Questionnaire survey on carrying capacity of Japanese registered tangible cultural properties as regional tourism resources

Shinya Oguri (Graduate School of Informatics, Nagoya University, ogrium@nagoya-u.jp)

Mayu Urata (Graduate School of Informatics, Nagoya University, mayu@i.nagoya-u.ac.jp)

Mamoru Endo (Graduate School of Informatics, Nagoya University, endo@i.nagoya-u.ac.jp)

Takami Yasuda (Graduate School of Informatics, Nagoya University, yasuda@i.nagoya-u.ac.jp)

Abstract

In recent years, the problem of stretched carrying capacity, so-called overtourism, has been pointed out at famous tourist destinations due to the increase in the number of tourists. Then, a trial has been made to disperse the tourists by utilizing regional tourism resources. In this study, a questionnaire survey of participants and owners of cultural properties was conducted through a special open house experiment to understand the problems that may arise in the use of national registered tangible cultural properties as regional tourism resources. As a result, it has been found that these could be a tourist resource of the region. In addition, participants were satisfied with "a tour of undisclosed places" and they expected "an explanation about an architectural feature or material or design", and so on. On the other hand, we found that the cultural property owners wanted to tell the participants the "history and episodes about their buildings". We also found that they are very positive about foreign-language services for inbound tourism. This suggests that regional tourism using registered tangible cultural properties may be applicable not only to domestic tourism, but also to inbound foreign tourists in the future.

Keywords

carrying capacity, registered tangible cultural property, heritage, overtourism, tourism resources

1. Introduction

According to the world tourism statistics published by UN-WTO (United Nations World Tourism Organization), [UN-WTO, 2019], the number of overseas tourists (Arrival base, travellers staying more than one night) in 2018 increased by 6 % to an estimated 1.4 billion. According to the long-term forecast announced in 2010, it was expected to reach 1.4 billion people in 2020, however this was achieved 2 years ahead of schedule. The growth rate of the world economy has far exceeded 3.7 %. According to the UNWTO, factors contributing to the expansion of the overseas travel market include the overall growth trend of the world economy, new business models created by technological advances, visa relaxation, and the spread of travel through the use of aviation. In the future, the prediction is that it will expand to 1.8 billion persons in 2030.

By this, many tourists from all over the world rush to the popular sightseeing spots, and it becomes a situation called overtourism [Dodds et al., 2019; Żemła, 2020]. Therefore, in order to protect the natural environment from excessive use of tourism, attempts have been made to limit the number of tourists. Then, how many tourists can there be without adversely affecting tourist resources? There have been some studies to calculate the number of people to be limited, the so-called "carrying capacity" [Eugene, 1989; Jesus et al., 2008; UNWTO, 1981].

This idea was originally based on the concept of carrying capacity for the natural environment, but has since come to be considered not only in terms of the natural environment but also in terms of social carrying capacity as a tourist destination

On the other hand, as a means to avoid concentration of tourists in popular sightseeing spots, trials of decentralization of tourists have been carried out all over the world. For example, in the British New Forest, a public bus tour [New Forest National Park, 2020] which observes the national park is planned, and in Madrid, Spain, improvement of cycling routes to the suburb, etc. have been carried out [Cicla Madrid, 2020]. In the case of Japan, registered tangible cultural properties are scattered all over the country and have a close relationship with the local history and culture, so they can be expected to be a resource for the decentralization of tourism.

In this paper, the possibility of decentralization of tourism to the region using registered tangible cultural property buildings of Japan and the carrying capacity in that case were verified through a special open house experiment from the viewpoint of both participants and cultural property owners.

2. Nationally registered tangible cultural properties

As shown in Figure 1, cultural properties in Japan are mainly organized into 6 categories: "Tangible cultural properties", "Intangible cultural properties", "Folk cultural properties", "Monuments", "Cultural landscapes", and "Group of traditional buildings". Tangible cultural properties are classified into "Important cultural properties" and "Registered tangible cultural properties", and among "Important cultural properties", especially valuable ones from the viewpoint of world culture are designated as "National treasures" [Agency for Cultural Affairs, 2020].

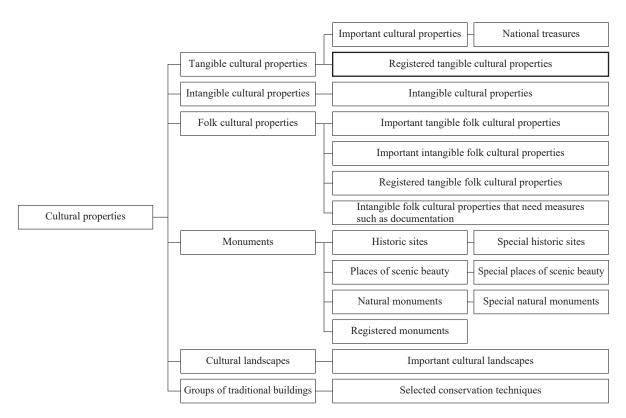


Figure 1: The system of Japanese cultural properties

It is the important cultural property designation system to select especially important objects in the tangible cultural properties. To complement this, Japan established the registration system for cultural properties in 1996, and registered properties are called Registered Tangible Cultural Properties.

Registered tangible cultural property buildings are widely registered from those before the Edo period to those in the Showa period. And, the application ranges over a diversity such as government offices, schools, housings, and religious facilities.

Registered tangible cultural properties have been registered in all 47 prefectures in Japan, and as of January 2020, a total of 12,443 items have been registered nationwide, and they increase every year. In Japan, the Law for the Protection of

Cultural Properties was revised in 2019. The main purpose of this law was to preserve cultural properties, but with this revision, the utilization of cultural properties was added as a new purpose. Therefore, there are now high expectations for how to utilize cultural properties. In this paper, we examine whether registered tangible cultural properties, which are distributed throughout Japan and have their own history and culture, can be used as regional tourism resources when the number of tourists is increasing worldwide.

3. Carrying capacity for cultural properties

Every year, many tourists visit Hong Kong, Bangkok, Macau, Singapore, London, Paris and other tourist cities around the world [Euro Monitor International, 2020] (Figure 2). In

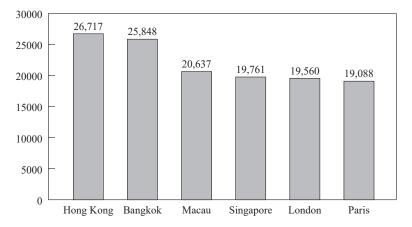


Figure 2: Numbers of foreign visitors

these cities, infrastructure and urban development is being promoted to accommodate large numbers of tourists.

In the meantime, though it seems to be a good method to attempt the regional dispersion in order to disperse the concentrated tourists, there are not many regional cities in which infrastructure and urban improvement can deal with a large number of tourists.

In this study, we discuss how to utilize registered tangible cultural properties as tourism resources in order to disperse tourists to local areas. Registered tangible cultural property buildings dispersed all over the country are various from large-scale to small-scale. Some cultural properties are always open to the public, while many others are not usually open to the public and are only open on limited days. In addition, there are cases where sufficient staff are available or not available, and the situation varies depending on the cultural property.

There is no example of research on the kind of problems when such registered tangible cultural properties are opened to the public as sightseeing resources. Therefore, in this study, when the owner of a registered tangible cultural property opens the building to the public, the acceptable capacity and conditions are verified, and this is called the carrying capacity for the registered tangible cultural property building.

4. Special open house

Between October 12, and November 24, 2019, with the cooperation of the Association of Owners of Registered Tangible Cultural Properties of Aichi Prefecture [The Owners Association of Registered Tangible Cultural Property Buildings of Aichi Prefecture, 2020], a special open house was conducted over a total of 11 days in which 50 registered tangible cultural properties in Aichi Prefecture were specially opened to the public.

Public relations methods were leaflets (Figure 3), website, Facebook, Twitter, Instagram, posters, newspaper, administrable publicity, and publicity by word of mouth. Participants ap-





Figure 4: Special open house

plied by mail, telephone, and fax, and anyone could participate. Figure 4 shows an owner explaining their cultural property to the participants.

The total number of participants was 771, and a questionnaire survey was carried out for both participants and cultural property owners in order to investigate problems of the opening of registered tangible cultural properties.

Questionnaire contents to the participants were as follows:



Figure 3: Leaflet of cultural properties special open house

- P-1: Address
- P-2: Sex
- P-3: Age
- P-4: Public relations methods
- P-5: What participants expect from the special open house of cultural properties (Expectations)
- P-6: Length of explanation time
- P-7: Evaluation by participants of the special open house (Evaluation)

The questionnaire contents to the cultural property owners were as follows:

- O-1: Public relations methods
- O-2: Burden for the preparation
- O-3: Collaborators of the special open house (Collaborators)
- O-4: Was the number of participants in the special open house adequate for owners' buildings? (Number of participants)
- O-5: Thoughts on cultural properties by their owners and stories of hardships in their conservation and utilization of cultural properties. (Owners mind)
- O-6: Benefits to owners of cultural property by participating in special open house (Benefits)
- O-7: Foreign language support

From the questionnaire result of the participants, 75.6 % were participants from inside the prefecture, and 17.8 % were from outside the prefecture. 6.6 % made no response. Also, 47.2 % were men, 49 % were women, and 3.9 % did not answer. Participants ranged in age from their 20's to their 80's, with an average age of 50 years. The results of the questionnaire are shown in Figures 5 to 15.

The results of the questionnaire on publicity methods are shown in Figure 5. Leaflets were the most common means of a public relation method, at 32.4 %. Website was second at 15.3 %. The use of social networking sites such as Twitter and Instagram were low. Newspapers were also used as a publicity

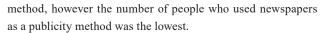


Figure 6 shows what the participants expect to see in the special open house. The most common answer was to be able to visit a building that cannot be seen on a daily basis (70.7 %). The second most common reason was to listen to explanations about architectural features, materials and design, which accounted for 54.1 % of the total number of participants. 30.2 % expected to hear about the people and stories related to the cultural property buildings, and 29.7 % wanted to know about the history of the buildings and the family histories of the cultural property owners. 22.4 % of the participants wanted to visit many of the distinctive parts of the cultural buildings. 20.5 % of the participants wanted to hear about the owners' thoughts on cultural properties and their difficulties in preserving and utilizing them. 18.3 % of participants wanted to obtain explanatory material about the cultural property building they had visited.

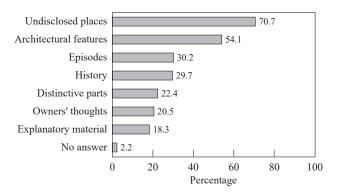


Figure 6: Expectations (P-5)

With regard to the amount of time spent explaining the cultural properties, the most common answer was that between 30 minutes to one hour was preferable for 64.3 % of participants. 10 % of participants would have preferred to be able to listen to explanations without restrictions (Figure 7).

About 88 % of the respondents answered "very good" or

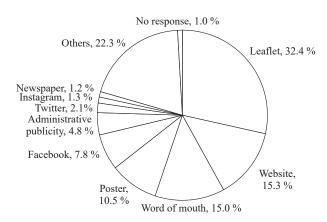


Figure 5: Public relations methods (P-4)

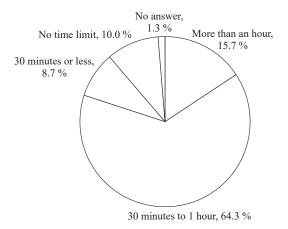


Figure 7: Length of explanation time (P-6)

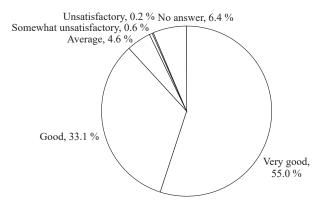


Figure 8: Evaluation (P-7)

"good" about their participation in the special open house of the registered cultural properties. 4.6 % of the respondents answered "average", "somewhat unsatisfactory" was 0.6 %, "unsatisfactory" was 0.2 %, and "no response" was 6.4 % (Figure 8).

It was found that the means of public relations by the owners of cultural properties were mainly through posters (31.8 %), leaflets (27.3 %) and word of mouth (17.3 %). A few people used the Internet, such as a website (11.8 %) or Facebook (8.2 %) (Figure 9).

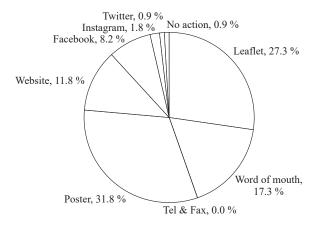


Figure 9: Public relations methods (O-1)

Regarding the burden of preparation for the special open house, 57.1 % of the participants answered, "It was not a burden". However, some answered, "Difficult to find a collaborator (23.8 %)", and "It was hard to clean the house (16.7 %)" (Figure 10).

As for the collaborators to owners in the special open house, "Owner only" (35.7 %) was the largest, and it was found that cooperation such as "Volunteers" (23.8 %), "Heritage manager" (16.7 %), and "Relatives" (16.7 %) was obtained (Figure 11).

In terms of the number of people who participated in the special open house, 76.2 % of cultural property owners thought the number was appropriate, 19.0 % thought it was low and 4.8 % thought it was high (Figure 12).

The owners of cultural properties most want to tell the par-

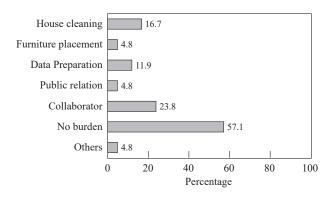


Figure 10: Burden on preparation (O-2)

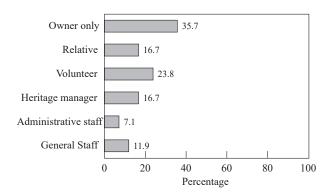


Figure 11: Collaborators (O-3)

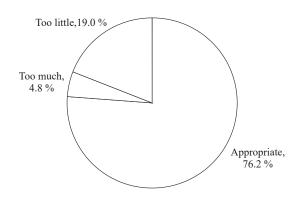


Figure 12: Number of participants (O-4)

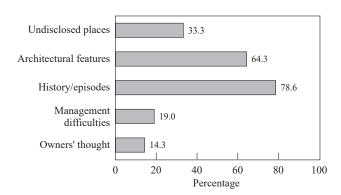


Figure 13: Owners mind (O-5)

ticipants in the special open house about the history and episodes relating to buildings (78.6 %) followed by architectural characteristics, materials and designs of buildings (64.3 %), information about places that are not normally open to the public (33.3 %), management difficulty of cultural properties (19.0 %), and thoughts of the cultural property owners (14.3 %) (Figure 13).

The benefits for owners about participating in the special open house were the chance to make a degree of recognition to many people (57.1 %), deeper understanding of cultural properties (42.9 %), sharing a fun time with participants (40.5 %), new relationships spread (16.7 %), and contributing to the local community (42.9 %) (Figure 14).

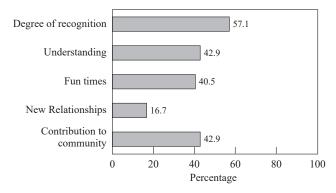


Figure 14: Benefits (O-6)

About 70 % of the owners were interested in providing explanations in English at the time of the special open house of cultural properties. 4.8 % answered "Yes", and 64.3 % answered they would "Positively consider". 31.0 % were not interested in providing explanations in English (Figure 15).

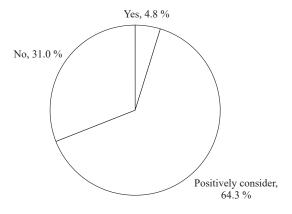


Figure 15: Foreign language support (O-7)

5. Consideration

From the results of the questionnaire to the participants, about 88 % participated in the special open house, and answered "Very good" or "Good", which showed that the buildings of registered tangible cultural properties were effective as regional tourism resources.

Also, the public relations methods were mainly leaflet and poster display, and it seems to be one of the reasons that there were few participants from outside of Aichi Prefecture (17.8 %). In the future, development of a system capable of widely transmitting information to persons interested in cultural properties is necessary.

In this open house of the registered tangible cultural property buildings, the participant was permitted by limiting the number of persons which seemed to be appropriate for each cultural property. As a result, only 4.8 % of the owners said that there were too many participants. It can be said that this fact indicates that it is desirable to decide the fixed number of registered tangible cultural property buildings in the region in advance and to open them to the public.

The question of "expectations for the special open house" for participants and the question of "what owners want to tell the participants" for owners can be regarded as the questions of the identical content from a different standpoint. For these questions, the largest number of participants answered a tour of undisclosed places while only a few owners answered this item.

On the other hand, only a small number of participants answered history and episodes related to buildings, which had the largest number of owners. It is interesting to see that the participants and the owners have different viewpoints on the special open house. Although this may be of great significance to the owners, the small history and episodes of the region are not widely known, and therefore the participants are not likely to show much interest. It can be considered that this is also affected by small information transmission quantity from the region. In order to make the registered tangible cultural property as a sightseeing resource of the region, it can be said that it is necessary to firmly transmit such information.

In addition, in this investigation, there were no participants from foreign countries, and it became an evaluation of only domestic participants. It is expected that foreigners will be interested in visiting the buildings of registered tangible cultural properties because they are known to have a deep knowledge of Japanese history and traditional landscape. In the future, it is necessary to investigate tourists from overseas as well.

Fortunately, nearly 70 % of the owners of cultural properties replied that their explanations in English were "Yes" or "Positively consider", indicating that it is possible to sufficiently accept foreign tourists even for regional sightseeing.

6. Summary

While tourists increase worldwide, overtourism in which tourists excessively concentrate in a specific sightseeing spot has been generated, and the discussion on carrying capacity has been generated. In order to cope with such excessive concentration, a dispersion off sightseeing to local areas is considered.

In this study, we focus on the registered tangible cultural property system in Japan, and consider the registered tangible cultural property buildings as regional tourism resources. However, it is not known what kind of problems there are in order to utilize as sightseeing resources, because the registered tangible cultural property buildings are various, and there are some which are not opened to the public in daily life.

Then, 50 registered tangible cultural property buildings were specially opened to the public in Aichi Prefecture, Japan, and a special open house on what kind of problems arise was carried out. Then, a questionnaire was carried out to both participants and cultural property owners to extract problems.

As a result, it was shown that many participants were interested in the opening of registered tangible cultural properties which are not usually open to the public, that the owners were satisfied with the special opening, and that they were also interested in an explanation in a foreign language which was conscious for inbound tourists. These results indicated that it is possible to decentralize tourism to regions by using national tangible cultural properties. It was also found that each of the registered tangible cultural properties had an appropriate number of visitors.

On the other hand, it was found that there are differences in the way of thinking between participants and the owners of cultural properties. In order to solve these problems, it is necessary to widely disseminate information on the history and culture of the owners of registered cultural properties in addition to information on architectural styles and building materials. Therefore, it was proven that the development of a system which can widely transmit information to the person who is interested in the cultural property is also necessary.

Based on the results of this survey, it is expected that owners of cultural properties, government agencies, tourism agents, NPOs and DMOs, and others involved in regional tourism will work together to develop specific tourism contents using the region's registered tangible cultural properties. In addition, it was proven that the development of a system which can widely transmit information to the person who is interested in the cultural property is also necessary.

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