

Tokyo Metropolitan University  
Graduate School of Urban Environmental Sciences  
Department of Tourism Science



TOKYO METROPOLITAN  
UNIVERSITY

# ANNUAL REPORT

Department of Tourism Science  
Tokyo Metropolitan University





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# ANNUAL REPORT 2023



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# 01 Research Staff



## Environmental Management Unit



### Shinya NUMATA

Professor

Ph.D. Tokyo Metropolitan University

Tropical Biology, Urban Ecology, Protected Area Management



### Takaaki NIHEI

Professor

University of Tsukuba

Geography



### Takeshi OSAWA

Associate Professor

Ph.D. Kobe university

Biodiversity Informatics, Conservation Science, Ecosystem management



### Etsuro TAKAGI

Assistant Professor

Ph.D. (Agriculture) The University of Tokyo

Forest zoology, Population ecology, Natural history



### Yuki SAKAMOTO

Assistant Professor

Ph.D. University of Tsukuba

Human Geography, Cultural Geography

## Regional and Urban Planning Unit



### Tetsuo SHIMIZU

Professor

Ph.D. (Civil Engineering),  
Tokyo Institute of Technology

Tourism Policy and Planning, Transport Studies



### Susumu KAWAHARA

Professor

Ph.D. (Engineering) Waseda University

Urban Design and Planning, Community-based Tourism, Destination Management, Public-Private Partnership



### Yu OKAMURA

Associate Professor

Dr. of Engineering  
The University of Tokyo

Urban Design, Conservation Planning, Community-Based Tourism and Town Planning



### Yuki OHIRA

Assistant Professor

Ph.D. (Engineering), Kobe University

Infrastructure Planning, Transport Studies



### Tomoyuki MASHIKO

Research Assistant Professor

Ph.D. (Architecture) Waseda University

Urban Planning & Design, Post-Disaster Recovery Design



### Norie HIRATA

Research Assistant Professor

Ph.D. (Tourism Science),  
Tokyo Metropolitan University

Place branding, Regional Planning, Space design



### Nguyen Van Truong

Specially Appointed Assistant Professor

PhD in Tourism Science,  
Tokyo Metropolitan University

Transportation, Tourism Behavior, Big data

## Behavioral and Management Sciences Unit



### Kenro AIHARA

Professor

Ph.D. (Engineering)  
The University of Tokyo

Information Engineering, Human-Computer Interaction, Behavioral Science, Cyber-Physical Systems, Crowd-sensing



### Katsuya HIHARA

Professor

Ph.D. University of Tsukuba

Micro-economics, Management, Tourism/Transport Policy



### Yohei KURATA

Associate Professor

Ph.D. (Spatial Information Science)  
University of Maine, USA

Tourism Informatics, Spatial Information Science



### Wu Lingling

Associate Professor

Ph.D.  
Hiroshima University

Tourism marketing, integrated tourist behavior modeling, big data analysis in tourism



### Yu OGASAWARA

Assistant Professor

Ph.D.  
Hirosaki university

Social systems engineering

## Development of wildlife tourism attraction in Asian tropical rainforests

Numata, S., E. Takagi,

The aim of the project is to develop a tourist attraction program using wildlife (VH: virtual hunting), and to construct management system towards tourism, conservation, and environmental education in ERNP. A camera trap system of wildlife-based tourist attraction "virtual hunting" is developed and implemented in nature and semi-nature area in ENRP

under the collaboration between TMU-UTM, JNPC, and JSG. The system involves video-trapping camera, tourists' activity (shooting), archiving, and data delivery as a trophy of the virtual hunting. In FY2022, we hold a field seminar to share how to use camera traps for tourist activity in

Endau Rompin National Park (ENRP), Peninsular Malaysia. Tourist guide and education materials was developed to enhance educational effect of VH. The wildlife has been monitored by camera traps as baseline information, and partly analyzed for conservation practice.

## Factors influencing attitudes and tolerance toward long-tailed macaques

Numata, S.

Long-Tailed Macaque (*Macaca fascicularis*) is a primate species widely distributed in Southeast Asia, including Malaysia, has recently contributed to a growing issue of human-macaque conflict. To quantitatively assess the factors influencing attitudes and tolerance towards macaques, a questionnaire was developed. The survey targeted students at Universiti Teknologi Malaysia (UTM), situated in the southern part of Johor, Malaysia. The results

suggest that the preference for macaques emerges as the most influential factor affecting attitudes and tolerance, significantly influencing conflict severity. Additionally, my results also suggest that CNE could play important role in attitudes and tolerance towards macaques, indicating that fostering preferences for macaques and providing CNE

opportunities are effective measures for conflict mitigation without causing actual harm. However, future discussions, utilizing additional data, are necessary to explore the detailed mechanism of interactions between these factors and the nuanced influence of detailed experiences (Oji Akaishi, Master's thesis)

## How does animal-dislike differ from biophobia?

Numata, S.

The complex relationship between humans and nature is increasingly recognized as a crucial determinant of individual well-being and societal harmony. This study delves into the nuanced dimensions of this connection by exploring the distinctions between animal-dislike (preference of animals)

and biophobia (anxiety disorder), particularly among Malaysian young adults. This study used the shorten measures of snake and spider phobia, the Snake Questionnaire (SNAQ) and the Spider Questionnaire (SPQ) to assess the individual's phobia

levels. The results revealed individuals with heightened snake phobia show a lower preference for snakes. Moreover, a relationship was identified between the preference of animals (all animals) with phobia (snake) and non-phobia (snake), regardless of whether the phobia was present or not (Afrina Umairah Binti Muhamad Rahim, Master's thesis)

## A study of wildlife experiences in National Parks in Malaysia

Numata, S.

Wildlife experiences is core of wildlife tourism, and direct encounter with wildlife is a main wildlife experience and is a core of wildlife tourism. However, it is generally difficult to encounter wildlife in tropical rainforest in South-East Asia despite its rich biodiversity. In this study, wildlife experiences in four National Parks in

Malaysia (Endau Rompin National Park, Taman Negara National Park, Bako National Park, Kubah National Park) were evaluated by mixed approach including analyses of "Lonely Planet" descriptions and TripAdvisor reviews. We found that the information provided

by Lonely Planet was limited, but also that visitors encountered a variety of wildlife, including not only mammals such as monkeys and elephants, but also birds, reptiles, amphibians, and insects. These results suggests that direct encounter and indirect experiences could be as important visitor experiences as direct encounter with wild mammals in national parks in Malaysia (Ryota Saito, Masters' thesis).

### Problems of multivariate analysis in agricultural regionalization: consideration from the case of the Hokuriku region

Nihei, T., Tabayashi, A., Ullah, W. and Ahmed, Z.

This article is a technical note that describes a conventional agricultural regionalization method and its problems, using the Hokuriku region as an example. The method is a multivariate analysis that combines factor analysis and cluster analysis. Finding agricultural regions requires the following 12 steps; 1) selecting variables, 2) preliminary

calculations, 3) omitting variables, 4) weighting factor scores, 5) exponentiating factor scores, 6) selecting a scale of statistical unit, 7) interpretation of factors, 8) map design, 9) displaying maps for factor analysis, 10) interpretation of clusters, 11) displaying a map

for cluster analysis, and 12) regionalization. We then discussed these problems; (i) How many variables should be selected? (ii) Which statistical unit should be selected? (iii) How can the calculation be adjusted? (iv) How can regions be classified subjectively?

### Strength of online tours from customer satisfaction perspectives: insights from text mining and emotional analysis of reviews.

Suzuki, M., Zhu, Y. and Nihei, T.

As the COVID-19 pandemic made real trips more difficult, Japanese travel agencies which mainly handle real trips have started online tours. Analysis of how participants review online tours, which do not involve a geographic trip, reveals customer satisfaction perspectives and strengths of online tours. We conducted text mining and emotional analysis with the hypothesis, which tours with high reviews and tours attended by participants multiple times had more positive reviews on the online tour than

the comparison group. We tried to extract strengths from significant difference with the comparison group. Overall, online tours are rated with a number of stars, where the guide's competence and interactivity, such as chats, are seen as strengths. In addition, tours which visit multiple places receive a large number of reviews, and the fact which multiple people can participate

within the same price; these are also considered strengths which differ from real trips in terms of cost performance. As for weaknesses, since sightseeing is done via an Internet connection, reviewers expressed disappointment with the lack of signal and image/voice interruptions. Although some parts were as hypothesized and some were not, the accuracy of the analysis will be improved by verifying not only one method but multiple methods.

### Writing geography of Hokkaido

Laboratorio de geografia (by T. Nihei)

#### 1. Introduction

I instructed field excursions (bus excursions) when I worked at Hokkaido University (2010-2021). This is part of my excursion notes. (by T. Nihei)

Proper nouns are written as they are pronounced, e.g. Hokkaido --> Hokkaidou, because Japanese place names can be difficult to pronounce in English (even in Japanese). An exception is "Tokyo" because it is listed in English dictionaries, though it is pronounced as "Toukyou."

#### 2. Geography of Hokkaidou: Oshima

Oshima [o-shi-ma] is a sub-prefecture (Sougou-shinkou-kyoku) in South

Hokkaidou (Dounan). The area is marked as No.1 in Figure 1.

#### Figure 1

[HTTP://2242.MOOO.COM/HOKKAIDO/31](http://2242.MOOO.COM/HOKKAIDO/31)  
DOI 10.13140/RG.2.2.36342.16966

It is located in the east of the Oshima Peninsula. It faces Uchiura Bay, Tsugaru Strait, and the Sea of Japan. Uchiura Bay is called Volcano Bay.\*1

The place name is Japanese. The pronunciation of Kanji characters "Watari-shima" changed to "O-shima." It means "cross, island."

Compared to other areas in Hokkaidou, the temperature is high and the snowfall

is less. In the case of Hakodate City, the average annual temperature is 9.1 C (degrees Celsius), the average annual precipitation is 1152 mm, and the average annual snowfall is 381 cm (averages from 1981 to 2010) \*2  
(To be continued)

### Writing geography of Hokkaido (Part 2)

Laboratorio de geografia (by T. Nihei)

(Continued)

These municipalities are included in Oshima; Hakodate City (Population in 2010; 279,127; 3rd largest in Hokkaidou), Hokuto City (48,032), Nanae Town (28,453), Yakumo Town (18,896), Mori Town (17,859), Matsumae Town (8748), Oshamanbe Town (6386), Kikonai Town (5386), Fukushima Town (5114), Shiriuchi Town (5074), and Shikabe Town (4767). The sub-prefecture bureau is located in Hakodate.

3. Note

\*1 Volcano Bay is "Funka Wan" in Japanese. It was named by a British naval officer in the 18th century. At the time, volcanoes erupted around the bay.

The shape of the bay looks like a caldera, however, it is not a caldera. The largest caldera in Japan is Kussharo Caldera (See Teshikaga Town).

\*2 In the case of Tokyo (Chiyoda Ward), the average annual temperature is 15.4 C, and the average annual rainfall is 1529 mm.

4. Bibliography

(1) Laboratorio de geografia. 2021. "Hokkaido atlas and gazetteer 0.2 preliminary." Tokyo: Laboratorio de geografia. DOI 10.13140/RG.2.2.29562.47047/1

(2) Nihei, T. 2018. "The regional geography of Japan." Sapporo: Hokkaido University Press.

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### Biodiversity Informatics based on Natural history collection

Dr. Osawa

We are conducting collection, organization, and explore effective usage methods for various natural history collections including specimens, observational information, and data from citizen science projects, which are not necessarily acquired based on strict research

designs. In this year, a study was published demonstrating that the Sika deer, which has recently expanded its distribution rapidly, causing agricultural and ecological damage as well as zoonotic diseases, changes its behavioral patterns

seasonally. Moreover, this behavior can be somewhat predicted through simulations using remote sensing products and numerical simulations combined with observations from camera trapping data (Osawa et al. 2023 Sci. Rep.).

### Discovery and evaluation of Ecosystem services

Dr. Osawa

Benefits for humans that derived from natural and semi-natural environments are referred to as "ecosystem services." It is believed that ecosystem services range from those already recognized and actively utilized by humans to potential ones that are yet to be

noticed. We are conducting capturing the latent value of these ecosystem services and quantifying services that are recognized but not yet quantitatively assessed. In this year, a study was published showing that field improvements aimed at

enhancing the food production function (provisioning service), the primary purpose of agricultural land, are preferentially conducted in areas with high foundational services, unintentionally fostering trade-offs among services (Osawa 2023 Ecol. Res.).

### Biodiversity in urban ecosystems

Dr. Osawa

Urban ecosystems, which are ecosystems altered by human activities, often contribute to regional biodiversity. The role of urban ecosystems in conserving biodiversity, particularly around TMU is

being examined. In this year, a study was published indicating that the firefly *Luciola cruciata*, which often inhabits urban rivers and agricultural lands, is not necessarily guaranteed

to live only in current environmental conditions but may also be strongly influenced by the land use histories (Ukita, Sato, Osawa 2023 Japanese journal of conservation ecology).

### Population dynamics of insects and its effects on social-ecological systems including tourism

Etsuro Takagi

Insects are mega-diversity group. Their habitats are around the globe, and they play important roles in many ecosystems. In general, however, insects are not preferred by human. They are rarely tourist attractions.

Insects are ecosystem engineers in many ecosystems. Various insects modify

ecosystems. Recently, an appreciation has been developing of how these ecosystem engineers affect ecosystems ecologically and economically, namely property values, quantity and quality of marketable timber products, landscape aesthetics, recreational experiences, and tourism appeal.

However, to date, limited information are available. Thus, I am focusing on the ecological and economical effects of insects which are ecosystem engineers on ecosystems.

Two works have been out in scientific journals.

### Geographical Study of Music Practice and Using Resources

Yuki Sakamoto

This study analyzed the connection between music and locality through a focus on "musicking" using case studies from Nanto City in Toyama Prefecture. By examining the process of music practice and the use of local resources, this study provides empirical evidence

of the relationship between music and locality. The study confirms that local residents who recognize the usefulness of music as a local resource are crucial for establishing a strong relationship between music and the local community. Further-

more, the study suggests that when music is utilized as a local resource, it can become a more community-based musical practice by involving people in the production of vernacular music.

### Regional promotion measures using wine

Yuki Sakamoto

This study reports the current status of regional promotional measures and tourism in Nagano Prefecture, where many wineries have been established in recent years. In 2013, Nagano Prefecture planned the Shinshu Wine Valley Concept and focused on establishing

wineries and publicity activities. In 2023, it set a new goal, the Shinshu Wine Valley Concept 2.0, expanding the concept to tourism and regional development. In response to this trend, municipalities in Nagano Prefecture increased their wine

promotion measures, established wineries, and cultivated wine grapes in many areas. Furthermore, establishing wineries has stimulated tourism using wine as a resource, indicating that wine is utilized across primary and tertiary industries.

### Studies on impact assessment measures of transport and tourism policies using human traffic big data

Tetsuo SHIMIZU, Yuki OHIRA and NGUYEN Van Truong

Using human traffic big data, the following studies to develop methodologies for evaluating the effects of tourism and transportation policies were conducted: (1) By utilizing bicycle probe data, statistical models in multiple municipalities in Tokyo were investigated in order to understand the factors of road structure and roadside

environment that affect the number of bicycle users on street segments. (2) By leveraging the population statistic data supplemented by mobile phones, a new methodology to estimate the basic units of waste by residents and visitors in the area were investigated. (3) By utilizing population statistic data supplemented by

mobile phones, the temporal variations in population distribution in different areas of the region during the event were identified in a case study to the Nagaoka Fireworks Festival, and a new methodology to understand the impact of a big event on the increase in visitor numbers were proposed.

### Studies toward the development of a system for sustainable tourism destination management in destinations

Tetsuo SHIMIZU, Yuki OHIRA and Keiko HARANO

The following studies for developing a system for sustainable tourism destination management in destinations were conducted: (1) The effectiveness of Social Return on Investment (SROI) by focusing on the southern foot of Mt. Yatsugatake are analyzed in order to develop a methodology

for estimating the economic impact of non-profit activities such as tourism development activities by regional tourism promotion organizations (DMOs) on the local community. (2) The evaluation framework for sustainable tourism destination management based on

indicators and the necessary human resources and organizational structure were examined for its regional implementation. Additionally, a suitable evaluation system for Japan, along with a set of quantitative indicators constituting it and a curriculum for training personnel were proposed.

### Studies on public transport service management in tourist destinations

Tetsuo SHIMIZU and Yuki OHIRA

We conducted the following studies toward implementing better public transport services management in tourist regions: (1) The service forms of demand-responsive buses in the north Kanto region based on statistical analysis were classified and the

regional characteristics that influence them were analyzed. (2) For estimating the economic value of measures to reduce the perceived waiting time for connecting public transport services at tourist destinations, a questionnaire survey in a

virtual tourist destination and bus route network were conducted. Using conjoint analysis, the willingness to pay for facilities and services at transfer bus stops was estimated.

### Research on the Strategic Formation of Event Legacies that Contribute to the Creation of Tourism Areas

Susumu KAWAHARA and Tomoyuki MASHIKO

In order to promote "Regenerative Tourism and Urbanism" which aims to promote various industries, build communities, and solve regional issues through tourism, it is important to work strategically with a public interest objective, aiming for results that are not limited to short-term effects.

This study aims to develop policy, planning, and management theories to strategically create event legacies, which are tangible and intangible assets and positive impacts on cities and

regions in the medium to long term, through the holding of tourism events and tours, which are one of the most common tourism projects undertaken by governments, DMOs, and businesses.

In FY2023, among the European Capital of Culture (ECOC) projects, in which various arts and cultural events are intensively developed in EU-designated cities for one year, we focused on cities that have legacy plans, budgets, and legacy programs and

emphasize bottom-up programs that are considered to lead to community development.

In particular, we studied the 2018 ECOC project in Leeuwarden, the Netherlands, to identify legacy elements that can be generated from large-scale arts and cultural events and the key points of process design, planning, and management from the preparation stage to the host year and subsequent development.



### Experimental study of actions toward the creation and realization of a "landscape picture book," a float vision for the central city area of Hachioji

Susumu KAWAHARA and Norie Hirata

This is a practical study applying the methods of the Float Vision and actions toward its realization proposed by the Sustainable Destination Planning Study Group (research representative: Kawahara) toward the creation of a landscape that enhances the attractiveness of the central city area around Hachioji Station. The planning method called "float vision" does not aim to be positioned in government plans or to be business-oriented at first, but rather to visualize in an easy-to-understand way the image of future space and activities that many people will want to be involved in and invest in. It is also a

method of working through public-private partnerships to take rapid action toward the realization of the plan.

In FY2021, through repeated discussions at both the Landscape Design Conference consisting of experts and citizen workshops, a "landscape picture book" was created and published, which depicts in sketches and simple language the future images of 10 model central city districts. In FY2022-23, the Kawahara Lab. took two actions to realize the sketches. The first is "Asinamidori," which promotes ground planting in public spaces and storefront spaces. The

second is the "Historical Black Wall Canvas," which aims to further enhance the landscape and attract visitors by utilizing the wooden black walls that have been promoted in the Kagai area.

Both of these projects were conducted as social experiments with local citizens and businesses. Based on this experience, we have identified issues for the next year's program, and have created a team and funding structure to continue the project. For more details, please visit the website.

<https://www.comp.tmu.ac.jp/ssm/study/project/floatvision-of-Central-hachioji.html>



Photo: The community team, led by Kawahara Lab, created a landscape presentation named "Black Wooden Wall Canvas," which attracted visitors and raised awareness of the geisha district.

### Research on Accommodation Operator-led Tourism that Give Back and Contribute to the Local Community

Susumu KAWAHARA

In response to the needs of travelers in the age of independent travel and in the wake of the coronavirus pandemic, advanced accommodations businesses rooted in the community are not only revitalizing their own accommodations businesses, but are also investing in local businesses outside their facilities and working with a variety of businesses to create attractions for the entire spa resort and the wider surrounding area. From this situation, we can see the role of accommodations businesses as a

regional infrastructure that supports a "regional business ecosystem that includes tourism. From this perspective, this research explores the ideal accommodation business-led tourism town development. In FY2023, we investigated the efforts of the DMC, which was established through a collaboration of several accommodation operators in Tendo Onsen, and clarified the situation whereby the various resources possessed by inns are utilized to

promote tourism tour projects in cooperation with farmers and others, utilizing idle real estate and striking a balance between business profitability and contribution to the community. Another study examined the possibility of utilizing the embankments and riverbeds within the legal river areas of hot spring resorts across Japan as tourism content, and considered the potential for accommodation businesses to manage and utilize these areas.

### Development of a New Method for Regional Interpretive Exhibition and Education Using a Projector Mapping Model System

Susumu KAWAHARA

In recent years, projector mapping model systems (P+MM), which can project a variety of thematic maps onto models using a projector, have been introduced in museums. The images projected by the P+MM can be freely created on a PC, so it should be possible to use the system in a variety of ways. However, the current state of use in many places is that the projected contents are not updated very often, and the system is only used for one-way explanatory displays.

Therefore, we are collaborating with a manufacturer to develop a P+MM that can be used for real-time writing and projection on the models, and for many people to create and bring in their own content for projection, and we are researching new ways to use the system as an explanatory exhibition tool that

can also be used by private sector guides, and as an educational tool.

In FY2020, we tried a method of projecting and discussing thematic maps created by students in the tourism planning and design exercise of the Tourism Science Department.

In FY2021, students from our department and I created a projection work, "Sake and snacks made with Hachioji ingredients," as exhibition content for the Hachioji Museum, in collaboration with the Hachioji City Hall.

The projection work is characterized by the fact that it uses "food," which people are easily interested in, as an entry point to express the resources and stories that make up Hachioji's Japanese Heritage. We also proposed a workshop method that local

producers could use this exhibition work for their sales promotion.

In FY2022, we interviewed local producers and prepared to release our content in the museum. As a result of the above, this was the first case in Japan where the P+MM system was used in tourism and education. It was also the first case in Japan where general users, not P+MM manufacturers, created content using general-purpose software, installed and displayed it on the system themselves, and made it interactive in terms of drawing and data updates. In addition, we were able to develop a system platform that easily facilitated this process.

<https://www.comp.tmu.ac.jp/ssm/-study/theme/Tourism-Applications-of-Technology.html>



The first Japanese function we developed and the examples of its use in tourism and education that we have implemented were introduced at the Japanese Heritage Festival.

### Ota Creative Town Concept and Practice

Yu Okamura

Ota Ward is a city where world-class technology and manufacturing overlap with a rich and enjoyable lifestyle. In April 2017, the Ota Creative Town Center was established by universities (Tokyo Metropolitan University and Yokohama National University), tourism associations, and local industrialists to realize the

future vision of a "Creative Town" where the community itself continuously fosters value. In FY2023, the center will present a paper at the Architectural Institute of Japan, work on the "Refining Factories Project" to visualize the value and attractiveness of factories in the planning of the "Ota

Open Factory," in which all factories are open to the public for a limited period of time, and develop a new project to promote the use of factories and manufacturing as an educational resource. The company also worked on the "Factrip" project, which utilizes factories and manufacturing as an educational resource.

### The changing structure and planning trends of walking trail projects in suburban areas and the potential for their utilisation in an era of shrinkage

Yu Okamura

This study is based on the hypothesis that "walking trail projects" (i.e., the development and establishment of walking trails and the holding of town walking events) consist of push factors generated by changes in the lifestyles of citizens who take walks, such as health, recreation, and mobility, and pull factors that lead to the formation of the environment expected by the communities that host visitors, such as suburban and recreational area development, conservation and utilization of natural and cultural

resources, and community formation. Based on the hypothesis that walking path projects are composed of push factors such as health, recreation, recreation, mobility, and so on, and pull factors that lead to the formation of the environment expected by the local community that welcomes visitors, such as the development of suburbs and recreational areas, conservation and utilization of natural and cultural resources, and community formation, the research topics include: first, a study of the history of "walking

path projects" (period classification and clarification of characteristics of each period); second, case studies of walking path projects in specific areas; and third, planning, implementation, and evaluation of "lifestyle experience-type walking paths. Thirdly, the research agenda is to propose, implement, and evaluate a plan for a "lifestyle-experience-type walking trail. In FY2023, we organized and published a report on the results of our research to date (<https://tokyo-metro-u.repo.nii.ac.jp/record/s/2000361>). This research was supported by Grant-in-Aid for Scientific Research (C).

### Research on international technology transfer and network formation for sustainable tourism regional planning technology

Yu Okamura

Efforts have been accumulated in various places to create sustainable tourism areas as a whole by building a comprehensive method from the conception of a vision to the creation and provision of tourism contents and resource management. In this study, we call this "planning technology for sustainable tourism area formation," and focus on the international transfer of technology from overseas to Japan, its diffusion and transmission within Japan, and exchange and network formation among the regions concerned. We will examine how

the original model of the transferring country is localized to the specific conditions (policy, planning, environment, resources, industry, etc.) of the destination country, and how the relationships among regions that share this technological knowledge contribute to improving the sustainability of the tourism region in question. Furthermore, based on the above findings, the project will identify the possibility of transferring the "sustainable tourism region formation package" that has developed

independently in Japan, such as tourism community development in hot spring resorts and monozukuri (manufacturing) tourism, to overseas and the key points to be considered when working on such a package. In FY2023, a paper on technology transfer and international exchange regarding walking trail projects was published in the online journal of the Japanese Society of Landscape Architecture. This research was supported by Grant-in-Aid for Scientific Research (B).

### Assessing the actual state of renovation of tourist attractions and examining the feasibility of planned interventions

Yu Okamura, Tomoyuki Mashiko, Susumu Kawahara

This section discusses the planning theory of "tourism area renovation" (gradual improvement of existing tourism areas) with the aim of creating sustainable tourism areas where the fruits of tourism to the area, such as economic benefits, lead to spatial improvements, while ensuring a certain degree of resilience against unforeseen events such as the Corona disaster and war. In other

words, rather than making a large investment in a vacant area, it aims to improve the tourist space through a series of small investments toward a common vision, and examines how planning interventions can be made based on the principles and methods of regional tourism planning that have been studied so far. This research is being conducted as a member of the

Subcommittee on Renovation of Tourist Spaces of the City Planning Committee of the Architectural Institute of Japan. In FY2023, a mini-lecture by a new committee member, student WS in Tomonoura, Fukuyama City, Hiroshima Prefecture, and joint visits to Matsuyama City, Ozu City, Uchiko Town, and other locations in Ehime Prefecture were conducted.

### Analyses of transport and tourism phenomena using location-based big data

Yuki Ohira and Tetsuo Shimizu

We have investigated some traffic and tourism phenomena utilizing big data related to location information, such as population statistics generated from mobile phone networks and probe data collected through route guidance

applications. Specifically, we (1) utilized bicycle probe data to analyze characteristics of spatial structures and the surrounding environment of roads travelled by cyclists and effects of development of bicycle lanes on

accidents, and (2) estimated the waste emission intensity by visitor and examined the relationship between the numbers of tourists and the amount of waste.

### Evaluation of efforts on tourism community development and destination management made by DMOs

Yuki Ohira, Tetsuo Shimizu and Keiko Harano

Various actions performed by DMOs (Destination Management/Marketing Organizations) for the management of tourist destinations include networking among local stakeholders, which is important for medium and long term tourism community development, even

though it does not directly result in short term profits. There remains no established method for quantitative evaluation for such activities and this is one of the reasons why DMO-related policy verification is still insufficient. In this research, a trial evaluation was

conducted to quantify the social impact of a project undertaken in 2021 by an inter-municipal DMO, Yatsugatake Tourism Management, using the social return on investment (SROI) method.

### Studies on local public transport services and facilities in suburban and rural areas

Yuki Ohira and Tetsuo Shimizu

Many municipalities in Japan, mainly in the suburbs and rural areas, have found it difficult to maintain the service level of public transport services such as buses, and have reduced the frequency of bus services or converted to demand responsive transport services. In this

research, (1) a survey was conducted on the demand responsive transport services introduced in the municipalities of Tochigi, Gunma and Ibaraki Prefectures, which are visited by many tourists from the Tokyo metropolitan area. After a clustering

analysis of those services, typical combination patterns of the clusters and regional spatial structures are analysed. (2) Relationships between the facilities at bus stops as access transport mode to tourist attractions and acceptable waiting time are estimated using the SP questionnaire.

### Analysis of the delocalization of bars and changes in customer usage behaviour after a major disaster in Amatrice, Italy

Tomoyuki MASHIKO

The mid-mountain region along the Apennines, which runs the length of the Italian peninsula, has developed as a tourist destination for people living in urban areas and is particularly characterised as a summer resort. On the other hand, the region is also at high risk of earthquakes, with the 2016 earthquake in central Italy causing human and material damage in a large area spanning four regions. In this study, a bar in a settlement facing the old Salaria road in

Amatrice, Lazio, was the object of research, and the actual relocation of the bar and the change in visitor behaviour were analysed. A field survey was conducted in August 2023 to understand the characteristics of bar-use behaviour not only of residents living in the settlement and the surrounding area, but also of bi-regional residents living in urban areas. The bi-regional residents visited the settlement on weekends and

during the holiday season and contributed to the self-governance activities, but as they were unable to move into emergency housing, they constructed a self-build on their property and maintained their previous living behaviour. The need for support for housing and livelihoods, including not only residents but also those who commute to the area, was discussed in the reconstruction of a mountainous area where the population is declining significantly.

### Recovery tourism for regional development and disaster transmission

Tomoyuki MASHIKO

In recent years, various disasters have become more frequent and severe in many parts of the world. In the reconstruction of disaster-affected areas, human and financial resources are invested specifically in rebuilding the homes of disaster victims and revitalising social and economic activities over the medium to long term, while tourism concepts, including disaster lore, are planned after the fact. In addition to traditional methods of disaster

transmission, such as local naming, oral traditions, rituals and biographies, there is also a trend towards institutionalisation, such as the construction of folklore centres and prayer parks since the modern era. This study systematically organises the methods of disaster lore through a review of existing research and a literature survey, and discusses how disaster recovery should be carried out from the perspective of tourism. The

results of this study have identified the following means of conveying disaster lessons: 1) narratives, 2) testimony collections, 3) earthquake remains, 4) stone monuments, 5) folklore facilities, 6) commemorative events, 7) place names, and 8) shrines. In addition, efforts related to disaster lore were positioned as an educational engine, and advanced efforts in disaster recovery in the past were evaluated.

### Development of a local learning program through the use of color to promote the creation of a resident-centered tourism community

Dr.HIRATA

In order to realize the creation of a sustainable tourism region, it is important for local residents to be actively involved in the management of local resources. In order to induce voluntary management by local residents, it is first necessary for them to learn about local resources. The purpose of this study is to develop, practice, and evaluate a program for local residents to make local tourism development a

personal matter by utilizing color. We define "local color palette" as a collection of local colors created by local residents themselves by learning about local resources and assigning the meaning of the resources to the extracted colors. This year, in order to develop a new regional learning program using color as an entry point that can be used beyond generations, gender, and

industries, we planned and managed a workshop to create a regional color palette to change the consciousness of local residents in Onjyuku Town, Isumi County, Chiba Prefecture, where a survey of regional colors was conducted last year. This research was supported by Grant-in-Aid for Scientific Research for Young Scientists.

### Disseminate information on academic findings for the appropriate use of vacant houses

Dr.HIRATA

The Housing and Urban Planning Support Council of the Architectural Institute of Japan (AIJ) has been studying ways to provide the academic knowledge accumulated by the AIJ to the general public and various public organizations in an easy-to-understand manner, and has been providing information through the AIJ website and other means. In order to provide the public with the necessary knowledge on the proper use of vacant houses and how to deal with

dangerous vacant houses such as specified vacant houses, the Information Project Subcommittee has so far collected and organized the available published papers on vacant houses into a chronological map of papers, and collected articles from academic members on the overview of the vacant house system, research, and good examples. We have also collected articles on the overview of the vacant house system, research, and good

examples from the members of the society. By reviewing and editing these articles, we published a website (<http://news-sv.aij.or.jp/shien/s2/akiya/index.html>) titled "Stories of Vacant Houses" in February 2023. In June this year, we held an academic symposium on the use of the website and served as vice-chair and panelist.



### Research on tourism statistics

Nguyen Van Truong

In tourism, accommodation statistics are fundamental data. However, research on improvement of the statistics regarding accuracy and availability for small regions is still limited. This research focuses on minimizing the variance and bias (or accuracy) of the accommodation

statistical estimate in two cases: large and small (prefectural and regional) areas. This study recommends an integration of bootstrap and regression to overcome the challenge. An unbiased linear estimator is used as a benchmark to investigate the

integration method's effectiveness. A case study of Japanese accommodation statistics was adopted to expect the tourism accommodation statistics to be improved.

### Research on overtourism

Nguyen Van Truong

Over-tourism has become a critical issue in many famous tourism areas in the world. This study determines determinants of tourists' satisfaction at a destination based on the difference between the actual experience and the expectation (perception) of tourists

before they travel. Then, policy implications will be formulated to fulfill the tourists' satisfaction and focus on these identified determinants. On the other hand, countermeasures to improve community satisfaction of tourists also proposed relying on the

determinants of local residents' satisfaction of tourists. The study is executed in the context of over-tourism. Biei or Kyoto will be chosen as a case study.

### Research on public transport quality of service

Nguyen Van Truong

Service quality is a determinant of increasing public transport rider satisfaction. However, understanding of service quality and satisfaction relations has been limited. This study seeks an appropriate method to demonstrate the nature of service quality-satisfaction relations. The importance-performance

analysis (IPA) and the three-factor theory, the most widely preferred for public transport service quality prioritization based on the importance of service factors to rider satisfaction, will be utilized. The study takes transit service in Ho Chi Minh City (HCMC), Vietnam, to demonstrate that the

three-factor theory, which has been limitedly utilized despite being more advantageous and robust, is superior to the IPA. It suggests that enhancing passenger information, rider care, and comfort are recommended as the most practical and economical measures in the short run.

## Research on advanced flow grasping methods base on collecting data from reserved spots and its analysis

Kenro Aihara

This research is being promoted with the aim of realizing "microscopic flow grasping" that realizes inflow and outflow to the target area and grasping the flow within the region by aggregating the movements of each individual. The purpose of this study is to propose and realize a methodology for recording, collection, analysis of moving vehicles that recognized by using detectors

installed at multiple points in the city in order to grasp the flow of automobiles. The system consists of a network camera, a processing PC, and network equipment for data transfer, and recognition results on the edge are aggregated in the cloud in real time. In FY2022, with the cooperation of several local municipalities, these prototype systems have been installed

at multiple public locations and trials were conducted. Measurements were carried out in continuous operation for several months, and problems such as operational stability, accuracy, and installation were extracted.

## Research about Risk Sharing Contracts in the Fields of Tourism and Transport

HIHARA Katsuya

Some relationships between entities in different industries, such as the relationship between airports and airlines, have complex and multifaceted structures in which conflicting relationships and cooperative relationships coexist, are very much interesting from the viewpoints such as contract theory and game theory, etc. In Japan, we have some examples in which regional airports share the risk of route revenue fluctuations with airlines. Noto-airport

Load Factor Guarantee Mechanism (LFGM) Contract (2003-present) is one good precedent. The Ministry of Land, Infrastructure, Transport and Tourism (MLIT) is also considering risk-sharing relationship among airport and airline in deciding the allocations of Haneda Airport slots. Also in many of the concession contracts of the airport, demand fluctuation risk sharing of airport and airline is taken into consideration (2012-) in deciding

landing fee.

This study seeks to extend the analysis to a more general context. In fiscal 2021, from the framework of incomplete contract theory, analysis results are obtained about the optimal content of the risk sharing contract that shares the passenger demand fluctuation risk among the concerned parties by a simple linear payment scheme.

## Development of methods about regional tourism statistics of data fusion with enhanced resolutions

HIHARA Katsuya, SHIMIZU Tetsuo (PI)、OGASAWARA Yu, OHIRA Yuki

Regional tourist destinations need to continuously acquire data on tourism phenomena and evaluations, which will lead to appropriate marketing and resource development. For that purpose, It is necessary to propose a methodology for improving tourism statistics and data with enough resolutions that are particularly useful for narrow-area DMO

measures and business planning. In this research, we specialize in total number of overnight stay data, and combine national tourism statistics, private data company stay population distribution data, Wi-Fi-packet sensor data, etc. and develop a method for estimating the total number of overnight guests by attributes in the

tourist area with the spatiotemporal resolution level as fine as possible. In pursuing this, the measures and business needs of DMO will be thoroughly identified, and the index data and estimation method Porto Folio necessary for the evaluation will be presented.

## Research about Factors for the Increase in the Number of Visitors to the Hot Spring Areas

HIHARA Katsuya, OGASAWARA Yu

Hot spring visits are major factor to tourism demand at large. But the number of accommodation users in the hot spring areas has decreased by 13 million since the bubble period. The number of accommodation facilities also decreased significantly. Various studies have been conducted about the factors causing stagnation in hot spring areas and recommendations for revitalization. Most of the researches are, however, qualitative about strategies of each hot

spring area. The quantitative researches, which investigate factors contributing to the growth of customers using open data with the possibility to compare among hot spring areas, are very limited.

This research attempts a new quantitative analysis of the factors leading to the growth of bathers and guests in 85 hot-spring location municipalities nationwide that have not been analyzed sufficiently due to data

constraints, by utilizing originally estimated data. In addition to familiar factors, like access to the areas, such factors as related to the number of foreign tourists to Japan are taken into accounts. By these analyses, effective measures and factors for attracting more hot spring customers at the municipality level are expected to be clarified. Supporting researchers: MEDAI Nagi, OKAMOTO Naoyuki



## Analysis of the Spatio-Temporal Structure Transitions of Accommodation Prices Using Online-Travel-Agent (OTA) Data - Considering the Influence under the COVID-19 Pandemic

HIHARA Katsuya, OGASAWARA Yu, SUZUKI Shouhei (Tokyo University of Technology)

Although online travel agency (OTA) prices are available, they are mainly for individual facilities, and it is difficult to grasp the temporal and spatial structure within a certain region using data for a specific period of time. In this study, we aim to capture the dynamics among regional areas (e.g., CBD, 2nd CBD, East and South in the Tokyo metropolitan area) by acquiring daily-level time series price data on room type listed on-line by Jalan, a representative OTA in Japan.

Specifically, time-series analysis will be conducted to obtain the temporal structure before and after the pandemic for the entire Tokyo metropolitan area. Next, a VAR model has been constructed to estimate the spatio-temporal price structure of the four sub-areas of the Tokyo metropolitan area using the average weekly room prices of the sub-areas. To date, the results suggest the possibility of a structural shift of price with a change

shown by Granger causality after the pandemic. In addition, impulse response analysis has revealed that the impact of a price hike shock in CBD on East and South for non-smoking double rooms during the pandemic is larger than pre-pandemic period. These results are beneficial to practitioners. Cooperating student: NEMOTO Kengo, KIZAKI Masashi

## Study of the Asymmetric Structures of Economic Contributions by Tourism across Regions in Japan

HIHARA Katsuya

In the situation before the Corona pandemic, it is reported that tourism has positive impact on the whole country. However, little is known about the details of the economic effects at the regional level. This research focuses on the asymmetry (differences in produc-

tion, employment, and investment in the region) regarding the economic effects of tourism on the region. In order to assess whether tourism has a role in mitigating the asymmetry, we intend to assess the impact of tourism on macro-economic variables such as production, employment and invest-

ment. Through this study, it is expected that the effect of tourism in terms of the impacts on asymmetric structures in Japan, thus making meaningful implications to the policy or management practices. Cooperating students: Miho Suzuki, Yuki Kano

## Analysis of Impact on Factors to Travel Intentions under Contagious Policies / Technical Change in Tourism Sector

HIHARA Katsuya

We intend to evaluate the impact on travel intention by the COVID-19 pandemic, mainly using samples of residents in Tokyo Metropolitan area. This study is expected to contribute to the evaluation of infection control measures, and also to contribute to the preparation of measures necessary to respond to other pandemics that may

occur in the future. At the same time, we intend to provide useful knowledge to practitioners by quantitatively evaluating the impact of contactless and touchless technologies on the intentions of hotel users. By analyzing social attributes such as age, educational background, gender, etc., it is also expected to obtain detailed

knowledge about the impact of various control measures during the corona pandemic crisis on travel/use intentions for each social stratum. Collaborating researcher: Yuma Takenaka, Dolgion Davaajargal

## Research about private lodging service over platformer transactions (Airbnb and others)

HIHARA Katsuya

This research focuses on private lodging services, such as Airbnb, among sharing economy. The web-based platform economy, such as Airbnb, brought about the revolutionary changes to the world, not just in trip arranging services, but also lodging service, real estate rental business. This research studies about numerous preceding academic literatures of the impact of Airbnb on the

world from various disciplines, from management, economics, sociology, information sciences and combine the study results in Japan. By this study, the impact of Airbnb on tourists, hosts of private lodging service, tourism industries, residents in regions, local communities are extracted and aligned, and comparative studies are executed about the methods of

evaluations. The study shed lights on housing space sharing business, which has been steadily on the rise before the pandemic. With all these studies combined and digested in this single study, it is expected for the new challenges facing such housing space sharing services to be outlined for the future researches. Collaborating researcher: YARA Emie

## A Study of the Satisfaction Transformation of Unintended Miss of Tourism Experiences

Yohei Kurata

We often experience miss of tourism experiences, due to temporary closures, food shortages, weather conditions, and so on. Surprisingly, there are few complaints and tweets from those who miss tourism experiences and sometimes they become even happy because they happened to visit another wonderful place during their vacant schedule. If the tourism provider can avoid the

visitors' complaints of when it was forced to close temporarily, it should be possible to induce them to revisit and to prevent critical word-of-mouth communication. Therefore, we analyzed the travel patterns and satisfaction levels of those who experienced miss of tourism experiences, and found that they were less likely to be dissatisfied when the

purpose of the trip was not tightly limited or when they were not accompanied by a companion. The latter can be explained by the self-actualization of overcoming unintended circumstances on one's own. In the case of temporary closure, we proposed a simple measure leaving a memo which suggests an alternative destination can be a cost-effective way to avoid dissatisfaction.

## Basic research on Shinto Shines becoming Tourism Destinations

Yohei Kurata

We often experience miss of tourism experiences, due to temporary closures, food shortages, weather conditions, and so on. Surprisingly, there are few complaints and tweets from those who miss tourism experiences and sometimes they become even happy because they happened to visit another wonderful place during their vacant schedule. If the tourism provider can avoid the

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## Detection of Local Issues from a huge number of geo-tagged tweets

Yohei Kurata

Based on the hypothesis that "geo-tagged complaining tweet may point out local issues (including tourism ones)" we first built our original complaint tweet detector using machine learning technique (BERT), applied it to a large number of geo-tagged tweets in Hokkaido, and confirmed that some geo-tagged complaining tweets in Hokkaido were surely pointed out local issues, although, their number was small. On the other hand, there were also many geo-tagged complaining tweets that posted daily complaints at home or at work. Therefore, in order to avoid

seeing the daily complaining tweets, we ignored the tweets posted by posters whose geotag positions were stable, and in the next step we targeted geo-tagged complaining tweets in Okinawa, and verified a large number of geo-tagged tweets. In addition, in order to generalize the method and avoid the use of our original dissatisfaction tweet detector, we looked at the relationship between complaining tweets and the results of sentiment analysis, and found that tweets about local issues were often included in those that were negative

judged by sentiment analysis, suggesting that sentiment analysis could be used to efficiently detect tweets pointing out local issues without using the dissatisfaction tweet detector. In the third step we targeted geo-tagged tweets in Aichi Prefecture, by ignoring tweets posted by stable, and making use of sentiment analysis we succeeded in detecting local issues efficiently.

## Evaluation of Tourism Promotion by Youtube Videos

Yohei Kurata

First, we conducted a comparative evaluation of the number of official Youtube channels held by tourism associations. The number of channels increased significantly, indicating the penetration of the video-based tourism promotion. On the other hand, we found some frequently-viewed videos that did not seem to contribute to

tourism promotion at all. accordingly, the risk of using the number of views as an evaluation index for tourism promotion was found. Thus, We focused on the expressions of desire in viewer comments, such as "I want to visit there" and proposed a new tourism promotion evaluation index based on the frequency of desire

comments and the reactions of other viewers to these comments (so-called "likes"). The results showed that videos by so-called "travel Youtubers" were highly effective in promoting tourism, confirming the validity of so-called "influencer marketing" in which Youtubers are invited to produce videos about the region.

## Analysis of tourists' emotional change and its influence on their overall evaluation

Wu Lingling

In this study, we targeted theme parks in Japan, with satisfaction with the tourism experience at the theme parks as the dependent variable. We estimated an ordered probit model with the weighted sum of emotional intensity, emotional intensity at the peak and end of the experience, and individual attributes as explanatory variables, considering the time spent on the tourism experience. We examined the impact of the sum of emotions considering the time spent, as well as the emotions at the peak and end times, on overall evaluation.

The analysis results showed that the weighted sum of emotional intensity, when weighted by time, had a negative impact on overall evaluation due to the negative effect of joyful surprise. However, peak emotions of joy and excitement had a positive impact on overall evaluation, while feeling tired at the peak and disappointed at the end had negative impacts. This suggests that different types of emotions have varying effects on overall evaluation.

From these results, it is suggested that setting points where tourists

strongly recall emotions such as joy and excitement may enhance overall evaluation. Additionally, measures to avoid peak fatigue and end-of-experience disappointment could be means to avoid low overall evaluations.

This study contributes to understanding the relationship between tourist emotions and overall evaluation, and it contributes to the development of tourism management and the tourism sector, including theme parks.

## A study of marketing placebo effect on intangible product

Wu Lingling

The marketing placebo effect refers to the influence of consumers' expectations, formed through experience, on the evaluation of products or services. This marketing placebo effect is used to enhance consumer expectations and increase the effectiveness and value of services. While there have been numerous studies on the marketing placebo effect of tangible goods (studies that show how the effect and evaluation change when consumer expectations are heightened), research on the marketing placebo effect of intangible goods is limited. Furthermore, many of these studies focus on a single factor that enhances expectations (such as price or number of components), with fewer studies combining multiple factors.

Therefore, this paper analyzed the effectiveness of combining factors that

manipulate expectations of intangible goods in the marketing placebo effect. Specifically, online tours were used as the intangible goods, and four factors—price, components, number of reviews, and scarcity—were combined to create two patterns of explanations: one that enhances expectations and one that does not. Eight different explanatory texts were created by combining explanations for each factor. After reading the explanatory text, participants evaluated the online tour based on five criteria: positive emotions towards the online tour, satisfaction with the online tour, tourism loyalty, intention to revisit online, and intention to visit in person.

The study collected 832 valid samples through a web survey conducted by a research firm in early January 2024 and

analyzed the data using an ordinal logistic model.

The results confirmed that scarcity and number of reviews positively influenced all evaluation criteria for online tours: positive emotions towards the online tour, satisfaction with the online tour, tourism loyalty, intention to revisit online, and intention to visit in person. Additionally, price positively influenced satisfaction with the online tour and tourism loyalty, although scarcity and number of reviews had a stronger impact. However, components did not have a positive impact on any of the five evaluation criteria.

From these research findings, it can be suggested that emphasizing the number of reviews, scarcity, and price when branding intangible goods may increase post-use evaluations of the product.

### Shinya Numata

#### Presentation

Riedel, M. J., 沼田真也、田所喬 シネマー議論ワークショップ～気軽に持続可能な生活を実現するために～ 東京 2023年12月

Numata, S. Challenges in nature management in human-dominated ecosystems. Tokyo Metropolitan University-Universiti Malaya Webinar on Sustainability Journey of City Campuses 2023. December 2023.

#### Articles、Books・Reports

Suhaimi, A M, M. J. Kobayashi, A. Satake, C. C. Ng, S. L. Lee, N. Muhammad, S. Numata, T. Otani, T. Kondo, N. Tani, S. H. Yeoh (2023) An ecological transcriptome approach to capture the molecular and physiological mechanisms of mass flowering in *Shorea curtisii*. Peer J 11:e16368 <https://doi.org/10.7717/peerj.16368>

Susanto, D. and S. Numata (2023) Traditional Ecological Knowledge of the Tengger Tribe and its Influencing Factors in Bromo Tengger Semeru National Park. *Jurnal Manajemen Hutan Tropika*. 29: 254-264.

Kobayashi, S., E. Takagi, N. Hassan, M. Hashim, S. Numata. (2024) Impacts of human activity on wild mammal detection rates and diel activity patterns in Endau-Rompin National Park, Malaysia. *Journal of Tropical Forest Science*. 36: 80-90.

### Takaaki NIHEI

#### Articles、Books・Reports

1. Nihei, T., Tabayashi, A., Wahid, U. and Ahmed, Z. 2023. Problems of multivariate analysis in agricultural regionalization: consideration from the case of the Hokuriku region. "Geographical Space" 15(3): 191-208. DOI 10.24586/jags.15.3\_191

2. Kikuchi, T., Suzuki, T., Nihei, T. Sakamoto, Y., Miyamoto, Y. and Kobayashi, T. 2023. Junken-dai-1-han Shizen-to-kyousei-suru-new-town-no-machi-dukuri Minami-oosawa-chiku-no-chousen. (written in Japanese.) "E-journal GEO" 18(2): 357-360. DOI 10.4157/ej-geo.18.357

3. Suzuki, M., Zhu, Y. and Nihei, T. 2023. Strength of online tours from customer satisfaction perspectives: insights from text mining and emotional analysis of reviews (written in Japanese.) "JAFIT International Tourism Review" 30: 67-34. DOI 10.24526/jafit.30.0\_67

4. Kagami, M. et al. 2023. Social studies: geography of junior high school. (written in Japanese.) "Textbook for junior high school approved by the Ministry of Education, Culture, Sports, Science and Technology." ISBN 978-4-8071-6478-3

5. Kagami, M. et al. 2023. General geography for high school students. (written in Japanese.) "Textbook for high school approved by the Ministry of Education, Culture, Sports, Science and Technology." ISBN 978-4-8071-6583-4

6. Teikoku-shoin et al. 2023. "General geography for high school students: instruction material: instruction textbook." (written in Japanese.) Tokyo: Teikoku-shoin. ISBN 978-4-8071-6649-7

7. Suzuki, M. and Nihei, T. 2023. Differences in ratings between online tour descriptions and participant reviews. (presented in Japanese.) "38th Annual Conference of Japan Institute of Tourism Research." Tokyo: Bunkyo University.

8. Laboratorio de geografia. 2023. "Hokkaido atlas and gazetteer 0.31 Figure 1 Hokkaido." Tokyo: Laboratorio de geografia. DOI 10.13140/RG.2.2.36342.16966

### Etsuro Takagi

#### Articles, Books • Reports

論文(査読付き)

Takagi, E. & Yamanaka, S. (2024) Reemergence and sister brood establishment in the bark beetle *Polygraphus proximus* (Coleoptera: Curculionidae: Scolytinae) under laboratory conditions. *Applied Entomology and Zoology* (in press).

Kobayashi, S., Takagi, E., Hassan, N., Hashim, M. & Numata, S. (2024) Impacts of human activity on wild mammal detection rates and diel activity patterns in Endau-Rompin national park, Malaysia. *Journal of Tropical Forest Science*, 36, 80-90.

Takagi, E. (2023) Colonization success of a tree-killing bark beetle: Geographic variation and mismatch with host preference. *Ecology and Evolution*, 13, e10274.

### Yuki Sakamoto

#### Articles, Books • Reports

• Ogura, T., Sakamoto Y. and Ando K., Measurement of microtopographical features using the low-cost mobile laser scanner in Nippara Limestone Cave, eastern Japan, Japan Geoscience Union Meeting 2023, Chiba, May 2023

• Shimpo N., Sakamoto Y., Otsuka K. and Mizuuchi Y., Towards rural forest sustainability: An exploratory study on how forests are managed through the forest rental business, Japan Geoscience Union Meeting 2023, Chiba, May 2023

• Sakamoto, Y. and Yamashita, A., Children's use of water spaces in Mishima City, Shizuoka prefecture, Annual Meeting of the Association of Japanese Geographers, Spring 2024, Tokyo, March 2024

• Mizuuchi, Y., Otsuka, K., Sakamoto, Y. and Shimpo, N., Landscape

preference on the users of forest rental businesses, Annual Meeting of the The Japanese Forest Society, Tokyo, March 2024

### Tetsuo Shimizu

#### Presentation

Nurzafrah, D., Shimizu, T. and Nur Shuhadah, M.: Charting New Horizons in Family Tourism Entrepreneurship and Sustainability: Women in Business Succession, 2nd Gulf University International Conference in Accounting and Finance, Online, December 2023. Three more research presentations were delivered by Japanese in some academic conferences.

#### Articles, Books • Reports

Two non-refered papers in an academic proceedings, one text book and two essays in commercial journals written in Japanese were published (please refer to the Japanese version Annual Report).

### Susumu KAWAHARA

#### Presentation

Formulation of a "landscape picture book," a vision for the future that prioritizes expressions that attract people, and a trial for its realization. — Greening and landscape experiment for the realization of the future vision of the central city area of Hachioji City, which is not included in the administrative plan. -, CHIBA Yumiko, WADA Hiromasa, KAWAHARA Susumu, AKABANE Yuya, Practical Research into the Use of the Projector Mapping Model System in the Fields of Tourism and Education -A Case Study of the Practical Seminar of University and the Production of Exhibition Contents at the Japanese Heritage Centre-, NAKAMOTO Natsuki, KAWAHARA Susumu, UCHIYA Tomoki, OGAWA Fumiya, OHTANI Asuka\*, SUGAWARA Madoka\*

#### Book

Norie Hirata and Susumu Kawahara, "The status of Blue Flag in Japan: Can Blue Flag be used for beach community development as a sustainable tourist destination?", Blue Flag Beaches -Economic Growth, Tourism and Sustainable Management-, Routledge, 16 August 2023, Routledge, DOI <https://doi.org/10.4324/9781003323570> ISBN 978-1003323570

#### Work

Integrated development of Mt Takao Foothill Park and the ANNAL River Water-Friendly Revetment. The revetment was completed in 2023.06, the park in 2024.03, Hachioji City, Tokyo (Kawahara participated as overall director and design supervisor)

#### Yu OKAMURA

##### Presentation

Yu Okamura and Junya Sugai (2023): Tourism Policy Fields in Municipal Urban Master Plans, Annual Conference of the Architectural Institute of Japan, Kyoto University, September 2023

Junya Sugai and Yu Okamura (2023): A Study on Urban Renewal Methods in Wholesale Districts Utilizing Spatial and Industrial Characteristics, Annual Conference of the Architectural Institute of Japan, Kyoto University, September 2023

Keisuke Kamiya, Yu Okamura, et al. (2023): Research on administrative programs in "Open Factory" sites, Annual Conference of the Architectural Institute of Japan, Kyoto University, September 2023

Yuma Koizumi, Yu Okamura, et al. (2023): Analysis of characteristics possessed by town factories in the Shimomaruko area as seen from the characteristics of their appearance, Annual Conference of the Architectural Institute of Japan, Kyoto University, September 2023

Kazuya Yamazaki and Yu Okamura (2023): Site Characteristic and Scenic View of Bay Area of Olympics Competition Venue by TV Cameras Projecting Urban Landscapes, Annual Conference of the Architectural Institute of Japan, Kyoto University, September 2023

Anna Watanabe and Yu Okamura (2023): Tourism Initiatives Utilizing the Oshi Culture in Togakushi, Nagano Prefecture and Its Impact on Cultural Inheritance, Annual Conference of the Architectural Institute of Japan, Kyoto University, September 2023

Mutsumi Hayashi and Yu Okamura (2023): A Study on the Methods of Disseminating the Attractiveness of Modernist Architecture through Architectural Open House Programs - Focusing on the Open House Type and the Networked Type, Annual Conference of the Architectural Institute of Japan, Kyoto University, September 2023

##### Articles, Books • Reports

Yu OKAMURA and Yukiko KATAGIRI(2023): Characteristics of Technology Transfer in Walking Trail Projects Based on the Relationship between Overseas Normative Cases and Domestic Deployment Organizations, Landscape Research Japan Online, Volume 16, pp.133-140

Yu OKAMURA and Yukiko KATAGIRI(2024):The changing structure and planning trends of walking trail projects in suburban areas and the potential for their utilisation in an era of shrinkage, Report on Grants-in-Aid for Scientific Research

#### Yuki Ohira

##### Articles, Books • Reports

Ohira, Y., How are official statistics and big data changing tourists behavior analyses?, JSCE Magazine, Vol.109, No.2, pp.16-17, 2024.

### Tomoyuki MASHIKO

#### Presentation

• Abe, T., Okada, J., Mashiko, T., Yamashita, H.. Development of a consultative method for disaster prevention town planning in historical port towns, 17th Symposium on Disaster Prevention in Historical Cities, B2.Flood and Landslide Disasters (2), Ritsumeikan University, 2023.7.

• Mashiko, T., Development of provisional settlements and their conversion in inclusive recovery process: Diverse emergency architectures in town impacted by the 2012 Emilia-Romagna Earthquake, XXV Conferenza Nazionale SIU, Session 11 Progetto territoriale nelle aree fragili, Cagliari, 2023.6

• Kensuke Otsuyama, Tomoyuki Mashiko, Haruka Tsukuda. Exploratory Comparative Study on Land Acquisition for Recovery in Italy, the United States, and Japan, i-Rec Conference 2023: Tensions Between Tradition and Innovation in Disaster Risk Reduction, Climate Action, and Reconstruction, Sendai, 2023.6

• Mashiko, T. and Satoh, S. The Temporal Relocation of Bars and Changes in Customers' Usage Behaviour in Amatrice, Lazio, Japan, Architectural Institute of Japan, 7463, Kyoto University, 2023.9

• Mashiko, T., Masumura, A.. Characteristics and potential utilization of individual records of survey on damaged buildings in the affected area of the 1976 Friuli earthquake in Italy, 43rd Conference on the History of Civil Engineering, 100th Anniversary of the Great Kanto Earthquake and Civil Engineering in Wartime, Hokkaido University, 2023.6

#### Articles, Books • Reports

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# 04 Awards, etc



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name	title
Susumu KAWAHARA	<p>2023 Ministry of Land, Infrastructure, and Transport Urban Landscape Award, Excellence Prize, in the category of Landscape and Town Development Activities and Education.</p> <p>For the work on the Landscape Picture Book "Future Story through Landscape Expression in Central Hachioji - Float Vision and Action Methods for Realization." Announced: June 2023.</p> <p>Awarding organization: Hachioji City, Workshop Group on the Future Landscape of the Hachioji Station Area, Hachioji Landscape Design Conference. (Prof. Kawahara participated as director. Kawahara Lab participated as the core entity of the action).</p>
Yu OKAMURA	<p>Awarded to supervised students</p> <p>FY2023 Young Scientist Presentation Award of Architectural Institute of Japan</p> <p>Junya Sugai: Research on urban renewal methods for wholesale districts that utilise spatial and industrial characteristics - Focusing on initiatives centred on trade associations in the Yokoyama-cho and Bakuro-cho wholesale districts.</p> <p>Anna Watanabe: Initiatives for tourism that utilize the Oshi culture and their impact on cultural inheritance in Togakushi, Nagano</p>





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令和5年度（2023年度）東京都立大学 都市環境学部 観光科学科、都市環境科学研究科 観光科学域 学位記授与式 2024/03/21



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観光を科学する  
TOURISM SCIENCE

Department of Tourism Science,  
Faculty of Urban Environmental Sciences,  
Tokyo Metropolitan University

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