasize the experience of the walk.

‘The paths in Japan, prefer the process, rather than the final goal the arrival.’

In a smaller scale, the search of depth applied to traditional houses introduce long and winding corridors; according to Eiji Usami ‘there are voluntarily multiplied in order to procure the illusion that penetrates deeply into a distant world: from complexity comes the depth of space.’

On the meaning of these two words are based our approaches to analyze Yubune; for this reason, we have supported the research with the principles given by Q. de Quency and G. C. Argàn:

'Type expresses in a general sense and therefore applicable to many gradations or varieties of the same idea, model, matrix, print, figure [...]'.

'The term typology means the study of types [...] therefore the type, [...] considers the objects of production in their formal aspects of series, due to a common function or to a reciprocal imitation, in contrast to individual aspects'.

It was useful to consider the concept of Type also under the point of view of G. C. Argàn, that in his 'On the concept of architectural typology', explains the origin of the meaning. He describes it as a system of characteristics of buildings, that have common formal peculiarities.

'When a type fixes itself in practice or architectural theory it already exists, in a certain historical condition of culture, as a response to a set of ideological, religious or practical demands'.

As stated in 'Architectural typology and urban morphology: an anthology' by M. Caja, M. Caja.
Landsberger S. Malcovati, ‘If extended to the city, through the notion of urban morphology, the concept of typology is a fundamental tool to understand the principles of settlements and work on the fabrics, the relationships between the architectures within a known and recognizable structure, describable and therefore convertible. […]’ (M. Caja, M. Landsberger S. Malcovati, ‘Architectural typology and urban morphology: an anthology’, 2010).

In this thesis is introduced the term ‘urban morphology’, a principle that is deeper connected with the application at a typological analysis of a settlement. Aldo Rossi in ‘Consideration about urban morphology and building typology’, said that shapes that delineate the cities are made of building types and studied by building typology, ‘two disciplines exploring two orders of homogeneous facts’ (A. Rossi, ‘Consideration about urban morphology and building typology’, 1964).

The object on which urban morphology concentrates is not the city in general, because it is composed of different characteristics; it studies groups of the city that are organized with order and with an internal logic. This is what we expect to do in our case studio to be able to organize and recognize groups of characteristics that define the settlements and their identity. One of these aspects is the ‘urban environment’, that is fundamental to understand cities and their structure, through the study of their shapes. Aldo Rossi distinguishes two types of ‘problem approach’. The first one refers to the study of systems - like economic, politic or social one - that generates the space of the city. The second one instead sees the city as a spatial structure, starting from the shapes of the city until the spatial relations. In the study of ‘urban environment’, is very important the scale of analysis, which contains three different scales: street, quarter and city scale.

The research follows this type of approach, with a zoom-in from the scale of the region to the relations among the building of the ‘cluster’. The aim is to understand what are the spatial rules of the complex Yubune system and his ‘cluster’; moreover, it is important to understand what are the elements that compose the rural architecture of Wazuka area.

To define the morphological and structural rules that compose Yubune settlement, we have relied on the theory and methodology studious of architects and other disciplines. They have faced the themes of typologies applicate at real case studies. There are many examples of analysis, but we...
decided to concentrate on the ones that contain a deep relation with the characteristics of the context and its peculiarities (like history, architectural style, social and perceptive aspects). We focused on three main themes of investigation. These are representation and morphology (closely connected to each other), and the perception: the collective image of what remains imprinted, a ‘mental image’, that we also had after the visit in Yubune湯船.

We can recognize that concepts in two different fundamental theories of two main authors of contemporary architecture: A. Cavallari Murat and K. Lynch.

‘The urban form is not the geometric form, it is the shape of the urban body seen at the same time as the aesthetic aspect of the containment, architecture and the aesthetic aspect of the society that is contained’.

A. Cavallari Murat applied an interesting analysis of the historical layering of the city of Turin; it is investigated with an innovative bi-dimensional and monochromatic representation. He researched also architectonical aesthetic aspects that characterized the city, social and demographical information, through the interpretation of compositive elements that were typical of the Baroque Turin.

He developed a series of ‘conjectural maps’, analyzing the relations between the building-building or the housing units. His typological representation based on ideograms and signs with strong significant permits the description of the main characteristics of Turin’s buildings. He wanted to underline: itineraries in private and public spaces, numbers and position of windows, internal court, distribution system, accesses, elevation floors, etc. The analysis continued with new groups of maps, called ‘histological maps’, in which he investigated ‘not only the individual belonging of housing units to categories but also the relationships between them, until the formation of quarter units and district units and the links between the ensembles of units and the road structure’ (A. Cavallari Murat. Urban shape and architecture in the Baroque Turin, 1968).

The building unit is the most elementary part of architectonic construction and how stated by A. Cavallari Murat ‘constitutes the indivisible elements of the settlement’ (A. Cavallari Murat, ‘Urban shape and architecture in the Baroque Turin, 1968).

He studied deeper the relations among the city and the housing units; it is necessary to start from the elements that define the organism itself, to understand how an entire city is structured: in fact, it is composed of strong links with different building organisms. This second type of maps is based on a mathematical model used as a method to face the analysis: ‘Euler’s graph’ (L. Eulero, ‘The graph theory,’ 1736).

In this way, the building is interpreted as a ‘functional scheme’ composed by the logical correlations among the housing units. These schemes connected to each other allow to understand the settlement, underlining the morphological and spatial ratio.

‘With the term graph means a geometric figure constitute by m points and n lines which connect that points’.

With these tools and methodology, A. Cavallari Murat described in a very peculiar approach the architectural aspects of Baroque Turin, with an innovative typology of representation. He also simplified the settlement thanks to the usage of diagrams. With this approach, he brought to light the generating rules of the city and the nearby rural areas, that allowed him to compare different historical layers.

He generated a clear, simple and direct methodology to approach the study of urban morphology. With this tools that A. Cavallari Murat used for his analysis would allow to return at the same point after have crossed each bridge just one time.


12 A. Cavallari Murat, ‘Forma urbana ed architettura nella Torino barocca: dalle premesse classiche alle conclusioni neoclassiche, 1968.'
are very useful to communicate the intent of the research; readjustments have been made to align this methodology to Japanese architecture, in terms of both graphic symbols and elements to be highlighted.

For instance, the social and architectonical importance that windows have in the analysis of the Baroque Turin - to underline rules of proportion and density - in Japanese context are not so relevant.

Furthermore, the usage of a single plan of representation was a ‘challenge’; this modality of communication is often forgotten for its simplicity.

A. Cavallari Murat mentioned K. Lynch and his theory like a previous example of research about the shapes of the city. He defines his method: ‘ideogrammatic translation of the texture of elements of the visual form of the city’ (A. Cavallari Murat, ‘Urban shape and architecture in the Baroque Turin’, 1968). In his description, Cavallari Murat also emphasizes the aspects with which he disagrees; he does not adapt his signs to the topography or real architectonics volumes. In ‘The image of the city’, K. Lynch wants to analyze the visible character of the city through the collective images of people who live there or who know it. He researches the concept of ‘imageability, a characteristic which confers on a physic object a higher probability to evoke in the viewer a strong image of itself’ (K. Lynch, ‘The image of the city’, 1960). This concept finds a parallel in the oriental culture, where the visible form is not always recognized like reality, but it can be considered such as the image of that in the mind of each person. For that reason, the settlement does not appear like a physic entity but like an ‘experimental place’ told by signs.

What A. Cavallari Murat recognizes like critical in the methodology is a solid base concept of K. Lynch’s thought: he does not set his theory on the physical territory voluntarily, just because he believes that ‘in the gesture of drawing, the shape should be used to reinforce the significant’ (K. Lynch, ‘The image of the city’, 1960).

For this reason, he produced conceptual maps of cities that he investigated, to bring to light just the principal characteristics of a settlement that define its shape, links, and structure. In his analyses he focused on five main contents, that he retains as the subject of urban images in a physic city:

Paths
Edges
Quarters
Nodes
Landmarks

Redraw of distributive functional scheme of two different unit with rural destination: the first one with ‘curte retro’, second one with ‘curte ante’, based on drawing of A. Cavallari Murat.
Paths
‘lines along which the observer usually moves, occasionally or potentially’.

People move through them to go in different parts of the city; all other elements are placed or connected with them. For many people, the path is the most important element that they recognize in their personal images of the city.

Landmarks
‘Frequently used like as elements of identity, seems to offer increasing confidence when the route becomes more familiar’.

They can be internal or external in the city if they are visible from a distance that permits to symbolize a constant presence and reference.

K. Lynch proposes also a series of topics in which the designer’s work can be influenced:

- Singularity
- Simplicity of form
- Continuity
- Preeminence
- Clear connection
- Directional differentiation
- Area of vision
- Awareness of movement
- Time series
- Names and significants

Start from the lessons learned from the previous methodologies about the study and the representation of a city, it has been possible to approach the case study.

How is it possible to underline the aspect of the settlements?
We started from the characteristics that were mentioned during our overview and the discussion with Japanese colleagues. We considered three main topics that concerned spatial, functional and environmental peculiarities of Yubune Iwakura 湯船岩倉.

The first group presents the characteristics of Yubune 湯船 under a spatial point of view. For instance, the ‘main and secondary paths’ that are fundamental especially in Japan.

The second class aims to discover the characteristics that are strictly related to architecture such as limits and functions.

The last one talks about the environment’s diversity proper of productive areas. This layering try to describe the most important aspects, with particular attention to the relations between the cluster itself and the context.

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THEORIES FOR URBAN ANALYSIS // Typological analysis and the study of Urban morphology

Conjectural analysis of Yubune

Access

Main paths

Secondary paths

Nodal points

Elevation floor / Conservation state

- a. Abandoned
- n. Neglected
- N. Good state

1*. 1 floor, with double high
2*. 2 floor, 2nd with double high
2**. 2 floor, both with double high

Traditional house

Contemporary house

40
80
10
0

10
40
80
10

Conjectural analysis of Yubune
THEORIES FOR URBAN ANALYSIS // Typological analysis and the study of Urban morphology

Conjectural analysis of Yubune
THEORIES FOR URBAN ANALYSIS // Typological analysis and the study of Urban morphology

- Bamboo
- Sugi
- Broadleaf
- Vegetables fields
- Tea plantation
- Garden
- Stairs
- Neglected areas

Conjectural analysis of Yubune
Also a monochromatic representation is a goal to preset, and achieved it, to be praised.\footnote{A. Cavallari Murat, *Forma urbana ed architettura nella Torino barocca*: dalle premesse classiche alle conclusioni neoclassiche, 1968.}

It was fundamental to understand the real characteristics, problems, and quality of Yubune Iwakura village. Thanks to the methodology we could investigate its peculiarity also at the scale of dwelling, determining the elements of the balance between environment, settlement, and the volumes. A. Cavallari Murat’s guidelines allowed us to obtain a complete and clear representation of our analyses bringing us to the aim of the method: highlight and notice the real identity elements of a settlement.
The volumes that are separated (F) (H) (W) (Ho) (T) can be linked or related to each other by (S), the intermediate space. The visual and spatial relation between the spaces depends on the nature of the one they share. The intermediate space can differ in form and orientation from the building that it connects. The intermediate space can be large enough to become the dominant space in the relation, and can organize a number of spaces about itself; it can be also an anteroom of residual space in nature and can be determined solely by the forms and orientations of the two volumes.
1. Typological analysis and the study of Urban morphology.
THEORIES FOR URBAN ANALYSIS

Typological analysis and the study of Urban morphology
THEORIES FOR URBAN ANALYSIS // Typological analysis and the study of Urban morphology
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The village - that is composed by a different combination of volumes - is unified by a space that expands between them. These spaces have a particular condition because they are not limited in most cases, with the possibility to cross them without restrictions.

According to the architect R. Lawrence the vast majority of dwellings are conformed by a set of codes or rules that are articulated by a series of oppositions. ‘(...) which are: Front/back, clean/dirty, day/night, public/private, male/female, symbolic/secular or sacred/profane’.22

It was precisely these oppositions that gave rise to hypotheses about the role of the elements that composes the villages. The efforts focused on a larger scale, the entire Wazuka-cho 和束 region, to understand more about the common principles that rule the villages. Thanks to the common productive finality of the region, the villages present quite similar aspects, especially for the relations between the space and volumes.

These little centers of tea production compose the real identity of the rural Japanese villages. The analyses underline a constant relation among the environment defined by tea

4 // GENERAL CONCLUSIONS

‘An open area, room or space may be conceived either as a more or less private place or as a public area, depending on the degree of accessibility, the form of supervision, who uses it, who takes care of it, and their respective responsibilities’.21

As demonstrated Yubune Iwakura 湯船岩倉 presents a particular situation in which the dwellings are composed by separated volumes that are grouped around an inner court or yard. This organization relies on physical proximity to relate its spaces to one another.

fields and the cluster, composed by the different disposition of the three main volumes: main house, factory, warehouse, and the interconnected space among them.

The forms of a cluster are visually ordered into a coherent, nonhierarchical organization not only by their proximity to one another but also by the similarity of their visual properties, also can be organized about a point of entry into a building or along the path of movement through it. Considering their flexibility, clustered organizations of forms may be organized in the following ways:

• They can be attached as appendages to a larger parent form or space.

• They can be related by proximity alone to articulate and express their volumes as individual entities but in the same plot.

• They can interlock their volumes and merge into a single form having a variety of faces.

And so the principles extracts from the villages of Wazuka-cho and are ruled by some spatial organizations that according to the analysis are:

A. Spatial disposition in which an intermediate area is placed in front of the cluster, between the volumes and the entrance of parcel. It is present in many cases in the second area of expansion, between Watsuka River and Yusuhara River.

B. Space positioned in the back of the volumes. It is not concentrated in a precise area of the village, but there is just one example of that in the main historical part of the settlement.

C. Combined typology of the previous situations: areas present in front of the volumes and in their backside. We can see a little majority compared to other cases with some presence in the historical part, but also in the other two zones.

D. Disposition in which, the intermediate spaces are not in a precise and definite position: they fill the areas between the volumes, surrounding them. It is present in a major quantity in the village. The first main reason is about the difficult environment along the two sides of Yubune, with slopes and an uncontrolled broadleaf’s forest. The dispositions are also influenced by the changes that have faced over the years these clusters, creating disorganized empty areas.

Representation of a typical ‘cluster’, with Warehouse, Main house and Factory with the connection space in between.
The crucial aspect of the relation among them is underlined by the presence of the same principles in the villages. The analysis developed confirms that these typologies are proposed more than once. It comes out another important concept in order to further confirm what assumed: the recurrence. It is very important because it defines how many times we can observe these four spatial dispositions in the village. In Yubune Iwakura 湯船岩倉, there is an equilibrated situation, in which there is not a prevalent typology between the others. If we extend the concept to the other two villages we can observe the same principles of presences. The confirm, that came out from the analyses adds other important considerations about that dispositions, that is no more just relations with connection spaces, but becomes the identity of the rural Japanese environment.

Diagram of recurrence
Yubune Gonose 湯船五の瀬
Diagram of recurrence
Yubune Iwakura 湯船岩倉

Diagram of recurrence
Yubune Hakayama 湯船原山

GENERAL CONCLUSIONS
PART 2

A sensible approach
Individual part - Mattia Salvador

5/ From production to shared knowledge
6/ Learning from the settlement
7/ A flexible system
8/ Design proposal
9/ Conclusions
because of its characteristics; at the same time, it appears as an upheaval of the real identity of the village, because it would overturn the spirit of the area.

In that terms, the labels that Wazuka region obtained in the last year, would have a contrasting results, if they would not be managed with care: on one hand, they could become a positive achievement to claim; at the same time, they could destroy the identity of the place.

It is not to underestimate the improvement that they could bring to the village in terms of tourism, communication and marketing. Problems could come out if the territory will not be prepared to face the challenge, without hospitality and logistic system that could handle the tourist flux.

5.1 As mentioned before, the UNESCO label and the nomination as Japan heritage of the Uji region opens several development opportunities for Wazuka region in the coming future. In parallel to these achievements, the increase that the tea tourism had in the last years, with a lot of export and many lovers of this specific typology of Tea, suggests an intensive development of the areas.

Such a situation represents a great opportunity for the rural village of Yubune Iwakura, also
It is interesting to analyze a similar Italian situation, which was also proposed by the Drinkscape Workshop; in fact, it is a very interesting case study, to understand in depth what the dynamics of these changes are. Moreover, it presents 29 municipalities, that involve an overall area of 10,789 hectares. From a geographical point of view, three areas are within the district of the Langhe, two in the Alto Monferrato and one of the Basso Monferrato.

The selected areas represent the exceptional quality of the vineyard landscape of Piedmont and of its deep and alive wine culture. The components were selected with some specific reference: - wine productions associated to the territories; - the importance at national and international level; - the need of representing the crucial places for the production of wine (from cultivation to production, conservation and distribution); - the historic settlement and architectural components (road networks, towns, villages, rural centers, castles, churches). Components 1, 3, 4, 5 have been selected in the following analysis since they are representative of the four most relevant production systems of Piedmont, each generated by a specific bound between wine variety, the terroir (soil and...
The result of every system is a top-quality wine, protected by a specific registered designation of origin such as Barolo, Barbaresco, Barbera d’Asti, Asti Spumante. The site is characterized by a rich and diverse system of farmhouses, wine-producing holdings, wine industries, wine cooperatives, public and private wineries; sometimes they are symbolic sites for the history and the development of viticulture and of national and international enology such as the component 2: Grinzane Cavour Castle. The cycle of wine is finally completed by the presence of artifacts from the vernacular world such as the Infernot excavated from “Pietra da Cantoni”, devoted to the domestic storage of the finest wines (component 6). In addition, a wide buffer zone of 76,000 hectares was defined, enclosing the six components and over 100 municipalities. It aims to further secure the nominated site and to ensure continuity to the landscape of the individual areas.

“(...) landscapes that retain an active social role in contemporary society, strongly associated with traditional ways of life and in which the evolutionary process is still underway. At the same time they exhibit material evidence of their evolution over time.”

Personal elaboration of vineyard landscape of Piedmont, Langhe-Roero and Monferrato area. It is clear the ratio between the core parts and the buffer zones, which have been established to protect them.

However, why can we consider the Italian’s site? The relation between the two different, but very similar sites was the main topic of the Drinkscape’s Workshop during the several Webinars and the transversal discussions between Italian and Japanese teams. The Langhe-Roero and Monferrato areas represent a ‘cultural environment’ as stated by Roberto Cerrato, Director of the association of vineyard landscape’s heritage, results of the combined action of humans and nature. The cultural tradition and vineyard’s knowledge of these areas have shaped the environment through the years with experience and innovative method processes. As well as the green Tea production for the Japanese site, the culture of wine represents the identity of this productive area, in which everything gravity around the wine supply chain. In addition, the Architecture has been influenced by this finality, with a particular relation environment/villages that, especially in the core area of the site, is totally dedicated to the harvest: it is felt as a sort of ritual, with the processing and sale of wine.

At the same time, the two territories have a crucial difference: the Italian example was already included in a well-structured and connected system. In fact, the vineyard landscape is situated between three important cities in the North of Italy: Turin, Milan and Genoa. Thanks to this special position the area is easily connected with the nearby regions by public transportations or highways. This is a peculiar characteristic, since it allows to absorb the impact.

It is crucial to analyse some data, to deeply understand the complex situation and to take advantage of the experience of other places. Indeed, it is possible to observe how the flux of tourism has increased thanks to territorial promotion and economic effort encouraged by UNESCO label. If we isolate a part of the site, for instance Langhe-Roero area, to focus on the main available data of the touristic flux through the years, it is clear the increase of tourist interest, during the several steps of the candidature as UNESCO heritage.

The development of the territory affects also the services network, for instance, the areas of UNESCO site can notice an increased number of hospitality’s structures: around 1200 classic hotels with 21,000 beds and 970 ‘extra-hotels’ buildings with 10,700 beds.

If we focus on the benefits that have led to the territory under the social point of view, the label stopped the emigration from the countryside to the cities and encouraged young people to invest in these territories.

2006
UNESCO nomination

January 2011
Official presentation of candidature’s Dossier

25 June 2014
Certification as UNESCO heritage

FROM PRODUCTION TO SHARED KNOWLEDGE / / / The Italian UNESCO case study

Personal elaboration of touristic flux’s trend of Langhe-Roero area. It represents the analysis of movements recorded during the year, based on Regional Turistic Observatory data.
5.3 As learned before, it is fundamental to prepare the village of Yubune to face the changes of its area.

From the disposition of the site, to the volumes, every spatial condition is totally devoted to the productive function.

Several steps compose the productive process of tea:

- the cultivation of Tea;
- the harvesting in two different periods (May - April and August - September) for different qualities of the product;
- the storing of Tea's leaves;
- the processing in the tea factories, from which the product comes out, ready to be sold.

This little productive system, as we saw, is not concentrated in a precise part of the village. Currently, the system of production has changed, becoming more industrialized through the years.

As in several parts of the world, the industrialization process affected the Japanese countryside. It has led to a deep change: from the small producer to the large multinational that deals with the processing and sale of the product. Such a transformation has cut out the small local productions - and with them all the spaces connected.

In this sense, also the orography of Japanese territories does not help. Indeed, the orography, mostly mountainous, was already important for the position, the direction and for the correct growth of the villages.

Currently, Yubune Iwakura 湯船岩倉 looks like a productive village with all the abovementioned features; but it presents an outer layer: the guesthouse. This building was strongly required
by the community that through a fundraiser has restructured and re-opened this traditional Japanese house for tourists.

It is possible to read it as a sort of ‘provocative agent’: a first spark of the will to change, that the community of Yubune has clearly shown.
Factories
The building in which the processing of tea took place; it is affected by the traditional style. It presents a wooden structure based on boundary pillars that permit to have internal spaces without obstacles: simple and regular space shaped to support the productive process of tea. Factories are usually composed by two floors: the ground floor, in which there was the transformation of tea and the first floor, that normally was used as storage for tea leaves but also as temporary dwelling for the workers; in fact, they came from other villages for the harvest time. The first floor presents a very detailed fences, called Koran 香欄 and on the same side of that, the roof is not anymore with two slope, but it becomes an Irimoya 入母屋, to underline the main façade of the factory.

Warehouse
It is a very functional building, since it presents the minimum characteristics necessary for its main function. It has little dimensions and a double high interior; it was used as storages of tea, so one little window - positioned on the top of the main façade - was enough for aeration.

The predominance of the productive function in the village allows to have a recurrent panorama in the type of buildings that are investigated, as well as in the characteristics of the typologies. These typologies are factories, mainhouses and warehouses.

The main characteristics are strictly connected to the functions and to the constructive technics. In fact, most of them are the ancient buildings of Yubune. This peculiarities present the most common characteristic for traditional Japanese wooden buildings.
Main house
The main house according to the traditional principles; it presents the space of the entrance at the level of the ground, and the remaining parts 50 cm higher, to highlights the effective space of the dwelling. All around the perimeter there is an engawa, with sliding doors called shoji, that allows to connect the inside with the outside. As already explained in the previous chapters, the contact between the internal space and the nature - represented by the garden - is one of the most important rules that governs the traditional Japanese architecture. The internal spaces, are managed with the same sliding doors, shoji, to create flexible spaces; it’s easy to separate them. This building has 2/3 entrance, the main is located on the principal façade, that face the central space of the cluster to which it belongs. Finally, the main house is composed by two floors; the first floor is connected internally by one distributive element and it is usually smaller than the ground floor for structural reasons; this situation gives the building a simple and elegant aspect.
As we can see from the dictionary’s definition, this word means something that loses its structures and productivity. If it is put in relation with the village of Yubune 湯船, it bears that negative meaning. Indeed, the fragmentation in Yubune 湯船, as well as in the other rural villages of the region has served to create a solid productivity network, composed by several clusters, which allow the sustenance of the whole area.

It is possible to interpret that concept as a limit to face up, but on the other hand, it would be a guideline for a sensible method of thinking. Fragmentation in terms of separation between volumes, that is the most important identity aspect of the Japanese rural settlements, becomes a solid base and a starting point.

The ‘scattered approach’ fits perfectly with these characteristics. The scattered approach means that the noncontinuity of the buildings is sought and exploited with the aim of obtaining something that is not concentrated just in one place, but split upon an area or territories.
This is useful when the connections between different parts are not effective, or where there is not a centrality, it is possible to explain the ‘scattered approach’ in a few main principles, useful to describe it in terms of conditions and limits:

- Presence of an authentic and identifiable environment.
- Reasonable distance between the subjects of the intervention.
- The possibility to individuate a central point for the support.

The separation in terms of functionality or space is another important feature, which is the common aspect that links the conditions all together. With such an approach it will be possible to create new interventions for the valorisation and rebirth of the place; these actions will be in line with the sensibility of the place and will respect the previous principles.
The design proposal is composed of three main strategies at three different 'level'.

The first one is an urban strategy, focused on the main identity subject that comes out from the previous analyses: the spaces between clusters. The urban scale approach allows to define those spaces deriving from the fragmentary situation of the village, has the purpose to create a large network of internal connections. This prepares the context to integrate the next steps. These new conformations have to welcome two more steps about the articulation of the approach. The second one has the objective of subdividing over time the intervention into three areas: historical center, the first expansion, and second expansion, for a question of feasibility and practicability of the transformation, thus establishing a long-term order.

The last one, provides for the identification of functions useful to create a system for Yubune aimed no longer at the production of Tea, but at the hospitality and passage of (o meglio knowledge) the tea culture. These functions, adaptable to more than one type (main house, tea factory or warehouse), will not be rigid but flexible, to guarantee transformation. The proposed scenario is a combination of them and not the only one possible. The functions aligned with these principles will be implemented through reversible, independent and 'pop-up structures, completely respectful of buildings with such a high historical and cultural value for the whole region.

8 // DESIGN PROPOSAL

Fig. 28
This concept is also mentioned in the ‘Empire of Sign’ of R. Barthes, in which he compares the ‘square’s culture’ more aligned with the western method of thinking, to the Japanese ‘walking’s culture’.

In Japanese cities, the activity linked by us to the square space is generally related to the role of the street. Many researchers have spoken about Michino-bunka (walking’s culture) in opposition to hiroba-no bunka (square’s culture).”

From his words, it is possible to understand another peculiar aspect of the oriental thought: the public spaces are individuated in the streets and not in the specific space. This means that also the public activities like events or traditional celebrations are strictly related to these special zones.

According to that, the strategy aims to create a dense network of internal connections giving to the space of the cluster the role of public spaces. The interaction with the street that already exists, allows especially in the Historic center, to obtain a deep interaction among spaces and parts of Yubune, all linked to one system.

8.1 Starting from the lesson learned from the method’s application of Cavallari Murat, the real importance of the cluster’s disposition for the identity of rural villages of Wazuka region comes out. They are characterized by a common space that permeates the buildings, and that generates a dense network that connects the whole village. These spaces - in this homogenous context - do not have a clear role or finality. In fact, even if they present a very high potential, they have so far remained in standby, without a clear definition. The urban strategy wants to learn from Japanese philosophy: the main important thing in the path, not the destination.

Fig. 29

The temporal strategy is composed by three different moments for the application of any intervention. Each step corresponds to one of the three areas of historical improvement of the village:

- the historical center;
- the area of the first expansion;
- the area of the second expansion.

Those zones are also defined by the orography of the valley; indeed, Watsuka river 和束川 and Yusuhara river 楠原 divide the village into three different areas.

6.2 As stated before, there are three typologies well distributed in the settlements. In parallel most of the buildings belong to one of these categories. Therefore, in terms of economic efforts and feasibility, it is not possible to imagine that the transformation could affect all the buildings at the same time.

For this reason, it is fundamental to define a strategy that considers these aspects. The temporal strategy will create a program for the implementation of Yubune and it will take into account the time that each transformation requires to be activated.
the coming future characterized by very high fluxes of tourism in these areas, all the functions that have been individuated are related to hospitality and knowledge sectors. The scenarios proposed cover different aspects, in order to obtain a complete and varied range of services and activities: from hospitality, culture and tasting tea; parallely, it is also proposed a glimpse at the “valley system” which surrounds Yubune Iwakura, for aspects related to sport or knowledge like the scattered museum of Tea production.

Every function has a minimum requirement in terms of:

- Space: place in which it could work
- Size: order of needed dimension
- Target: Type of user of the service
- Scale: limit of influence.

8.3 To set the transformation, some actions have been crucial:

- firstly, there have been the definition of the temporal steps for the intervention
- second, a connected context from which to start has been investigated;
- finally, the characteristics that are constant in the village have been investigated.

Therefore, the last step requires to define the functions of the “new Yubune”. According to
### Function’s characteristics

<table>
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<tr>
<th>Space</th>
<th>Size</th>
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<th>Scale</th>
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<tr>
<td>Indoor/Outdoor</td>
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| Scattered museum        |      |         |                |
| Scattered guesthouse    |      |         |                |
| Reception               |      |         |                |
| Infopoint               |      |         |                |
| Storage                 |      |         |                |

1. **Scattered museum**
   - Museum spread over a geographical area, which physically attracts visitors to the discovery of a territory and its products.

2. **Scattered guesthouse**
   - Reception system diffused in the territory and not concentrated in a single space.

3. **Sport’s HUB**
   - Point of support for sports activities carried out in the valley and along its slopes.

4. **Multipurpose space**
   - Flexible space able to adapt to different entertaining and promotional actions.

5. **Tea room**
   - A place in which to enjoy the experience of tea respecting all the principles of the ancient Japanese tradition.

6. **Dwelling**
   - Space lived from a family in its daily life and in intimacy.

7. **Matcha Café**
   - Refreshment point offering typical dishes with matcha.

8. **Reception**
   - First welcome service to complete the widespread Guesthouse system.

9. **Infopoint**
   - A place where to discover the itineraries to visit the region, to know the events and opening times of the services.

10. **Storage**
    - Storage space of other main functions.
These requirements combined with the characteristics of typologies help to define the matching between the two different categories. This type of association has led to more functions for each building. This consideration represents the key feature of the strategy: flexibility. The system allows to define an implementation strategy, not rigid and fixed, but ‘dynamic’ and adaptable. It is necessary to remember that not all the buildings considered at T0 will be free or available; therefore, other buildings must be able to amortize this situation, without interrupting the process.

In this case, there will be several parallel options available, because other volumes - with suitable characteristics - will be ready to host specific functions. This permits to guarantee the correct development of the transformation without interruption or failure.
The functions identified, in order to enter the proposed system, must have a certain capacity to adapt to the change of characteristics of the buildings that will accommodate them. This flexibility will be ensured by a very sensitive approach to the various types. The devices that will guarantee the implementation of different functions will be characterized by total reversibility and structural independence for a sensitive approach to buildings of historical-cultural value. The devices will allow through light and easy-to-install structures, the use of internal and/or external space depending on the type. The proposed scenario revolves around simple and easily available materials, such as cedarwood (present in the valley) to try to obtain adaptation to different circumstances.

1. Scattered Museum
2. Scattered guesthouse
3. Sport’s HUB

Possible scenarios of ‘function’s devices’, inside the three typologies.
Fig. 32

In fact, the construction of the bridge that connects the two sides of Watsuka River, changed the importance of the internal street of Yubune - since before it was the main street to go through the valley. Actually, it presents as a secondary street, for the internal connection; thanks to the addition of cluster’s spaces it could become more linked with the village.

The functional approach combined with the characteristics of the main three typologies of the village helps to define the possible buildings that could host the activities. It is fundamental to consider that the proposed scenario is just one possible combination function/typology: it is not the only one.

The services of ‘first welcome’ have been located in the center of the area. The internal dispositions of buildings guided the matching; for example in the direction of the valley the HUB sport or on the opposite side of the area a step of Scattered museum of Tea’s production.

As stated in the definition of the temporal strategy, the first step will start from the historical center: indeed, it is the most identity place of the settlement and the area from which the development of the village started. This area, naturally delimited by the confluence of two Rivers, presents a special connotation and for that it becomes perfect for the application of the urban strategy.

Starting from the rules imposed by the application of the three presented strategies, it is possible to define a scenario of what Yubune Iwakura will be in the next future. As stated in the definition of the temporal strategy, the first step will start from the historical center: indeed, it is the most identity place of the settlement and the area from which the development of the village started. This area, naturally delimited by the confluence of two Rivers, presents a special connotation and for that it becomes perfect for the application of the urban strategy.

The services of ‘first welcome’ have been located in the center of the area. The internal dispositions of buildings guided the matching; for example in the direction of the valley the HUB sport or on the opposite side of the area a step of Scattered museum of Tea’s production.

The first approach contains some scattered guesthouse, which is based on the accommodation’s system of the transformation; however, this special central area mainly aims to connect the most important services and activities and leave the hospitality functions for the other two areas of expansion.
During the first phase, it is expected to plug some points aimed at the host, but this specific function and its services will be mainly aimed at the other two areas (1 exp. 2 exp) so as to maintain the main functions in the most historic part of Yubune.

Near the inner part, towards the valley, it will be the support service for the sport practiced on the slopes.

The most central area will see the inclusion of first reception points and information of interest for the whole village.
Fig. 33

8. **Okoshi-ezu** (図33), also called **Tate-ezu** (建絵図), is a fold-up, three-dimensional plan drawn on paper, to show the interior of rooms assembled on a floor plan. This method is said to have begun in the **Edo period** (江戸時代) primarily for the construction of tea ceremony houses. In these particular buildings every element of the design, from the floor plan to the walls, could be freely manipulated and a change in one element affected all the others. This three-dimensional paper mode was a traditional concrete way for visualizing such structures.

**How is it works?**

Diagrammatical representation of Okoshi-ezu’s concept. In blue the portion of the building investigated.
DESIGN PROPOSAL // The art of Okoshi-ezu

Flexibility becomes how to manage a space that is for intrinsic characteristics ‘free’. The function adapted at this building uses the potential of typology to define a space for all, in terms of target, utility and accessibility. The scenario proposes a device that follows this concept, with a pop-up room that can host events for the community and the tourist at guesthouses such as traditional Japanese theatre or just for locals as space for lessons on the territory or celebration.

FLEXIBLE SPACES
Uemura Koetsu tea factory’s

In the center of the historical part of Yubune Iwakura, another unused Tea factory host the possibility to taste unconventional plates receipt in which matcha tea becomes the main ingredient. Also in this scenario, the device is based on an independent wooden structure, easy to build and completely reversible. Still considering the feasibility of the strategy, the scenario proposed two steps of ‘function’s expansion’ in order with the dimension of the building and the two floors that are possible to occupy.

INFORMAL TEA EXPERIENCE
Maeda Keisanke tea factory’s
FLEXIBLE SPACES
Uemura Koetsu
tea factory's
INFORMAL TEA EXPERIENCE
Maeda Keisanke
tea factory's
The making process rarely is straight and error-free; indeed, they say that you learn from your mistakes; this section represents exactly one of the cases to learn from. During the long process of the thesis there have been some ‘wrong ways’ that have been abandoned. This specific situation deals with a procedure of a constructive method that could be useful for a sensible design approach for Yubune’s village. The technological detail is based on a traditional constructive technique, easy to build and completely autonomous. The joint of the module is inspired by the Cidory-toys 1000 (that means ‘a thousand birds’). It was originated a century ago in the city of Hida-Takayama 飛高山, a town in Gifu 岐阜 known for its technically sophisticated carpentry. The abovementioned toy is a 3d puzzle composed of notched sticks of wood that fit together to form a small structure without the use of adhesives or other tools. Each wooden stick has been carved in different ways and the special notches allow them to interlock in a single point. The combination of that junctions creates a unit made of 12 wooden sticks slot together. The six-sided units can be connected to one another at any edge. It is then combined with a square section and then connected through pure joinery. This type of joint is a common trait of traditional Japanese woodworking at all scales, from small furniture and accessories to temples and other prominent structures. The knowledge about the potential of this crucial system has been investigated also thanks to the construction of one-unit model; it was possible to see for real how it works and what are its strengths and weaknesses. Nevertheless, this experiment became a ‘failure’ because the need for Yubune 湯船 is not represented by the imposition of an architect that order what to do and in which way. The problem is more delicate and the situation too complex: the sensibility and the fragility of the place need flexible solutions, aligned with its own rules and identity.
9 // CONCLUSIONS

9.1 The development of closer economic, cultural, and political relations among all the countries of the world as a result of travel and communication becoming easy.

The process by which particular goods and services, or social and cultural influences, gradually becomes similar in all parts of the world.

The definitions provided by the Cambridge Academic Content Dictionary and the Cambridge Business English Dictionary underline different perspectives of the meaning of the expression “globalization”.

On one hand, this study testify how optimists say that globalization represents more cultural choices for everyone; on the other hand, it considers the peculiar aspect of influences in social, cultural and economic terms.

In our crucial historical era - in which the distances are reduced as much as possible, and the globalization leads to consider similar situations around the world - metropolis and their systems are continuously increasing.

In this big-scale frames, the little realities undergo such changes: they are abandoned or forgotten. Therefore, these authentic worlds need to be protected and treated with special care.

As stated in the previous chapters, there are a lot of labels whose ambition is the valorization and protection of such places. But they are not enough: according to their guidelines, it is fundamental to create strategies and unified approaches to act with municipalities, communities, experts, researchers and people.

The efforts need to start from the system of these specific areas, encouraging a holistic development.
Starting from the abovementioned considerations, the most important goal of this thesis has been the sensibility of the approach to set: all the actions have been measured according to the fragile balance that rules the settlements of Yubune 湯船.

It has been fundamental to respect the peculiarities and the identity of the place, without deleting the harmony that you can breathe in those territories. The transformation was necessary; thus, the design process proposes to Yubune 湯船 a scenario with the opportunity to handle the coming future and to create a completely new vocation. However, each action is considered in order to preserve the identity and the past of the place.

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**IMAGE REFERENCES**

- Fig. 1 'Postcard' from Ishitera.
- Fig. 2 KIT Design Lab, during the Drinkscape workshop in Yubune.
- Fig. 3 Kansai-airport Station of Osaka, the first day of Drinkscape workshop in Yubune.
- Fig. 4 Traditional Tea ceremony in the Uji City Municipal Tea Ceremony House. (credits: KIT Design Lab)
- Fig. 5 Mr. Koichiro Yamamoto's house. (credits: KIT Design Lab)
- Fig. 6 Mr. Harumatsu Kanbayashi's garden. (credits: KIT Design Lab)
- Fig. 7 Frame of overview at Ishitera. (credits: KIT Design Lab)
- Fig. 8 Sketch of relation between the holy temple and Yubune Iwakura.
- Fig. 9 Landscape of Yubune Iwakura.
- Fig. 10 River of Yubune Iwakura.
- Fig. 11 Frame of the density of Yubune Iwakura.
- Fig. 12 Fragmentation in volumes of Cluster.
- Fig. 13 Hided garden of Maeda’s mainhouse.
- Fig. 14 Detailed tiles from the roof of traditional wooden buildings.
- Fig. 15 Tea fields in front of ‘Matcha Café’.
- Fig. 16 Welcome at Uji City Municipal Tea Ceremony House.
Fig. 17 Inside-outside view from a mainhouse's interior in Yubune Iwakura.
(credits: KIT Design Lab)

Fig. 18 Tea fields in Yubune Iwakura, close to the temple.

Fig. 19 Overview in Tea factory of Yubune Iwakura.
(credits: KIT Design Lab)

Fig. 20 Branches of peach tree in Kyoto.

Fig. 21 Frame of the density of Yubune Iwakura.

Fig. 22 Spot of Yubune Iwakura, from the side of the second extension.

Fig. 23 Inside the process of Tea Matcha.
(credits: KIT Design Lab)

Fig. 24 Fields of grapes of Cellamonte, situated in one of the six cores area of the vineyard landscape of Piedmont, Langhe-Roero and Monferrato.

Fig. 25 Unused Tea factory in Yubune Iwakura.
(credits: KIT Design Lab)

Fig. 26 Traditional Japanese portal called Torii access to a sacred area of Yubune Iwakura.

Fig. 27 Spot of Yubune Iwakura from the tea fields of second extension’s side.

Fig. 28 Traditional mainhouse of Yubune Iwakura.

Fig. 29 Aereal view of the historical centre of Yubune Iwakura.
(credits: KIT Design Lab)

Fig. 30 Tombstones of the sacred area of the Yubune Iwakura's temple.

Fig. 31 Spot of the first extension area of Yubune Iwakura.

Fig. 32 Branches of peach tree in front of a mainhouse in Yubune Iwakura.

Fig. 33 Example of traditional Okoshi-ezu.
(source www.asl.or.jp)

Fig. 34 Homemade wooden reproduction of Chidory joint, scale 1:1.

Fig. 35 Nijo Castle, Kyoto.

Fig. 36 Tea fields of Wazuka region.

Fig. 37 Internal garden of the imperial palace, Kyoto.

All photos are taken by Salvador Mattia during the Drinkscape workshop - except where it is indicated differently.
Io che ringrazio (il) Te.
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Yubune, regione di Wazuka-Cho, Giappone.

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Fig. 38

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