



การศึกษาการปรับเปลี่ยนของเรือนฟุนายะภายใต้การจัดการ Denken ในเขตอนุรักษ์ของเมืองอิเนะ ประเทศญี่ปุ่น

Study on the adaptation of Funaya houses under the Denken system in the preservation area of Ine town, Japan

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บทคัดย่อ

ประเทศญี่ปุ่นมีการจัดการหรือระบบการอนุรักษ์สถาปัตยกรรมพื้นถิ่นที่มีประสิทธิภาพ ที่เรียกว่าเขตอนุรักษ์กลุ่มอาคาร สถาปัตยกรรม และสิ่งปลูกสร้างดั้งเดิมทรงคุณค่า หรือ “ระบบ Denken” ในหลายหมู่บ้านและเมืองต่างๆ บทความนี้มุ่งศึกษาและทำความเข้าใจกับระบบการอนุรักษ์นี้ โดยศึกษาจากพื้นที่กรณีศึกษาในเขตการอนุรักษ์ของหมู่บ้านชาวประมงอิเนะ จังหวัดเกียวโต ประเทศญี่ปุ่น และมุ่งประเด็นศึกษาถึงการปรับเปลี่ยนของเรือนฟุนายะ ซึ่งเป็นมรดกทางวัฒนธรรมด้านสถาปัตยกรรมภายใต้การจัดการในเขตอนุรักษ์จากจำนวนนักท่องเที่ยวที่เพิ่มมากขึ้น งานวิจัยนี้เป็นวิจัยเชิงคุณภาพ ใช้การสำรวจและลงพื้นที่ศึกษาเป็นหลัก รวมถึงมีการสัมภาษณ์ชาวประมงในพื้นที่ สมาชิกในคณะกรรมการการอนุรักษ์ และเจ้าพนักงานของเขตการปกครองด้านการรักษาสถาปัตยกรรมในเมืองอิเนะ เกี่ยวกับการปรับเปลี่ยนประโยชน์ใช้สอยของเรือนฟุนายะ ผลการศึกษาต้องการอธิบายและสรุปผลถึง 2 ประเด็นหลักคือ การจัดการหรือระบบอนุรักษ์สถาปัตยกรรมทำงานอย่างไรในพื้นที่อนุรักษ์ และการปรับเปลี่ยนของเรือนฟุนายะเพื่อการท่องเที่ยวภายใต้ระบบอนุรักษ์นี้ ผลลัพธ์ที่ได้จากการศึกษาคือองค์ความรู้ที่สามารถใช้เป็นตัวอย่างกรณีศึกษาแก่ประเทศไทยในด้านแนวคิดและการจัดการสถาปัตยกรรมพื้นถิ่น หรือมรดกทางวัฒนธรรมด้านสถาปัตยกรรมในทางกายภาพของพื้นที่ชุมชน หมู่บ้าน ย่าน และเมืองอื่นๆ ที่มีบริบทคล้ายคลึงกันอีกด้วย

คำสำคัญ: เรือนฟุนายะ เรือนพื้นถิ่นญี่ปุ่น ระบบ Denken หมู่บ้านชาวประมงอิเนะ ญี่ปุ่น

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Abstract

In Japan, there is an effective system in managing for Traditional Buildings or the “Denken system” in numerous preservation areas. This paper aims to study and understand the preservation system in Ine town and clarify the architectural adaptation of Funaya houses, which are cultural heritages in the conservation area, following an increasing number of tourists. The methods of the study include a field study, a survey in the preservation area and mainly interview the officer in charge of the preservation board in Ine town about the adaptation of Funaya houses in the preservation area, and analyze some adapted houses from the front elevations. The findings are clarified in two main points, involving the management of the Denken system for the preservation and the adaptation of Funaya houses for tourism under the Denken system in Ine town. As a result, this study can be applied as a case study of management of cultural heritages or vernacular or traditional houses for other villages and districts which have similar context as well.

Keywords: Funaya, Japanese vernacular architecture, Denken system, Ine town, Japan

Introduction

Japan is well known for its flourishing abundance of natural resources and the country's traditional heritage. There are dozens of preserving town management that is effective. The revision of the Law for Protection of Cultural Properties in 1970, authorizes villages and some streetscapes in Japan to be recognized as a new type of cultural properties at first, as groups of traditional building and structure with their contexts. After that, a system of "Preservation Districts for Groups of Traditional Buildings", which translated from "伝統的建造物群保存地区 - Dentoteki Kenzobutsu-gun Hozon-chiku" in the Japanese language was established to conserve those traditional buildings. Then, the Japanese government classifies this management as a high value, it was designated as "Important Preservation Districts for Groups of Traditional Buildings" (重要伝統的建造物群保存地区 - Juyo Dentoteki Kenzobutsu-gun Hozon-chiku) and imparts support for their preservation in various fields (Tachakitachorn, 2009). Nowadays, there is a gradually growing of preservation districts, which is categorized as a village, a post town, a port town, a merchant town, a historic industrial town, a temple town, an amusement quarter, and a samurai quarter or a castle town (Figure 1).

Ine town, located in Northern Kyoto prefecture, is a town managed by the system of Important Preservation Districts for Groups of Traditional Buildings or the Denken system, its famous for wooden houses of fishermen called "Funaya" or boat houses, selected as Groups of Traditional Buildings of Japan in 2005. Nowadays, Funaya are attracted to tourism, the number of tourists is growing year by year. Some Funaya houses have changed and adapted to new functions for tourism. However, a group of preservation meeting in the town under the Denken system remains to keep and conserve the original atmosphere in the preservation area.

For this article, the study focuses on the adaptation of Funaya houses under the management of the Denken system and clarifies the methodology to conserve the old original atmosphere of a fishing village in Ine town. This article is a part of master's thesis titled "A Study on Expansion Borders of Vernacular Stilt Houses in Koh Lanta Old Town", which aims to find processes to keep the surrounding of fisherman village as well and conserve original houses of fishermen during flourishing tourism period in Koh Lanta, Krabi province in Thailand which origin of the community is a fishing town that similar to Ine fishing village, while tourism has become an important sector that has an impact on many

communities in Thailand. The character and identity of towns changed dramatically. Besides, it also makes vernacular or traditional architectures change and cut down the architectural aesthetic. Thus, cultural heritages in Koh Lanta or other water-based sites, which a group of cultural or historical buildings still remains in the sites, require kind of new methodologies for conservation that efforts in Thailand (Issarathumnoon, 2004). The study of the Denken system in a case study area should be more beneficial for conservation as well.



Figure 1 Categories of preservation districts and locations on the map of Japan

Research objectives

1. To study a system of important preservation districts for groups of traditional buildings or the Denken system of Japan in Ine town
2. To clarify the adaptation of Funaya houses under the preservation area scheme in Ine town, in accordance with an increasing number of tourists.

Research scope

This study indicates and scopes the adaptation of some Funaya houses or boat houses in Ine fishing village, which is a traditional house in a fisherman village context. Ine fishing village is located in Ine-cho or Ine town in the Northeast of Tango peninsula in Kyoto prefecture. The municipality is composed of 77% of the forest, while human settlements are 0.7% of the total area (Alvarez, 2018). The preserved area is located in the South of the Ine town, surrounded by mountains on three sides, at a mouth of the Ine bay that is opened in the south, including 310.2 hectares or 23.92 square meters. In the center of the bay, there is Ao island, which can protect tides (Figure 2). The preservation area under the Denken system has covered 432 traditional houses, 5 important sculptures, 15 conserved trees, and 18 tourist accommodations.



Figure 2 Boundary of Ine-ura preservation area (with the Denken system)

Methodology

This research is qualitative research, which analyzes information from documentary research and collected data. The main process is a field study in Ine fishing village, contains a physical survey, a detailed investigation of the adaptive of Funaya houses, and interview of a member of preservation meeting and an officer in charge of the preservation board in Ine town.

Then, analyze the facades of some adapted houses. Sort these three methods in detail in order.

1. Search and collect secondary data

The data includes a macro-scale level that contains urban planning, land use, and a preservation system of the town and a micro-scale level that contains style, shape, form, materials, and structure of the traditional building. Review and search the information using books and research papers.

2. Field study and interview the informants in Ine town

Conducted a physical survey of Ine town and then scoped in the preservation area. Collect the data about traditional houses, landscape and atmosphere of this village. The interviewees include fishermen in the village at present, a member of the preservation meeting and an officer of the board of education in Ine town. The interview mainly questions are about how the Denken system was managed in the town, how the community and local residents participated with the conservation of cultural heritage and adaptation of the Funaya under the tourism situation in Ine town.

3. Analyze and summarize

After the survey and interview in the preservation area, this study put the data in order, then analyzes and summarizes, involving analysis of the facades of Funaya houses along the waterfront for some adapted Funaya houses.

Background of the Funaya houses in Ine town and related literature

Ine (伊根町- Ine cho) is a town in Yosa district in the north of Kyoto prefecture in Japan, the total area is 23.92 square meters. The town is rich of natural resources, ecosystems, surrounded by 3 mountains. The forest is a fish breeding forest or Uotsukirin type forest, which grows in coastal lands with an important presence of several kinds of fish (Alvarez, 2018). According to an abundance of natural resources, especially fish resources, it sets off a fisherman town. This town has flourished in fishing since ancient times. In the past, local residents in the area were fishermen, so they built the houses at waterfront for fishing. The current preservation district was called Inemikkamura that means the three communities that have inhabited in the preserved area since the Edo period (in 1603–1868). There are 3 villages which are Hide, Kameshima and Hirata in the past. The first community to settle was Kameshima in the 15th century. All their villages cooperated with the fishing, while each village managed separately (Figure 3 & 4). The union between the communities became official when they formed Inemura in 1889. The 3 former villages became districts inside the new municipality (Alvarez, 2018). The main career of men was fisherman, while agriculture and forestry activities were for female. Nowadays, there are over 400 Funaya or boat houses, which are the original traditional heritages of the fishermen in the past, remain to locate along the Ine bay. Most of Funaya or boat houses is a local residential household, that there are only a few tourism service places such as restaurants and tourist accommodations in the area.

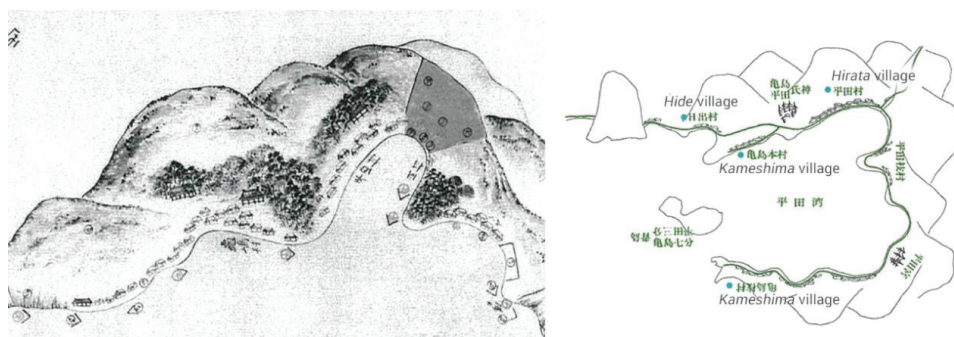


Figure 3 Three original communities in Ine-ura fishing village

Source: Meiji and Hosei University (2012)

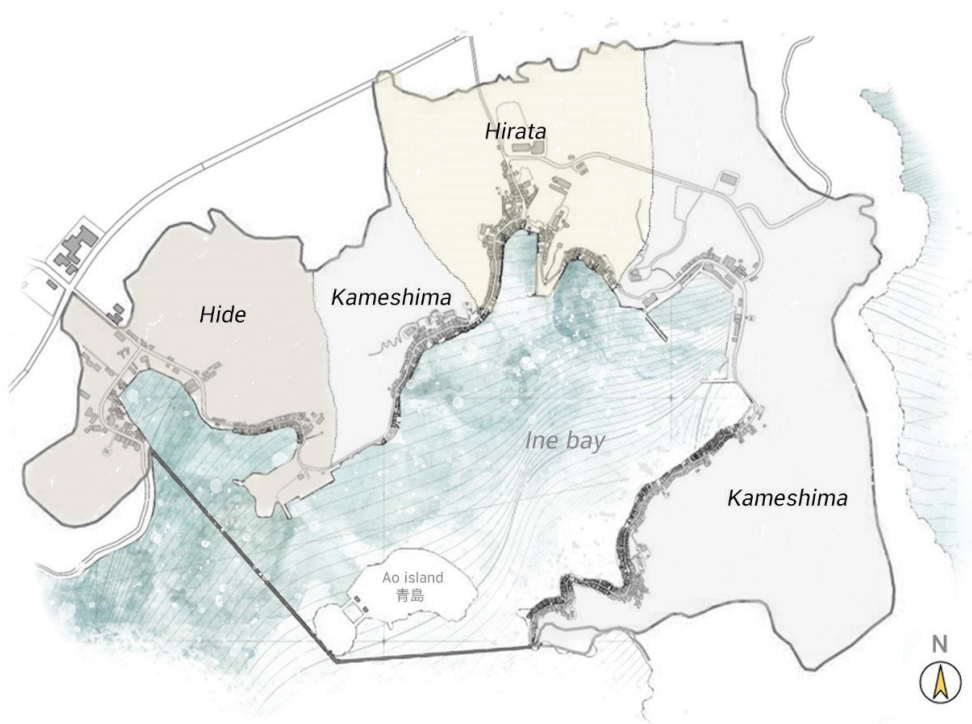


Figure 4 Boundary of three original communities in Ine-ura fishing village

“Funaya” (伊根の舟屋- Ine no Funaya) or boat house is a traditional building that has built along the coast of Ine bay. Those traditional boat houses were fishermen’s houses in the past. The traditional buildings were built relating with the sea context. The meaning and function of “Funaya” is a boat garage used to protect boats. It is used as a storage for net and fishing tools as well. Funaya has two floors, the first floor has used for a boat parking and storage, while the second floor is a living space such as a bedroom of fishermen. According to the routine of fishermen in Ine, they do fishery at night and in the morning. In the afternoon, they sleep and take a nap on the second floor of Funaya. Nowadays, few of the first floor of Funaya is used for a guest room, a guest house, restaurant, café and museum, while the second floor remains using as a private space of the Funaya’s owners. The structure of the Funaya is unique. Funaya was built with the wood structure, however, the basement and the floor on the first floor are built using concrete, which can protect a wood structure from the erosion of the seawater.

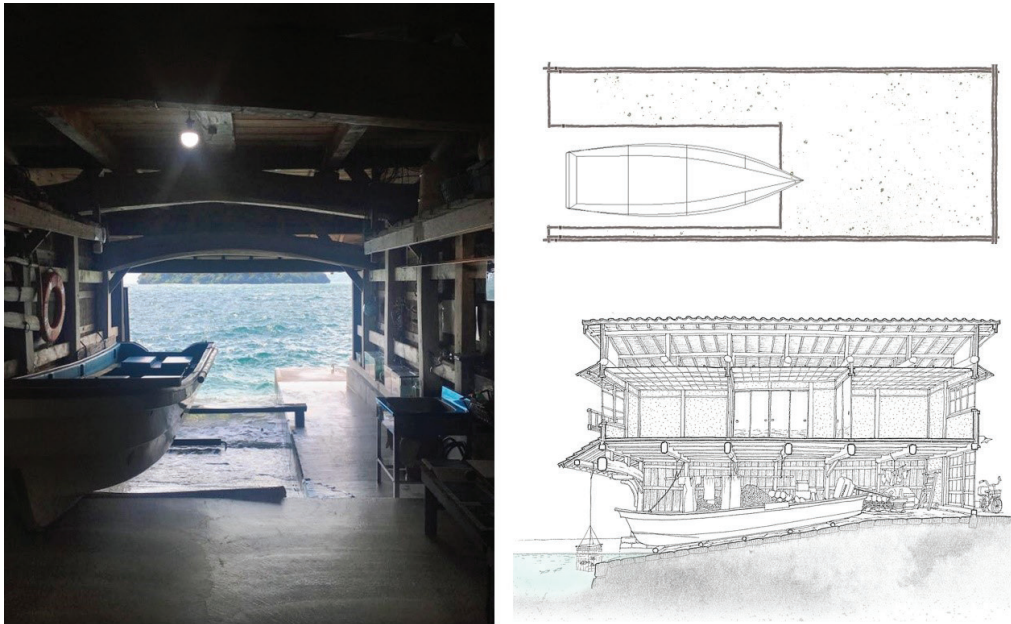


Figure 5 Space inside Funaya, boat space plan at the first floor and section of Funaya



Figure 6 Funaya houses in Ine fishing village

According to the interview of the officer of the preservation board in Ine town and literature review, Funaya had been classified by the viewpoint or elevation from the sea and clarified the current landscape composition. The forms of Funaya are one of classification as well. The façades or the walls of the seaside had been divided into two parts, including the lower part had been wide open, which boats can access or use for boat parking. The other part is the upper part, which had had some opening for ventilation. Fishing nets and tools used to be hung inside the funaya. Based on the categorization, Funaya had been divided into 4 categories, which are type A, type B, type C and type D that based on the opening of the façade relating to the original function of the boat. (Figure 7). At present, up to 60% of the Funaya still maintains the boat space, however, there are some Funaya that have reduced the size of the boat entrance. Comparing with the rest, some Fuyana have been totally transformed, boat parking have removed.

1. Type A: whole water and fully opened that means all water can access inside the first floor and all of Funaya is showed.

2. Type B: some water and fully opened that means some of the water can access the first floor and some of Funaya is showed.

3. Type C: no water and fully opened that means there is no water can get inside the first floor and all of Funaya is showed.

4. Type D: no water and not opened that means there is no water can get inside the first floor and all of Funaya is not shown.

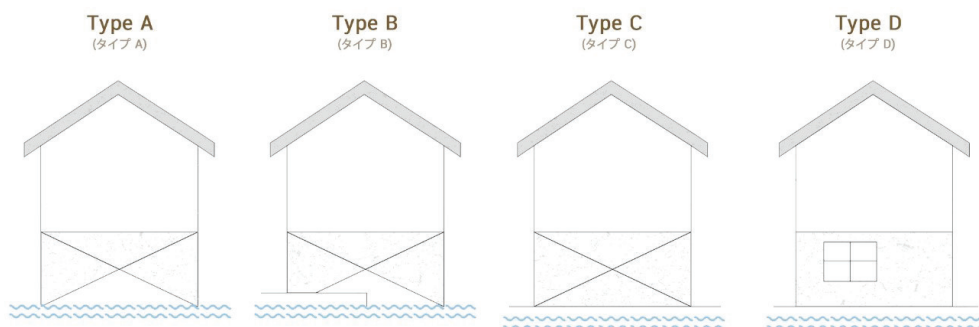


Figure 7 Classification of Funaya

Ine fishing village was selected as Groups of Traditional Buildings in 2005. There are principles of the town planning in the preservation area.

1) There are two types of building in the preserved zone, include the buildings which located at the waterfront of Ine bay, called “Funaya” or the boat house and the buildings located at the land, which separated by the road in the center.

2) The owners of buildings in the preservation zone have their own group of buildings, includes main houses for a living and extended family which located at the land behind a road, storehouse or storage, and Funaya for fishing located along the waterfront. For example, unit3, 6 and 31 (Figure 8)

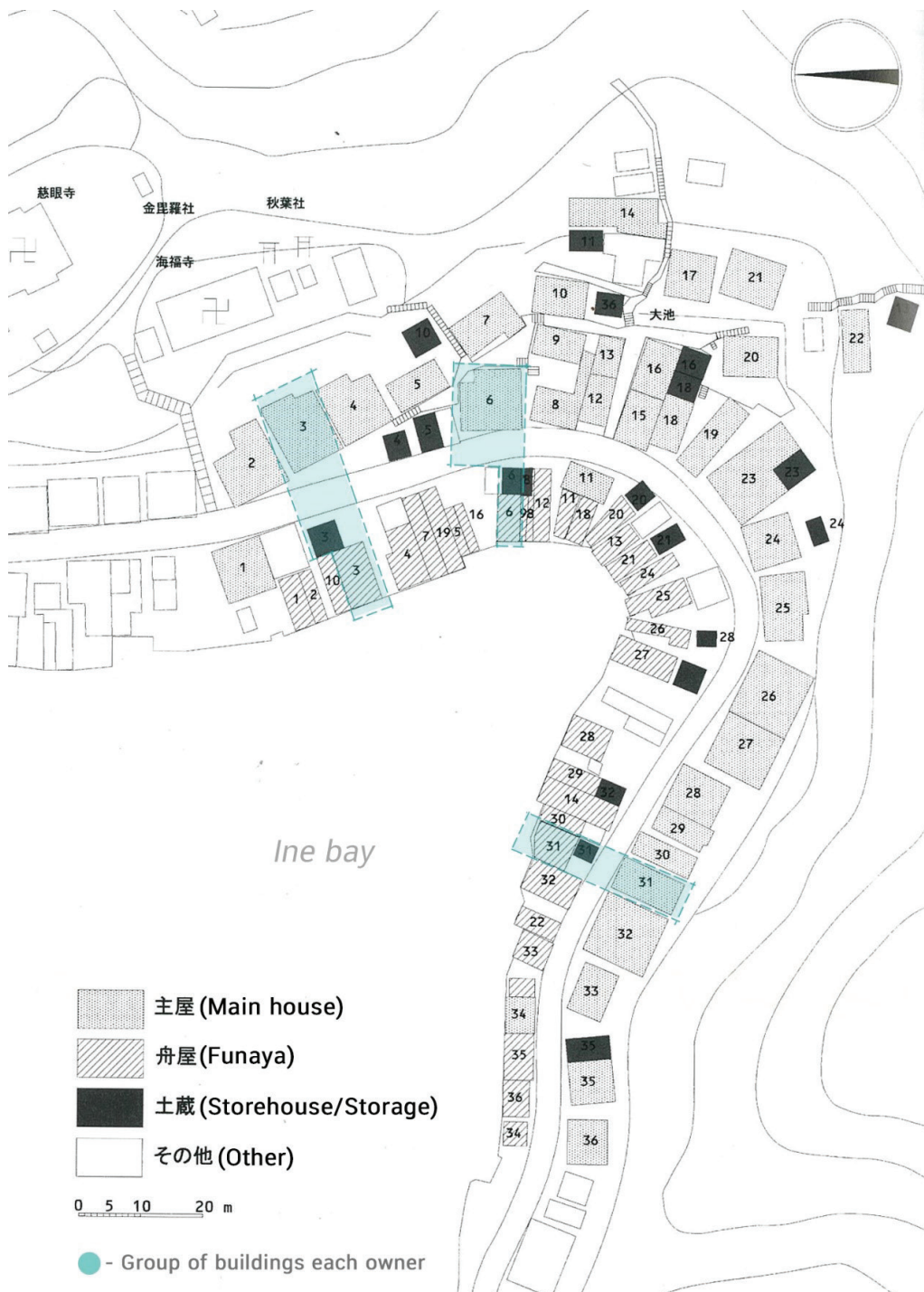


Figure 8 Housing unit layer of one part of the preservation area

Source: Board of Education Ine town (2005)

Findings

The findings are clarified for two main points, involving (1) the management of the Denken system for the preservation and (2) the adaptation of Funaya houses under the Denken system, in accord with an increasing number of tourists in Ine town.

1. The Denken system in the preservation area of Ine town

1.1 The management of the Denken system in Ine town

The information has collected by the interview of Nagahama who is a member of the preservation meeting in the area and used to be a local fisherman in Ine village on October 14, 2019 with Mishima Nobuo, a professional at architectural and urban design who translated the data from Japanese to English. The questions for the interview are mainly about the Denken system. For example, how the Denken system works in the preservation area of Ine town, how it manages and conserves cultural heritage, and the questions about the community participation for preservation, including how the local residents think of the preservation as well. As described, around 30 years ago, the beginning of preservation was started. The fishing cooperative (limited cooperative) of fishermen considered about conservation of Funaya. Then, the research meeting

Kenkyu kai (研究会), which was supported by researchers and architectural professors or experts, joined the operation of the conservation in Ine fishing village. That researchers that collaborated with the board of education of Japan and local people in the area started studying and researching a fundamental of Funaya in the village, then did the reports of the cultural heritages in the village. After that, local residents and fishermen of the area established the preservation meeting (保存会- Hozon kai) which cooperates with the fishermen limited cooperation, to conserve the local heritage and support fishermen in Ine town. The important verifying for designation of the Denken system were the survey or architectural and town reports, interviews and recommendations of local people to Kyoto prefecture. The funaya groups were designated as the important preservation districts for groups of traditional buildings in 2005 (Nagayama, 2019). The system has covered traditional houses, landscape and the atmosphere as the village's cultural heritage, which include 432 traditional houses, 5 important sculptures, 15 conserved trees and 18 tourist accommodations in nowadays. After the Denken system designated the preservation area, the major advantage that the local people and residents gain is the financial support from the government of Japan. The Funaya's owners can receive the financial support for 80% as a maximum of the total cost when they repair or renovate their Funaya. There are rules of renovation. The

height of Funaya must be maintained, for instance. However, a basement and at the first floor can be designed by the owners, they can design ceiling height at the first floor as well. In addition, the preservation meeting also decides and selects houses or Funaya to renovate such as buildings that were damaged by natural disasters and traditional buildings that up to 700 years old. In the case of the landscape of the area, the design and townscape planning are planned by the local government. If the house's owners would like to add more landscape elements such as a sign and advertisement sign, they can not make and put it freely. They has to request and make permissions before. For summary, the main responsibility of the preservation meeting is discuss on the preservation, repairing the traditional buildings, management of landscape and townscape and making permissions. Furthermore, this area obtains other supports for the local community. For example, monthly financial support for the old original buildings in the preservation area, commercial support such as guest houses, restaurants and cafes, the town hall and tourism information center supporting and other departments supporting.

As the identity of Ine fishing village is a fisherman village, fishing and fishery are important of business and economy in the preserved area. The preservation meeting remains to cooperate with the fisherman limited cooperation by the reason of decreasing in the number of fishermen in the village. The fisherman cooperation supports the co-working of fishermen, they held the fishery cooperative and fishermen also can get money support from the government. Moreover, the service includes the pension for up to 65 years old retired fishermen. However, half of the fishermen are new residents in Ine fishing village that came from outside of Ine town nowadays.

1.2 Local residents and communities participation for preservation

Based on the question about the local residents' and communities' participation and how local residents in Ine town think about the preservation, the local residents think that the Funaya is important and should be protected. Thus, the preservation meeting collaborates with local people in the community and supports another groups of community. There are groups of the community which protects, support and develop the town, the prime group is the preservation meeting, which is administered using the Denken system or the important preservation districts for groups of traditional buildings, which includes around 50 members which have meeting and discussion monthly, 80% of residents belong to this meeting, includes up to 150 of the owners also belong to the meeting. The main duty is to discuss about the townscape and atmosphere preservation in the village. The landscape also had been discussed in the meeting. They suggest the way to develop a better environment

in the town such as put flowers in front of buildings, put flowers on the mountains, preserve trees, especially Shiinoki trees or Castanopsis, plant more trees such as a Sakura or Cherry blossom trees and cut weeds to make the town cleaner. The preservation meeting hosts the meeting for all members and the residents once per year and the meeting of disaster prevention and management twice a year as well. In addition, there is a sub-meeting of the preservation meeting that is the community meeting that focuses on the development of the community. They host activities for community such as a clean campaign, welcome some visitors, lecture for local residents and volunteer activities with students in a junior high school. There are the community places in the preservation area, that local residents can operate. Moreover, another groups are the private organization, the organization of merchant and the tourism organization.

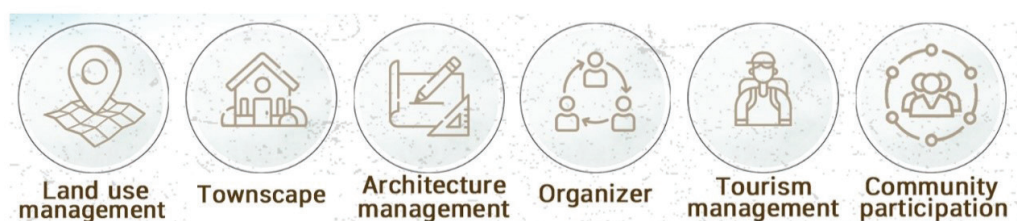


Figure 9 Summary of main roles of the Denken system in Ine town

2. Adaptation of the Funaya houses under the management of the Denken system

2.1 Tourism in Ine town

According to the interview of Koyama who is the officer in charge of the preservation board in Ine town on October 15, 2019 with professor Mishima Nobuo, at the present, Ine fishing village is considered one of the most beautiful villages in Japan, its most charming and popular aspect would be the Funaya of Ine. The Funaya are caught by tourists in which most tourists come from Japan, China, Thailand and Korea (Koyama, 2019). According to the tourism statistic of Ine town, the number of tourists has continuously increased (Table 1).

Table 1 Tourist arrivals in Ine town

	Visitors in Ine town, Kyoto prefecture				
	One day visitors	Stay in Ine town	Total visitors		
			Japanese travellers	foreigners	total number(人)
2009	184,934	35,011	42,613	177,332	219,945
2010	190,786	31,060	40,926	180,920	221,846
2011	203,290	33,877	44,518	192,649	237,167
2012	198,125	33,330	43,600	187,855	231,455
2013	190,704	33,906	42,172	182,438	224,610
2014	224,891	34,291	47,919	211,263	259,182
2015	220,852	26,993	44,561	203,284	247,845
2016	222,451	29,519	47,200	204,770	251,970
2017	244,525	31,378	58,345	217,558	275,903
2018	262,739	38,697	60,738	240,698	301,436
2019	299,937	29,497	64,172	265,262	329,434

Source: Kyoto Prefecture (2020)

According to statistic of Ine town, the number of visitors in the town is continuously increasing in the future, however, the guest houses or accommodation for tourists in the town are limited. In the preservation area, there are some Funaya that have been changed to guest houses or accommodations for travelers, located along the Ine bay, almost all of the guesthouses were located at the waterfront (Figure 10). As the interview, only 10% of tourists can stay in Ine fishing village, a maximum number of guests is 5-7 people per one guest house. This point is one of the tourism problems in the area.



Figure 10 Location of guest houses in the Ine preservation area by surveying

2.2 Adaptation of the Funaya house

For the Funaya houses which are located along the Ine bay, some houses changed from the original Funaya to public buildings for tourism such as guest houses, cafes, and shops. In case of the renovation of Funaya, as there are 4 types of Funaya, the house's owners can decide the basement on the first floor of the building and the height of the first floor. Changing of the first floor's height of the Funaya for welcoming visitors, converting to public place. However, the owner must remain on the second floor and under building's original height (Figure 11).

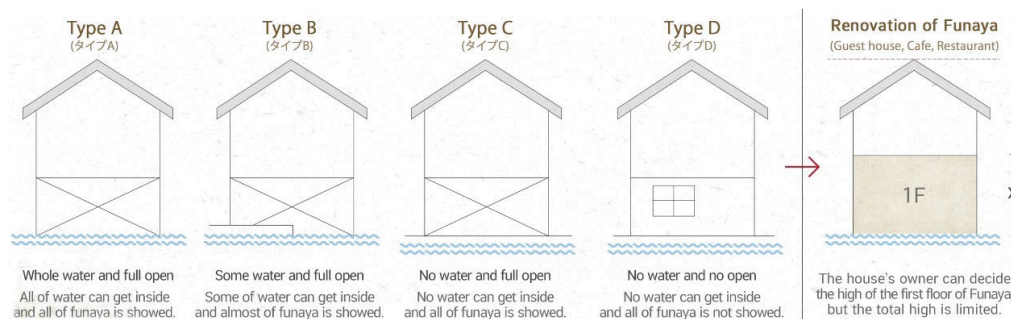


Figure 11 Specification of the renovation of Funaya

2.2.1 Adaptation of the Funaya house in physical characteristics

These are some examples of adapted Funaya houses for tourism along the bay. From the front elevation from the sea, some of Funaya houses' original style have changed, while almost Funaya still remains the boat garage (Figure 12), which is a unique and identity of the traditional Funaya. However, some local residents still are fishermen running fishery business, while some households have stopped doing fishery.

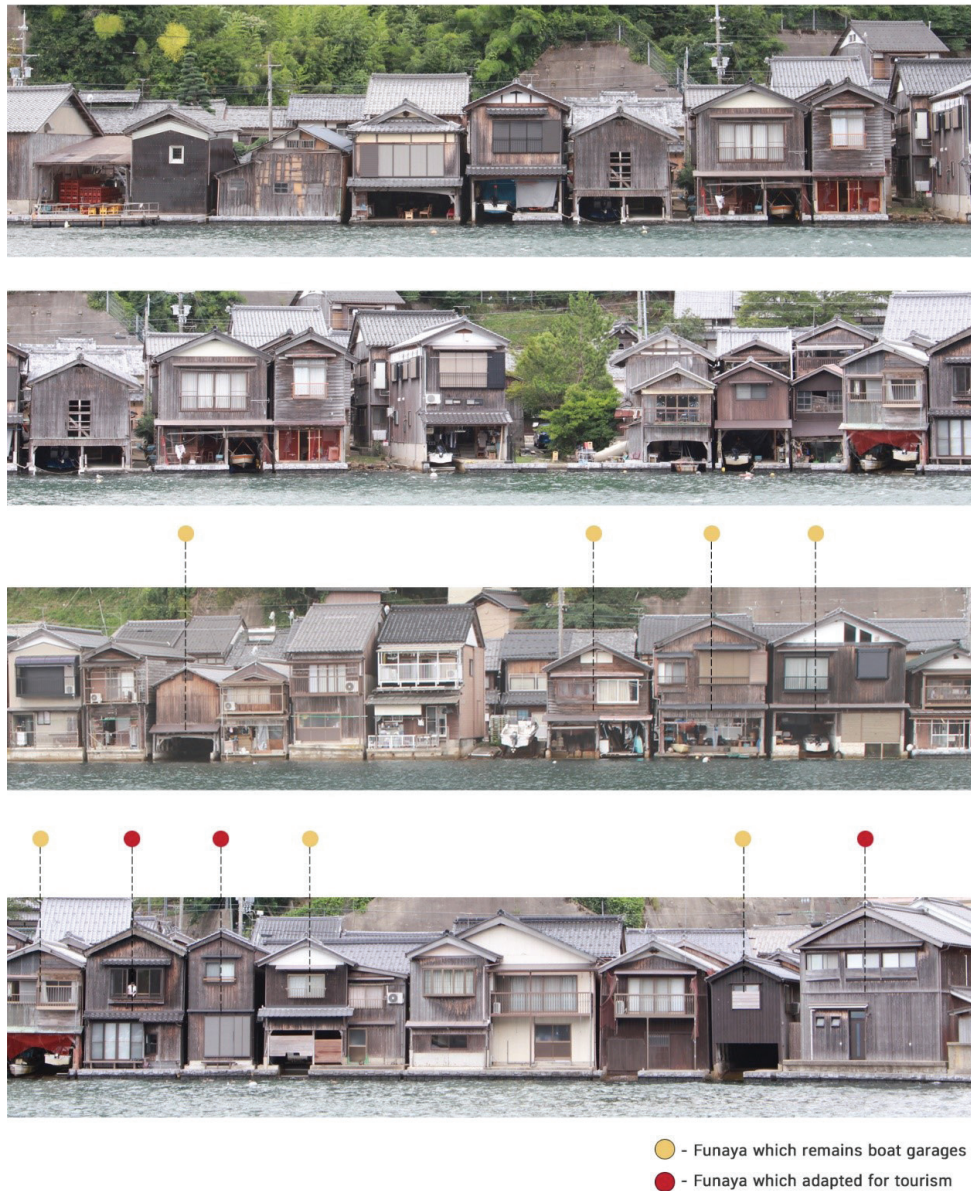


Figure 12 Front elevations of Funaya from the sea viewpoint
which show the adaptation of some Funaya

From figure 12, most of the original traditional Funaya houses, which are remaining the boat garage, have the lower height of the first floor than the adapted Funaya houses. The adapted Funaya houses have been renovated with expanding the first floor's height, however, the adaptation of Funaya houses still keeps the total primary height of the old house. According to the human scale theory, the size of the building, includes the height and the length, is the most important element which can influence people's sense of scale (Teng, 2012). For the first floor of adapted Funaya houses, its height has been expanded into a larger room for welcoming visitors.

2.2.2 Adaptation of the interior design

For the interior design of the renovated Funaya, more elements of a public place can be designed, for example, signages of a public place such as an exit sign and emergency exit sign, railing of a stair, etc. However the original proportion and scale of the elements, which are unique and difference from the western houses, should be maintained (Poonpol, 2004).



Figure 13 Interior of renovated Funaya as a guest house in Ine fishing village

2.3 Some tourism problems in Ine town

Ine fishing village has some problems relating to tourism as well. From the interview, many local residents do not want to interact with travelers and some of them do not agree or resist with tourism. Most of the local people in the area would like to keep and protect their lifestyle and the lively way, but some of the tourists took their photos, mostly private areas or private spaces of Funaya. Thus, that is a major problem of tourism in the preserved area, the preservation meeting still finding the way to solve these problems.

Moreover, there was a hotel company offering a great deal of money to build a big hotel in the Ine preservation area, however the preservation meeting did not agree and disapprove of it. The tourism management in the preserved area supports the local residents to renovate their's Funaya. Additionally, convenience stores such as 7-Eleven, Family mart and Lawson are still unacceptable to be built in the preservation area. The preservation meeting has focused on financial supports to local residents for renovating Funaya for tourism. The renovation as restaurants, cafes and guest houses is acceptable in the area.

Discussion and conclusion

The Important Preservation Districts for Groups of Traditional Buildings or the Denken system is one of the tools for cultural heritage preservation of the government of Japan. The system has been widely adapted to numerous groups of the old buildings and cultural heritages in many areas of Japan which have unique character in each place.

For Ine fishing village as the case study of this article, the area is considered in the type of fishing village. Physically, the unique characteristic of the townscape is based on the viewpoint from the sea which is a rare place in Japan and in the world. According to the land morphology of the preservation area, it is a curve form that almost full circle which is showed as a map of the area. It makes recognition of well-arranged of the architectural elevations and unity of Funaya for visitors (Figure 14). In addition, the findings of the study show the point about the length of total height of the Funaya. Although the local residents can renovate their Funaya, but they must keep the original height of Funaya. Thus, it is one of the factors of unity for the preservation area and also well-arranged of the elevation (Figure 14).

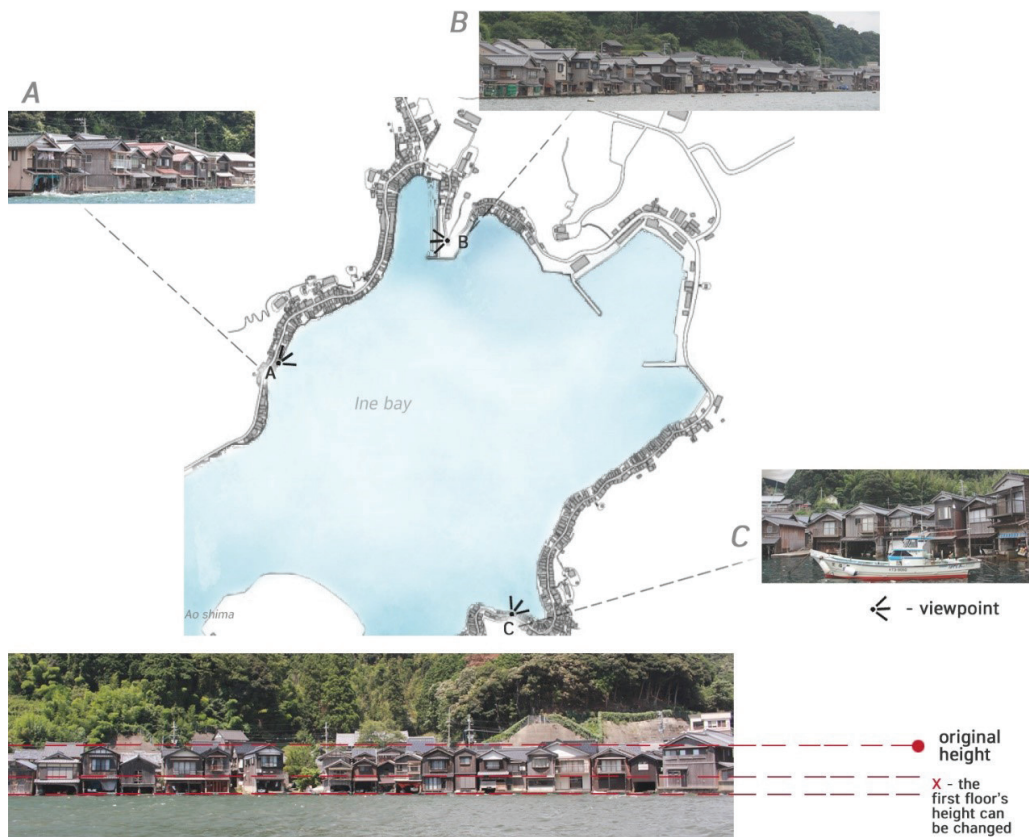


Figure 14 Example of viewpoints and analysis of the height of Funaya houses

From the point of the managements in Ine fishing village, local residents participation is the main key of successful conservation to protect and conserve the Funaya, including to preserve local cultural heritages and original townscape. The roles of community participation and the board of education which is a non-local residents in the area can stimulate and understand the community at primary level. The cooperation between the local residents and government, make all members of the group become united (Srisakulchairak, 2018) and make sense of belonging and awareness for the residents as well. Besides, there is tourism management by the community and the town preservation board during the flourishing tourism period although there are some tourism problems that are needed to be solved. Moreover, the fact of effective management is a cleanliness of the area. The preservation and community meeting keeps hosting clean campaign for the area,

while other fishing villages or waterfront communities face problem of floating trash pollution. Furthermore, Ine fishing village has been selected for the UNESCO world heritage site of Japan, that will bring more benefits to this area.

The summary of this article indicates the preservation of cultural heritages using the Denken system and community participation of Ine which the concept could be used and adapted as an example for other towns, especially other fisherman's villages. A study on the law on the Important District for Preservation of a Group of Traditional Buildings or Denken system should be more beneficial for the development of a guideline for a preservation system of a group of traditional buildings in Thailand (Tachakitkachorn, 2009). For instance, in Thailand, there are fisherman villages and waterfront communities or water-based communities such as in Lanta old town, in Koh Panyi and in Amphawa district (Silapacharanan, 2014) which suppose to conserve and manage the traditional architectures and cultural heritages in the area. Although preservation system and organization system in Thailand are different from those of Japan, but architects, researchers and urban planners can consider physical managements to make a typology and aesthetics for conservation (Oranratmanee, 2009) such as the unity of architecture in town and well-arranged of elevation of buildings as a case study of Ine fishing village.

Research limitations and suggestions for future research

From the field study in Ine town, the time was limited for only 2 days. There were troubles communicating in Japanese, however, the interview records have translated and explained by professor Mishima Nobuo. For future research, survey mapping and more measuring work should be done. Land use and town planning are also necessary for the analysis.

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