

ANNUAL REPORT

FY 2018

Department of Tourism Science Tokyo Metropolitan University



TOKYO METROPOLITAN
UNIVERSITY



TOURISM SCIENCE



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1. Research Staff

1.1 Environmental Management Unit

Toshio KIKUCHI

Professor/ D. Sc. (Geography) (The University of Tsukuba)
Agricultural and Rural Geography, Rural Tourism and Rurality-based Tourism, Sustainable Rural System, Food System and Food Tourism, Resource Management

Shinya NUMATA

Associate Professor/ Ph.D. (Tokyo Metropolitan University)
Tropical Biology, Urban Ecology, Protected Area and Tourism

Takeshi OSAWA

Associate Professor/ Ph.D. (Kobe university)
Biodiversity Informatics, Conservation Science, Ecosystem management

Koun SUGIMOTO

Assistant Professor/ Ph.D (Tourism Science) (Tokyo Metropolitan University)
Tourism Geography, Applied Geography, Geographic Information System

Etsuro TAKAGI

Assistant Professor/ Ph.D (Agriculture) (The University of Tokyo)
Forest Entomology, Population Ecology, Natural History

Ranaweerage ERANGA

Research Assistant Professor/ Ph.D. (Tourism Science) (Tokyo Metropolitan University)
Wildlife Tourism, Human Dimensions of Wildlife

Kei OTA

Research Assistant Professor/ Ph.D. (Tourism Science) (Tokyo Metropolitan University)
Tourism Geography, Land Use Change, Coastal Area, GIS

1.2 Regional Planning and Management Unit

Tetsuro SHIMIZU

Professor/ Dr. of Engineering (Tokyo Institute of Technology)
Transport Studies, Tourism Planning, Tourism Policy Study, Infrastructure Planning

Susumu KAWAHARA

Associate Professor/ Ph.D. (Waseda University)
Urban planning & design, Destination Planning & Management, community-based development and tourism

Yu OKAMURA

Assistant Professor/ Ph.D. (The University of Tokyo)
Urban Design, Conservation Planning, Community-Based Tourism and Town Planning

Yukiko KATAGIRI

Assistant Professor/ Ph.D. (Keio University)
Landscape Planning, Tourism Planning

Mitsuru NODA

Assistant Professor/ Ph.D. (WASEDA University)
Rural Planning, Urban & Regional Design, Community-based Tourism Development

Naoaki FURUKAWA

Research Assistant Professor/ MArch. (Waseda University)
Urban Planning, Dwelling Environment Improvement, Historical Environment Conservation

Norie HIRATA

Research Assistant Professor/ Ph.D. (Tourism Science) (Tokyo Metropolitan University)
Community-Based Tourism Planning, Place Branding, Space Design

1.3 Behavior and Management Science Unit

Yohei KURATA

Associate Professor/ Ph.D. (Spatial Information Science) (University of Maine, USA)
Tourism Informatics, Spatial Information Science

Taketo NAOI

Associate Professor/ Ph.D. (The University of Surrey)
Tourism, Tourism Psychology

Katsuya HIRAHARA

Associate Professor/ Ph.D. (University of Tsukuba)
Micro-economics, Management, Tourism/Transport Policy

Yu OGASAWARA

Associate Professor/ Ph.D. (Hiroshima University)
Social systems engineering

Hajime TOZAKI

Research Professor/ Ph.D. (Kyoto University)
Transport Policy, Tourism Policy

Makiko ASO

Research Assistant Professor/ MA in Tourism (University of the Ryukyus, Japan) , MBA (Graduate School of Management, Kyoto University, Japan)
Learning from Experience of Business in Tourism

Shohei Suzuki

Research Assistant Professor
Ph.D (Tourism Science), Tokyo Metropolitan University
Tourism informatics

2. Research Summaries

2.1 Environmental Management Unit

Commodification of Rural Spaces with the Development of Urban Farming in the Vancouver Metropolitan Area, British Columbia, Canada (Toshio Kikuchi)

This study aimed to clarify the commodification of rural spaces in relation to the development of urban farming, focusing on the concept of community gardens in the Vancouver metropolitan area in the district of British Columbia in Canada. Urban agriculture in the Vancouver metropolitan area differed from suburban agriculture, as the emphasis was placed on maintaining green spaces and leisure spaces as community gardens rather than as spaces to produce agricultural products for food supply. Consequently, the existence of community gardens has become a node that connects urbanity (urban likeness) and rurality (rural distinctiveness) in the suburbs of the metropolitan area, particularly the community gardens of Richmond.



Landscape of rural gentrification in Leicester suburbs, England

Progress and impact of rural gentrification in remote commuter villages (Toshio Kikuchi, Koun Sugimoto)

This study discusses and explores the nature of local community changes caused by the progress of rural gentrification by focusing on the conflicts and harmonies between the incomers and native residents of the Leicestershire villages, an area which is becoming known as the remote commuter belt of the London Metropolitan Area. This study employs a quantitative approach based on an analysis of statistical data, such as the UK Census, to ascertain the process of gentrification in the area. In addition, records of the community council proceedings as well as literature about the area are reviewed. Survey interviews of residents were conducted to qualitatively capture their perceptions of the changes within their communities. In the case of the Leicestershire villages, the concept of traditional rurality struggles with that of new rurality under the progress of gentrification. On the other hand, gentrifiers seem to be attached to their local communities, and they are important actors in the management thereof. As a result,

we conclude that the aforementioned coexistence of conflicts and harmonies should be regarded as a phenomenon which indicates that these villages are becoming cosmopolitanised.

Characteristics of the Commodification of Rural Spaces in British Columbia, Canada (Toshio Kikuchi)

The commodification of rural spaces, in other words, utilizes the regional resources found in rural spaces. These resources are familiar to regional residents, and involve local landscapes, natural environments, industries, products, lifestyles, annual events, culture and histories. The diversified commodification of rural spaces can be observed in British Columbia. There are regional differences in types of commodification, as defined by physical conditions, accessibility to metropolitan centres, and local agricultural activities. In short, the commodification of rural spaces in British Columbia, which is much more advanced and diversified than that of Japan, plays an important role in sustaining the rural economy and society. The various phenomena occurring in rural areas of developed countries, including Japan and Canada, can be understood to a substantial degree, using the concept of the commodification of rural spaces. One effective measure to develop regional economies is to commodify rural spaces. Furthermore, promoting the commodification of rural spaces could possibly lead to the development of healthy societies. Therefore, generalizations and concepts must be continually developed, and more empirical research is needed in the future.



The PYO strawberry farm in Vancouver, Canada

Strategies for Sustaining and Developing Agriculture and Regional Conditions in Japan (Toshio Kikuchi)

The main elements of strategies for sustainable farm management are (1) ensuring capable farm operators, their successors, and farm laborers, (2) building up rational farm management by promoting large-scale or intensified farm operation with advanced technology, machines, and facilities, (3) keeping stable income sources including those both from farm products and non-farm jobs, (4) establishing multiple

channels for shipping farm products, and (5) forming networks between producers and consumers. Our case studies suggest that locational, physical, economic, social, cultural, and political conditions play an important role in the sustainable development of agriculture and rural regions. Among these, accessibility to large cities, which are the main markets for farm products, favorable physical conditions for farm production, and suitable political conditions are important. Capable and good farm operators establishing efficient farm management and leading rural communities are especially needed to maintain and develop agriculture utilizing their locational and physical conditions. We need to respond to regional differences in order to identify sustainable and viable types of agriculture in Japan.



Urban farming and farm products stand in Kodaira city, Tokyo suburbs

Biodiversity conservation in urban ecosystems: people's nature experience and attitude to ecosystem disservices (Shinya Numata, Etsuro Takagi, Koun Sugimoto)

In order to understand effects of ecosystem disservice on urban society, studies on urban dwellers' nature experiences, preference to plants and animals, and tolerance to dis-like animals have been conducted. A study suggests that increasing people's direct experience with nature is important to raise public tolerance. Another study showed that people liked smaller birds and mammals, and some insects, but were only willing to have birds and insects near their homes. An international comparative study on wildlife value orientation has been conducted, and a paper was presented at an international conference held in Germany in September 2018.

Tree reproductive phenology of dipterocarp rainforests in Southeast Asia (Shinya Numata)

General flowering (GF) is supra-annual community-level synchronization of reproduction of many plant taxa in Southeast Asian rainforests. In this region, diverse tree species including dipterocarp species represent reproductive synchronization with 5-7 months at irregular intervals of 1-10 years. GF results in a

massive number of fruits in the forests, and therefore GF plays a central role in the successful regeneration of dipterocarp forests in Southeast Asia. Data analyses on long-term phenological and meteorological data have been conducted. A long-term meteorological analysis suggested that temperature is spatially highly correlated at regional scale, but spatial variation in rainfall was too high for spatial synchronization of GF at regional scale.

Resource management of Manila clam in a clamming area in terms of harvest and satisfaction of clamming participants (Shinya Numata)

Clamming is a type of nature-based leisure activities involving harvesting clams from tidal flats. Recently, however, not a few clamming areas have been closed temporarily because of decline in the population of main harvest. To address the key challenge, clams are artificially spread in several clamming areas to supply a demand for participants. We aim to evaluate validity of current clam resource management (mainly spreading clams) from two perspectives: accepting harvest pressure and sustaining satisfaction level of clamming participants. The total amount of harvest in one clamming season in 2016 - 2018 were estimated to be 56 - 73 individuals m⁻², that are higher than native clam population density in this study. This result indicates that native clam population is not capable of accepting harvesting pressure in the clamming area. Second, to examine the relationship between harvest and satisfaction and loyalty of clamming participants, we conducted questionnaire survey to evaluate the amount of their harvest and quality of the clamming experience including three types of partial satisfaction and two types of loyalty to the area. The amount of harvest positively influenced satisfaction toward harvest significantly, and the satisfaction positively influenced two types of loyalty significantly. However, the satisfaction toward enjoying the activity influenced loyalty stronger than the satisfaction toward harvest (A Yamamoto, master thesis).

Development of wildlife tourism attraction in Asian tropical rainforests (Shinya Numata, Etsuro 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 ENRP. 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. Tourist guide and education materials are developed to enhance educational effect of VH. The wildlife data obtained by tourists and park managers will be archived, analyzed and utilized for ecologically sustainable park management. In FY2018, a trial of promotional tourism was conducted to evaluate performance of VH package, to evaluate

visitors' satisfaction for pricing VH package, and to evaluate performance of park guides on VH operation. Our survey results suggest rich mammalian fauna, including threatened and rare species in the tropical rainforests of ERNP. However, there were several problems on the operation of VH because of lack of preparation and human resources in the field.

Management of alien invasive species (Takeshi Osawa)

There are too many invasive species in Japan and some of these could become alien invasive species which severely affects for regional biodiversity, human health and agricultural products. Management of alien invasive species is important topic for biodiversity conservation and sustainable use of ecosystem services. Ogasawara (bonin) islands which is one of world natural heritage site have severe problems by alien invasive species. The main aim of this theme is evaluating the influences by alien invasive species and propose the effective management idea/plan to reduce the damages. In this year I and colleagues evaluate the negative spillover effects by eradication of alien invasive species in one of island in Ogasawara (Hata et al. 2019).



The negative spillover effects by eradication of alien invasive species in one of island in Ogasawara

Biodiversity Informatics based on Natural history collection (Takeshi Osawa)

Natural history collection such as specimen, observation records and data from citizens are one of important resources for several research themes. To use these resources I often use virtual ecology approach which simulates species dynamics using theoretical models along with "virtual observation" of those species dynamics. In this year I and colleagues applied this approach for pest insect *Stenotus rubrovittatus* to explain their expansion process and future range. The data resources were collected from monitoring records collected by local governmental employee. Results suggested that recent range expansion of this species was likely to cause by climate change factors (Osawa et al. 2018). Thus, climate change could influence for the pest damage through the range expansion of

pest species.

Discovery and evaluation of Ecosystem services (Takeshi Osawa)

Ecosystem services are defined as several benefits that humans gain from the ecosystems. Some of ecosystem services were already provide several benefits for human. However, there might be much more ecosystem services which has insufficient recognition by human society. To grasp and quantitative evaluation is important for the conservation and sustainable use of ecosystem. In this year we tried to take quantitative evaluation on "cultural ecosystem service" which defined non-material benefits from ecosystem including aesthetic inspiration, cultural identity, sense of home, and spiritual experiences.

Spatiotemporal analysis and visualization of tourism dynamics using GIS-based techniques (Koun Sugimoto)

Using spatiotemporal analysis, a series of studies on tourism dynamics was conducted to elucidate the phenomenon of tourism and elicit acquired knowledge that could be applied to tourism marketing and impact evaluation. In FY 2018, the spatio-temporal structure of daytrip activity and the spatial choice in night time of daytrip tourists who are living in the Tokyo Metropolitan area were analyzed using a large people flow dataset derived from "person trip data." In addition, visitor surveys combining the output from GPS loggers and questionnaires were conducted in cooperation with the local government in Taito city. Based on this survey, I examined how the space consumption and mobility of visitors differed depending on the location of the starting point in the destination.

Comprehensive study on regional and tourism dynamics to facilitate problem solving and the reconstruction of urban tourism destinations (focusing on the Ueno District in Tokyo) (Koun Sugimoto, Kei Ota, Toshio Kikuchi)

The number of urban tourism destinations in the Tokyo metropolis has been growing, and stable foundations for management have been established in response to the huge market demand, including among city residents. However, various issues related to regional and tourism management have emerged because of changes in the city's structure resulting from urban development, population changes, globalization, and the growth of competitive regions, among others. To provide a methodology for solving these issues and facilitating the reconstruction of urban tourist destinations, a comprehensive research project on regional and tourism dynamics was conducted in the Ueno District, Tokyo. In FY 2018, we started to write a book about the history of the Ueno district to be published for the general public. In addition, we promoted projects for the evaluation of tourist events.

MICE strategy and urban infrastructure improvement in international cities (Koun Sugimoto, Toshio Kikuchi)

With the intensification of global inter-city competition, attracting MICE is considered one of the most important measures for strengthening a city's international competitiveness. To facilitate the growth of the MICE industry in Tokyo, it is crucial that measures to develop organizations and personnel be implemented alongside measures related to aspects of implementation, such as those for facilitating regional cooperation for sightseeing tours after sales conventions and those for constructing the city's infrastructure so that it is suitable for MICE. In FY 2018, we focused on the Tokyo research case and made preparations for the submission of our work as a research paper. Moreover, we delivered lectures about MICE to the general public.

Youth tourism and its accepters(Koun Sugimoto, Kei Ota)

A group consisting of nine young researchers specializing in geography and tourism continued a project focused on youth tourism and leisure in large cities. The purpose of this project included the following: 1) to organize tourism and leisure, which young people can experience at each stage of their lives; 2) to understand spatial behavior, spatial recognition, and activities of youth tourism and leisure; and 3) to understand regional accepters of tourism and leisure for young people. In FY 2018, we focused primarily on the following three activities to disseminate our research: First, we compiled some of the original study results into six articles and submitted them for publication in a commercial journal. Second, we delivered a total of ten lectures for the general public at Open University in Tokyo Metropolitan University. Third, we participated in a meeting to exchange opinions with the department of youth research at a prestigious advertising company. Regarding the research activity itself, we conducted a web-based questionnaire survey to clarify the decision-making processes that fostered youth migration to Tokyo.

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 engineer 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 is available. Thus, I am focusing on the ecological and economical effects of insects which are ecosystem engineers on ecosystems. I conducted field surveys, experiments

and laboratory works, and revealed new knowledge on a bark beetle, which causes mass mortality in East Eurasia.

Recent trends in night cruises and the restructuring of the Tokyo waterfront (Kei Ota)

In recent years, the demand for cruises in Japan has increased. Night cruises in cities have also become important tourist attractions that enhance nightlife in urban tourism. In this research, I will address night cruises in Tokyo through the organization of their history and current trends, and clarification of usage characteristics and changes to attraction strategies. In this study, the example of historic night cruises beginning in 1950 is given, three contexts of passenger attraction strategies for night cruises are investigated, passenger tendencies are addressed, and the relationship between the redevelopment of night cruises and the waterfront is explored.

At the same time, I will examine night cruises in Tokyo with reference to the outlook of the Tokyo waterfront, where redevelopment is currently progressing in anticipation of the Tokyo Olympic and Paralympic Games in 2020.

Travel motivations of foreign exchange students in Japanese Universities (Ranaweera Eranga)

This study focuses on travel motivations of foreign exchange students in Japanese universities based on a case study of ASEAN International Mobility for Students (AIMS) program between Malaysian universities and Tokyo Metropolitan University. The concept of Push and Pull factors is used to analyze the travel motivations of students. Four push factors and five pull factors could be identified as the key influential factors in making travel decisions. The results help to understand the needs of Malaysian student travel market in Japan.

2.2 Regional Planning and Management Unit

Studies Relating to National and Regional Tourism Promotion Policies (Tetsuo Shimizu, Yukiko Katagiri)

Several fundamental studies whose purposes are to propose policies for national and regional tourism promotion were conducted. First, potential of national health tourism industry in Nepal was investigated by analyzing the gap between traveler needs and service provision strategies through questionnaire and interview surveys. Second, management strategy of visit and revisit intention under political crisis situation in Thailand was investigated using data on psychological responses and willingness to behave through questionnaire survey. Third, some policy implications for inbound tourism promotion in rural area of Japan were provided by analyzing factors on number of overnight stays in rural area of Japan statistically. Fourth,



Interview for a stakeholder of Nepali health tourism industry

measures for maintaining visitor satisfaction in congested tourist destination, a case of Mt. Takao were proposed by analyzing effect of congestion level on satisfaction at the site.

Studies Relating to Transport Policies and Measures for Regional Tourism Promotion (Tetsuo Shimizu, Yukiko Katagiri)

Several fundamental studies whose purposes are to propose policies for secondary transport service provision in rural areas. First, policies on bike sharing service deployment in the comprehensive Austin's urban transport development strategy were suggested based on the analysis of group use characteristics using big data. Second, strategic importance of self-drive tourism in Bali Island was examined, and factors of conflict between foreign self-drive tourists and local residents were extracted through psychological analysis. Third, a method to estimate willingness-to-pay to secondary transport services for specific tour activities was proposed using questionnaire data in the southern part of Niigata prefecture. Fourth, changes of level of service of local public transport services by the opening of the Shinkansen line were analyzed both physically and psychologically in the Joetsu area of Niigata prefecture.



Dock-type share bike system in Austin, Texas, US

A Study on Recurrent Education Programs for Tourism Destination and Industry Management (Tetsuo Shimizu, Norie Hirata, Taketo Naoi)

The objective of the study is to develop systematic recurrent education programs. First, recurrent education programs for tourism destination and industry management in several countries including Japan were reviewed through literature and interview surveys. Second, problems of the current programs were extracted through evaluation data by students and the program coordinator obtained in several programs. Finally, systems of recurrent education program for tourism destination and industry managers based on job type were proposed, and standard curriculums of each program were also proposed.



Interview for researches in the Universita Ca Foscari Venezia on tourism education program

A Study on Future Japanese Tourism Statistics System (Tetsuo Shimizu)

Direction of improvement on Japanese tourism statistics was proposed to make them more usable for decision making and policy evaluation by local destination management organizations (DMOs). First, intensive surveys on utilization of national tourism statistics by local DMOs revealed that data management level of local DMOs has been at low level. Second, accuracy of the Accommodation Survey was analyzed in the case number of overnight stays is estimated by municipality of tourism zone which is smaller than prefecture. Third, substitutability of mobile big data for the Accommodation Survey was investigated. Finally, strategy of improvement on the Accommodation Survey was proposed.

A study on systematization of planning techniques for sustainable destination (Susumu Kawahara, Yu Okamura)

We worked on a planning theory that integrate both tangible (e.g., preservation and improvement of urban space and environment) and intangible plans (e.g., plans for tourism programs and contents creation.) to develop more sophisticated

sustainable destination, especially due to the recent targets of tourism planning in Japan are biased towards intangible programs.

Our detail methods are

- to learn and reflect sightseeing behaviors and tourism resources in geographical / spatial environment
- to develop environmental improvement, utilize the private sites and the public sites together
- to realize a vision based on social experiments
- to support all the method above by organizational design, process design, and monitoring

This year, as one of the key points to complete finalize these methods, we focused on certification system to secure the quality and environment of tourist destination and strategic communication in various media for tourists and residents, employees in tourist destination. We extracted key points based on several case studies. (Please refer to the following research Summaries for details.)

2018
24th, Sept.(Mon)
14:00-18:00

地域観光プランニング 公開研究会
Symposium on Tourist Destination Planning in the Niseko Area

ニセコ地域のサマーシーズン活性化を考える
-How Niseko can be revitalized in the summer season?-

会場：ニセコグラン・ヒラフ マウンテンセンター
Grand HIRAFU Mountain Center

開催趣旨 / Introduction

日本建築学会 地域観光プランニング小委員会（主催：岡村祐）では、公共性や公益性、地域視点を重視してきた都市計画やまちづくり分野の計画技術や進め方と事業性や観光客視点を重視してきた観光事業を融合した新しい観光のプランニングとマネジメントのあり方を検討してきました。この度、ニセコ地域にて「地域観光プランニングカレッジ」と称するワークショップを開催し、学生と共にサマーシーズンの活性化について考えました。学生提案を踏まえ、住民の暮れとニセコのサマーシーズン活性化について考える公開研究会を開催します。どうぞご参加ください。

A group of researchers in the field of tourist destination planning from the Architectural Institute of Japan(AI) has been studying an integrated planning methodology of physical environment and tourism development. From the 21st to 25th of September, the group will hold a workshop called "Tourist destination planning college" in Niseko under the theme of "How Niseko can be revitalized in the summer season?". On September 24th, we will also host a symposium as follows. Please feel free to come and discuss.

プログラム / Program

14:00-	開会 / Opening Remarks
14:05-15:45	学生提案の発表 / Three Presentations by the student participants
15:45-16:00	休憩 / Coffee Break
16:00-18:00	公開研究会「ニセコ地域のサマーシーズン活性化を考える」討論 / Discussion on Tourist Destination Planning in the Niseko Area

登壇者（予定）：須知安町長、須知安町観光課、エリアマネジメント組織、宇根経典君

18:00 閉会 / Closing Remarks

会場 / Place

ニセコグラン・ヒラフ マウンテンセンター
Grand HIRAFU Mountain Center

Symposium on tourist destination planning in Niseko Area (2018/9/14)

Development of educational program to train sustainable destination planners (Susumu Kawahara, Yu Okamura)

We organized the "Planning College for Sustainable Destination" from July to September. College students throughout Japan can learn the methodology of planning and implementing sustainable destination. The second year program of this college was opened in Niseko, sky resort area in Hokkaido prefecture, where influenced by foreign capital hotels and condominiums and many foreign visitors. 13 researchers and practitioners, 12 students, and approximately 25 local residents and business professionals participated in the program consists of an online survey seminar and training camp workshop:

- Drawing a "preliminary future vision" that presented the aerial image and activity image that attract various stakeholders' participation.
- Implementing "Human Resource-oriented Planning Approach" to brainstorm for team building, business proposals, and making full use of the characteristics of the local talent through discussions with many key people in the region.
- Proposing a "social experiment event" for learning and confirming the business needs for realizing a temporary future vision.

Formulation of landscape guidelines to support tourism development (Susumu Kawahara)

This project aims to realize the "Nagato Yumoto Onsen Tourism Planning Plan" formulated by Nagato City in August 2016, in collaboration with private business operators, regional and administrative agencies. As one of the efforts, we developed an advanced "Nagato Yumoto Onsen Landscape Guidelines" that is strongly aware of the revitalization of tourist areas.

The features are as follows.

To induce the active utilization of public spaces such as rivers and road spaces, and the private space along the road.

- To make visualization of the future image through collaboration with social experimental events to quickly create where there is not yet a good quality landscape.
- To foster those who will be responsible for future landscape formation throughout the introduction of workshops jointly with local designers and constructors.
- To link with formation of model case combined with vacant house survey and renovation proposal to owner
- To induce active formation of nighttime landscape
- To show the idea of improvement of hospitality expression and directing

An action research study on an area management methods to regenerate "Satoyama" areas and to support community development at the time of large-scale residential housing development (Susumu Kawahara)

This project is an action research to promote the conservation and utilization of regional resources by using an area management method. Our laboratory has participated in "Area Management Association Minamiyama (AMAM)" which aim to regenerate "Satoyama", community-based forest, as a mitigation and to develop a sense of community in large-scale housing development in Inagi City, Tokyo. AMAM is composed of various stakeholders such as a land owner, a developer, an urban planner, a NPO worker who manages forest and vegetable fields, a designer, a community café owner, a musician and a professor. In 2014-2015 our laboratory organized a series of design workshops and events with other AMAM members to build a club house that later became the base of our area management activities, and to establish an area management organization to help start-up of activities. In fiscal 2016, seven projects conducted by AMAM members are started. The construction of the club house have opened at the April in 2017. Our laboratory led the activity archiving project to record and disseminate the history of activities on various media, with the aim of communicating the significance and activities of area management to people in the town for 10 years. In 2017-2018 our laboratory organized a series of workshops to encourage new residents to understand and participate in AMAM.

Vision creation for the Ota Creative Town and its practices (Yu Okamura, Susumu Kawahara)

Recently in Japan, the urban environment in industrial cities has been changing due to changes in the industrial, economical, and social structure. Ota Ward in Tokyo Metropolis has small industrial districts, some of which are mixed-use areas and factories still possess sophisticated skill-sets, their working environment is inadequate as it is surrounded by too many residential dwellings. In addition, it is too difficult to pass technical knowledge onto succeeding generations. In this research, we focus on a comprehensive and active planning method, specifically, on how to integrate manufacturing, community development, and city promotion so as to solve this kind of problem in mixed residential-industrial cities.



Booth Introducing Ota Open Factory in Tokyo Monorail Festival

In 2018 we conducted multiple projects such as organizing Ota Open Factory and managing the Creative Town Labo Tamagawa, which is a base for local activities as a member of "Ota Creative Town Center", which has played a role as a platform attracting a variety of stakeholders.

Establishment of Walking Trail Projects in a Suburban Area and its Planning Theory (Yu Okamura, Yukiko Katagiri)

In recent times, walking trails have attracted many visitors in many suburbs of Japanese cities, which can be attributed to their development by local authorities, as well as their promotion by railway companies. However, this cannot be regarded a contemporary boom; indeed, it can be located within the history of the development of walking trails. This study aims at revealing the historical transition from the pre-World War II period to the recent year by focusing on a particular walking trail called the Yaen Mountain Pass Route, which is approximately thirteen kilometres long and located in the Tama hills on the outskirts of the Tokyo metropolis. On the basis of this history of the Route, this study elucidates how trails located on the outskirts of the Tokyo metropolis have been developed and utilised to meet the demands of citizens' leisure activities and health promotion, as well as of local interests in developing a recreation site and preserving and enhancing natural and cultural resources.



Yaen Mountain Pass Route

Landscape Conservation Policy and Tourism Developments in the Traditional Settlement of Santorini Island, Greece (Yu Okamura)

In recent years our research team has made investigations into the relationship between landscape conservation policy and tourism development in Greek traditional settlements designated by the various regulations of this state. This research focused on some specific differences of cultural landscape in traditional settlements of Santorini Island, Aegean Sea, which are designated and conserved by Greek government. Particularly, the traditional

settlement of Oia is truly well conserved comparing to the other settlements. Actually, this research clarified the existence of several special regulations issued in 1993, 1995 and 2000 for this town exclusively. Among them especially the Executive Order of 1993 has to be regarded as the most significant regulation in relation to the preservation of cultural and natural assets as well as the maintenance of order in society. Analysing the above regulations, we also conducted field investigations three times.

Management of the Green Resources in Yanaka Cemetery (Yukiko Katagiri, Tetsuo Shimizu)

Temples and cemeteries are precious open spaces from the perspective of landscape and disaster prevention, but they have changed due to changes in social conditions, which have affected the local environment and landscape. The purpose of this study is to identify the services (public benefit effect) provided by the greenery in temple precincts and cemeteries, to clarify the effect of the changes on the community, and to obtain knowledge for studying methods and systems for the conservation of green spaces in historical areas.

This year, as a basic survey for the green management of the cemetery in the ward, we conducted a survey on the state of the survival of trees before and after the start of the cemetery restoration project, a hearing survey of the management, and a questionnaire survey on the impression that visitors and residents have on the green of the cemetery. The results are reported at local community planning forums such as the Yanaka Community Planning Council.



Yanaka Cemetery during cherry blossom season

Effect and Event Legacy of the National Urban Greenery Fair (Yukiko Katagiri)

The National Urban Greenery Fair (NUGF) is a national event held by local governments to creating communities and urban environment with flower and green. This project aims to clarify the effects and to discuss how to identify the performance as the



Hearing at the Yamaguchi Kirara Expo Memorial Park

Legacy, through case studies on the nine cities which had held the NUGF. The major effects of the NUGF are new activities and organizations for park management based on the main site and administrative organization system and new project by the park and greenspace department. Some cities recognize their effect on city branding and tourism promotion. Furthermore, the linkage between the policies and executive committee of the NUGF is important to develop the effects as a legacy. Such evaluations and economic effects from the viewpoints of business should be clarified for diverse actors to understand that the NUGF could be an opportunity as a social implementation to find the possibilities of park and green openspaces.

Role of public museum staffs for tourism promotion (Yukiko Katagiri, Tetsuo Shimizu)

While the museums is expected to play a role in promoting tourism, the management of public museums, especially museums of history and folklore, is required to be reviewed due to financial problems. The purpose of this study is to clarify the role expected of museums in tourism promotion and the actual situation of museum business, and to obtain basic knowledge to examine the mechanism to utilize the resources of museums in tourism promotion.



Visit to Nagasaki Museum of History and Culture

In the survey, we reviewed the systems and policies related to the development of specialist staff and the promotion of tourism in museums, and conducted a hearing survey on the relationship between the utilization of local tourism organizations and the promotion of tourism and the museum business focusing on the activities of staff, and analyzed the status of each response.

Strategies for the Management of Green Infrastructure and Vacant Lots in Shulinking Cities (Yukiko Katagiri)

The concept of green infrastructure encompasses many possibilities and uncertainties. The objective of this study is to identify the prospects for developing green infrastructure in North American cities, which are in a state of maturity and decline, by considering accelerated management of vacant land groups, urban green infrastructure planning, and site-scale green infrastructure application methods.

In this fiscal year, hearings were conducted with administrative officers and GSI (Green Stormwater Infrastructure) officers of Erb Family Foundation and Detroit Future city. The management and participation system on vacant land and green infrastructure, the role of program arrangement, etc. were examined together with the investigation to Philadelphia conducted last year.

A study on the sister city for compatibility between sightseeing and disaster prevention (Mitsuru Noda)

This research attempts to examine the feasibility of utilizing cooperation between local governments by wide area network, based on mutual complementation between domestic sister cities, which are local governments cooperation in normal times, and emergency assistance agreement, which is coordination between local governments in emergency. In FY 2018, In this fiscal year, we carried out a questionnaire survey targeting the section in charge of sister city collaboration in the depopulated local government, and grasped about the union situation and concrete approach of sister city, evaluation from the viewpoint of the local government, the need of cooperation between the local government policies further. In the next fiscal year, based on data analysis, we plan to put together recommendations for more effective cooperation among local governments.

Practical Research about The Elucidation and Today's Utilization of Food Culture History with "Collection of memory" in Depopulated Area (Mitsuru Noda)

The aim of this research is to elucidate the traditional food culture by collecting 「memories of life」, and to consider utilization of "food culture history" for the continuation of the

5. 食文化

5-2. 主業 / 副業

English

昔の食事は野菜や山菜が中心であり、遺物や遺物にして食べた。地元で採れた魚やワサギも主要な食事であった。また行商から買ったカツオやサザエ等の海の魚やクラゲ、刺っている鶏の肉や卵、山で仕留めたイナシやワサギが食卓に並ぶことも多かったようだ。とりわけクラゲやワサギは現在では殆どみられない食材である。

English..

■野菜
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■山菜
昔の食事は野菜や山菜が中心であり、遺物や遺物にして食べた。地元で採れた魚やワサギも主要な食事であった。また行商から買ったカツオやサザエ等の海の魚やクラゲ、刺っている鶏の肉や卵、山で仕留めたイナシやワサギが食卓に並ぶことも多かったようだ。とりわけクラゲやワサギは現在では殆どみられない食材である。

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Oral history of 5 villages of Kono Tani Ino town

village. This year, we conducted an interview survey (Oral history survey) targeting the Konotani district in Ino town, Kochi Prefecture, and analyzed the contents of the contents heard in text format. Finally, we edited 「The Oral history of the village」 which published a wide range of themes. In the next fiscal year, Starting with the sharing of 「The Oral history of the village」, we plan to promote the use of food culture for the continuation of the village and the planning for that purpose.

AWAJI Long Trail PJ (Mitsuru Noda, Susumu Kawahara)

The aim of this research is Construction of “Tourism based Rural Planning” through the planning survey and the demonstration project in Awaji Island. In FY 2018, we produced a promotion video by a workshop using our original tools and conducted trail visitor events combining different disciplines. Furthermore, we presented our past efforts at the symposium. In the next fiscal year as well, we will continue to cooperate with the residents to advance the project and strive to theoretically achieve results.



Scene of Making PV of Resident Participation

On the historical environmental management of the Nguyen Imperial Tombs in collaboration with peripheral villages, Hue-Vietnam (Naoaki Furukawa, Susumu Kawahara)

This research, with local planners' first-hand assistance, takes the peripheries of the successive Imperial Tombs (registered as UNESCO World Heritage) in Hue-Vietnam as precedents for investigating the distinct historical-eco system of East Asia, and tries to establish the sustainable management of the historical environment of the Imperial Tombs with peripheral villagers' involvement. This research, therefore, tries to conduct the collaborative pilot projects with locals, which contributes to improvement of the dwelling environment as well as to management of the integrated historical-eco system around the heritages with the following 3 goals 1) Rethinking the irrigation system and landscaping of this area in order to support the villagers to settle down to grow crops, 2) Building Communities

for the local management of the regional resources, 3) Suggesting new ecotourism models which could advance the appropriate environmental education and enhance the community based management of the regional resources, alternative to the current prevalent heritage tourism.

In 2018 FY, we presented the new management plan for the Hue heritages being scattered in the Huong River Basin by using the previous research outcomes to the local authority and relevant governmental office. Furthermore, we organized the "Eco-Study tour (both Japanese and English speakers)" in the Gia-Long Tomb's periphery on the initiative of community organizations in March 2019. This had positive feedback from the participants and the observers and got a lot of TV and social network coverage.



Eco-Study tour in the Gia-Long Tomb's periphery



Map and guide book for the Eco-Study tour

Grasp of tourism policy planning practitioners for the creation of sustainable tourism areas (Norie Hirata)

As a premise of this research, there is a need to practice both regional economic management and regional resource management in cooperation for sustainable tourism community

development.

In order to promote tourism and town development through public-private collaboration that achieves regional revitalization in each area, with many actors such as local governments and local businesses, an appropriate Important KGI in local governments based on the hypothesis that it is necessary to set up KPIs and to have a human resource for tourism policy planning with knowledge that can be consistent with these measures and business planning, the first step is to grasp the local government situation in Tokyo. In addition, we developed and tried a data education program related to indicators. From now on, in order to grasp the skills necessary for the local government staff involved in the tourism related policy, interview surveys will be conducted on the personnel involved in the characteristic tourism related policy planning, and the career path of the key person will be grasped. Finally, research is being carried out toward the proposal of an educational program for tourism policy-making practitioners.

Development and practice of a training program for local government employees for regional revitalization project planning (Norie Hirata, Tetsuo Shimizu, Susumu Kawahara, Yu Okamura)

We established a training program "Regional Creation School" to improve the information processing of local government employees in Tama area and the policy making ability of local revitalization, and researched the abilities and issues that local officials should acquire. We set four data powers, five skills to raise them as a capability to be acquired, develop a curriculum, get 11 participants in the first phase and the second phase, the effects and challenges Was verified. As a result, it was revealed that understanding degree will not be high unless the content is understandable by experience, strong demand for exercise and group work time increase. Also, regarding the use of RESAS, many local government officials thought necessary, but it turned out that there are problems such as that many local governments can not use inside the agency.



A training program "Regional Creation School"

Possibilities of Blue Flag as a tool to promote sustainable tourism development (Norie Hirata, Susumu Kawahara)

This research target was Blue Flag, the oldest eco-label as an environmental certification, and organized the contributions and issues of sustainable development in tourism by Blue Flag. The balance between the promotion of tourism and environmental conservation, and the local community is considered important for sustainable tourism town development. Therefore, we conducted a survey on the development of the Blue Flag certification development from the viewpoint of creating a sustainable tourism spot, and also conducted an interview survey on two key cases in Japan that acquired Asia's first Blue Flag. As a result, it was understood that the purpose of acquiring the Blue Flag certification was wide, from PR on the beach to environmental management by the area, and this program started in Europe was gradually developed to emphasize social aspects. Furthermore, the content of contribution in the area as a tourist destination of the Blue Flag certification is the difference between the motivation for acquiring the Blue Flag on the regional side, the creation of the regional system for the certification acquisition, and the involvement method and efforts of the area after the certification acquisition. It clarified that it was different.



Wakasa Wada Beach in Fukui that received the Blue Flag Award

Activities for Information sharing Professionals and Citizens (Norie Hirata)

Council for Housing Community Development Support established in Architectural Institute of Japan take a project on supporting citizens to understand community development and housing issue. The project aims to build

a scheme that researchers and residents can share the information on community development and housing. We are working on information dissemination activities for In this activity, we have lowered the barriers between researchers and the general public, and have created a system and information disclosure so that information on housing and community development can be shared. In the future, regarding vacant house measures that have become a problem in Japan in recent years, we will examine the contents and methods for information disclosure that will be useful not only to citizens but also to vacant house measurers of local governments.

2.3 Behavior and Management Science Unit

Test utilization of CT-Planalyzer, CT-planner-based analytic tool of tourist destinations (Yohei Kurata)

we continued the development of CT-planalyzer, CT-planner-based analysis tool for the analysis of tourist destinations, in collaboration with Hara Tatsunori Lab., RACE, U-tokyo, which enables, map-based visualization of presumable popular tourist routes and spots, without actual behavioral data, we tested this tool in IT-workshops held in various cities for its further improvement, in search for its social needs

Improvement of web-based tour-planning tool, CT-planner (Yohei Kurata)

In order to promote popular use of our CT-planner, web-based tour planner, in collaboration with Hara Tatsunori Lab., RACE, U-tokyo, we developed another trial version of CT-planner, which takes, crowdness data of tourist spots into account, we supported SSL transactions on CT-planner's server, by this improvement, the the current smartphone version of CT-Planner is now possible to show the user's current location, which enriches the convenience of mobile use of CT-planner

How interaction with locals fosters foreign tourists' understanding of visited areas?: typification of the effects (Taketo Naoi)

The results of a past investigation at a historic district in Kawagoe City, Japan, which asked Japanese and overseas students of a university in Tokyo to rate their impression of the selected shops, suggested that the exteriors' openness as perceived by Japanese and overseas students, respectively, had positive and negative effects on the perceived overall favorability of the shops. Another past investigation conducted around a shopping street, Kokusaidori Street, Okinawa Prefecture, Japan, required students of another university in Tokyo and the local tourism practitioners originally from outside the prefecture

to rate their impression of the selected shops and showed the positive effects of the perceived locality on their purchase intention. Parts of these results were published as a refereed article and as an English book chapter. The results of a last year' questionnaire survey with actual visitors around Kokusaidori Street in an attempt to verify a model that involves personal precedents to explain purchase intention suggested the positive effects of the perceived locality on purchase intention. This work was supported by JSPS KAKENHI Grant Number 15K01952 and conducted in collaboration with Dr. Naoi's ex-doctoral student, Dr. Akira Uehara. Parts of the results have been published in his doctoral thesis.



A Japanese-style historic house that is a designated cultural property in Kawagoe Ichibangai Street (a historic district) and has been renovated into a shop.

The effect of intervention by information on the model of potential visitors' intention to avoid visiting volcanic destinations (Taketo Naoi)

This study aimed to verify the effect of intervention by information about residents' views and responses to volcanic eruptions on a model of the intent to avoid volcanic tourism sites by potential visitors after media reports of the eruptions from the perspective of risk communication, on the basis of the Social Amplification of Risk Framework, the Dual Process Model, and the Reversal Theory. The results of a web-based questionnaire that had 624 respondents indicated that this study's avoidance model was valid, which suggests that information-based intervention may be an effective method of controlling potential visitors' intention to avoid visiting a location. The results also suggested the necessity of reconsidering the possibility, as suggested in tourism studies, that the attractiveness of tourism sites and risk

are two sides of the same coin. It was also suggested that, in the field of risk perception research, there may be “the attraction of the unusual,” which differs from the simple sense of risk. This study offers a significant academic contribution to the fields of tourism and risk perception studies. The first author of this study is Ryota Nakamata, an ex-master’s student of Dr. Naoi’s. The results will be presented at an international conference (TTRA) this June.

The influence of the use of dialects in store signs on potential tourists’ impression of signboards, their interest in the signs and their intention to enter the stores (Taketo Naoi)

This study aimed to verify the effect of the use of Japanese dialects on stores’ signboards at tourism destinations on potential tourists’ impression of the signboards, their interest in the signboards, and their intention to enter the stores. The target area is Ichiba Hondori Street, a shopping street in the city center of Naha City, Okinawa Prefecture, Japan. A web-based questionnaire survey was conducted with 648 respondents. Visual stimuli of three types of signboards that differed only in the use of languages, which were two types of local languages and standard Japanese that have the same meaning, were created as to stimuli for the respondents to evaluate, and each respondent was assigned to one of the four types. The results indicated that respondents who evaluated a signboard with a dialect that was familiar to them were more interested in the signboard and had a stronger intention to enter the store. This points to the effectiveness of the use of dialects that are familiar to tourists on signboards in order to encourage them to enter the stores. The first author of this study is Mio Muramatsu, an ex-bachelor’s student of Dr. Naoi’s.



Ichiba-Hondori Street
(a shopping street in the heart of Naha City)

The influence of tour guides and the spontaneity of experience on evaluations of Memorable Tourism Experience (Taketo Naoi, Ayaka Igarashi)

Despite much attention paid to Memorable Tourism Experience (MTE) as a driver for tourists’ intention to pursue similar experiences and the arguably diversified nature of tourist experience, there are no studies on the effects of differences in the nature of tourists’ experience on evaluations of MTE (i.e. the extent to which experience is regarded as MTE). This study aimed to examine the effects of two types of differences in tourists’ experiences, namely the presence or absence of a tour guide and the extent of spontaneity of the experiences, on evaluations of MTE. According to the results of a web-based questionnaire that had 194 Japanese university students indicated that, the stronger they thought that they had unrestricted fun and learning experience, the stronger their intention to have similar experience again was. In contrast, the perceived actualization of novel experiences and interaction with locals and local cultures was found to have affected their intention to engage in similar experiences negatively. Also, tourists’ spontaneous experience without tour guides was suggested to enable their unrestricted fun experience and strengthen their intention to have similar experiences. The first author of this study is an ex-bachelor’s student of Dr. Naoi’s.

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 2018, 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.

Analysis of Airport Management Efficiency (HIHARA Katsuya, OGASAWARA Yu)

The role of airports has long been as starting / ending point infrastructure in transportation networks. Recently, business environments surrounding airports have undergone vast changes such as LCC penetrations, airport privatization (concession) and growing number of foreigners visiting Japan in addition to

include commercial businesses, like duty-free shops and parking lots. These multi-functionalization and multi-faceting are still progressing with cooperating with local tourism promotion agencies such as DMOs. In the past, the management efficiency analyses of overseas airports have been conducted to analyze human flows, logistics and commercial facility businesses. But the efficiency analysis of airport management in Japan is very limited, possibly because of data constraints.

In this study, we use methods such as Data Envelopment Analysis (DEA) and Stochastic Frontier Analysis (SFA) as efficiency analysis on recent management processes of all civil aviation airports in Japan, where multi-functionalization and multi-faceting are well in progress. Supporting students: YAMASHIRO Kengo

Research about Factors for the Increase in the Number of Visitors to the Hot Spring Areas (HIHARA Katsuya, OGASAWARA Yu)

Hot spring visits are a 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 students: OKAMOTO Naoyuki

Research on the present conditions of "return goods" and its characteristics in oldness and tax payment (HIHARA Katsuya, OGASAWARA Yu, SUZUKI Shohei)

The hometown tax payment system is currently at a major crossroads, such as a review of the system, due to the issue of high value returnable goods and the range of local products. On the other hand, with regard to the relationship between returnee goods and donations, which is the starting point of analysis of such situations, the research quantitatively analyzed is very limited, and it can not be said that objective research has been sufficiently conducted. It is very important to analyze the relationship between return items and donations, in order to contribute to the discussion that makes the hometown tax

payment system better.

From this point of view, this research focuses on Internet sites related to hometown tax payments, which are used by many people when deciding on a donation to local government for hometown tax payments, and data on the contents of return items on those sites collected on your own. Based on the data, we try to analyze quantitatively the relationship between return items and donations. First, it is expected that new findings will be obtained by classifying return items and analyzing the types of return items that are effective and the relationship between hometown and the amount of tax payment. Collaborating students: Atsushi Sekine

Survey research of private lodging and simple lodging market in Kyoto city after the enforcement of the Private Lodging Business Act: From the standpoint of property owner, Research on the actual condition of private residence from the viewpoint of the property owner in Kyoto City after the enforcement of the Housing and Housing Business Act (HIHARA Katsuya)

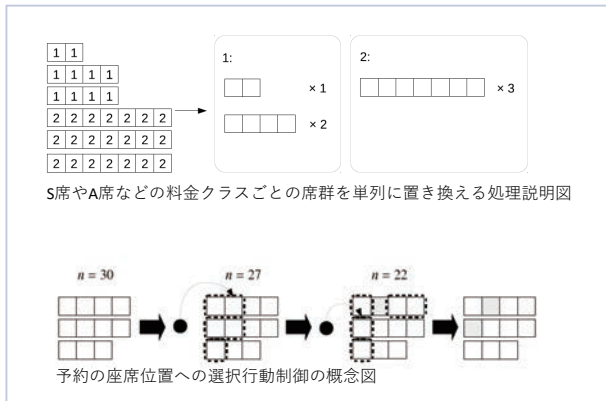
In this study, we surveyed the actual conditions of the market related to private residences in the fall of 2018, taking the case of 11 wards of Kyoto City as an example, where there are many difficulties in adjusting the interests of private relationships. Based on listing data such as actual Airbnb and LIFULL HOME 'SY etc., the accommodation price is acquired / estimated, and from the viewpoint of the profitability of the property owner, the housing accommodation business (new public residence) under the housing accommodation business law application, the hotel business law. We tried to compare the rental facilities in the rental market in Japan.

As a result, basic data on the distribution of average profitability in 11 wards can be obtained, and the profitability of central 3 wards in Kamikyo Ward, Chukyo Ward and Shimogyo Ward, Kyoto City where there are many tourist spots and major stations is high. Results were obtained, and the situation was visualized. In addition, it is clear from the comparison between private residence management and rental that the rental amount is larger for relatively narrow properties up to 1DK, and for larger rooms with a minimum of 1 LDK, private residences are more profitable. became. Cooperating student: Tanaka

Analysing and developing decision making theories under uncertainty for service industry (Yu Ogasawara)

We analysed a revenue management model for facilities (e.g. kabuki, theater, and so on) and developed efficient algorithm for service industry. In addition, some new hierarchical clustering methods for interval-valued data known as symbolic data were developed.

For the revenue management model with information of seating position and customers' preference, we showed that choice-based deterministic linear programming method worked



Choice-based seating position model with undistinguished multi-lines in revenue management

more effective than decomposition approximation method to solve approximate optimal policies, which was opposite result from ones of some previous researches. In the study for developing hierarchical clustering methods, we suggested new interval-valued statistics and interval-valued distance functions, and analysed relationship between the statistics and squared Euclidean distance by using interval analysis theory. We also proposed a novel dendrogram, named arrow-dendrogram to illustrate computational result of the clustering methods since dissimilarity in the clustering methods was interval value.

Resional creation and public transport (Hajime Tozaki)

I was the chief examinr at a study group hosted by the Union Research Institute. A hearing survey was conducted on the role played by public transport , its current status and problems in promoting regional revialization, and the rests will be published in fiscal 2019.

Research on the spread of business jet in Japan (Hajime Tozaki)

In 2020, when the Tokyo Olympic games will be held and in 2019, when he 2019 Rugby World Cup will be held, the opportunities for VIPs to visit Japan using business jets will increase dramatically in the future. However, in reality, the reception environment has not been set at all. How to improve the receiving environment in the futute is an extremely important issue in Japan's growth strategy. In oder to address the issue, we conducted research focusing on feasibility.

The study of DMO and DMC (Destination Management / Marketing Organization and Company) (Makiko Asom, Keiichi Tujino)

It is a continuing study from last year. In this fiscal year, we compared the marketing activities of the Japanese version DMO and Hawaii's DMO HTA (Hawaii Tourism Authority). In particular,

with regard to the "earning ability" that the Japanese version DMO is focusing on, it pays attention to the HTA's goal of "contributing to the improvement of the quality of life of residents" and actively conducts internal marketing activities. It was thought that the activity fostered the attachment of the residents and nurtured the ability to earn money. Therefore, we analyze the development of internal marketing and fostering of civic pride by taking HTA as an example, and as a result, it is possible to develop synergy effects of marketing by expanding awareness of local residents and developing efforts to create attachment. It suggested that is high. We will continue researching in the future.

Research on value creation (Makiko Asom, Keiichi Tujino)

It is a research that tries to approach the elucidation of the mechanism of value creation about a company's service system. Since it mainly targets travel companies, this year, we introduced JTB's Hawaii OLI'OLI system, which has been improved since its introduction in 1995, and continues to the present, and the market strategy aspect of that system And considered the mechanism that generates value. As a result of the survey, it is divided into three role stages, and at the center is the 'OLI' OLI system, which is assembled so that they can cycle and function and interact with customers to expand the service value. It turned out that it was. It also became clear that it is the market strategic aspect of the system that aims to be a virtuous cycle. This result was reported at the Japan Institute of Tourism Research.

Application of data on booking site to marketing (Shohei Suzuki)

With the spread of the Internet and smartphones, "Booking site" has become an indispensable tool for tourists. A variety of information such as prices, photos, and introductory text provided by the accommodation facility, as well as reviews by the hotel guests, are abundant on the booking sites. In this year's research, we also analyzed the thumbnails provided by the accommodation using the Google Cloud Vision API, and extracted the elements contained in the thumbnails. As a result, it became clear that the elements included in the thumbnails are largely different depending on the type of accommodation (for example, Japanese-Style Inn tends to use photographs including elements of the night as compared to hotels). Furthermore, the thumbnails of Nagano, Yamanashi and Gunma hotels included elements similar to the thumbnails of Japanese-Style Inn in other prefectures. Then, in order to carry out analysis that added the element of "price" to these analysis results, we developed a program for acquiring and processing the price information of each accommodation.

Research of event evaluation method using SNS data (Shohei Suzuki)

In this study, we evaluate events using SNS data and examine

the possibility of introducing SNS data to event evaluation. The target event is the UENOYES Balloon Days held at Ueno Park in 2018. We evaluated the art event held in Ueno Park in 2016. Therefore, we considered events that were comparable to previous studies. We used tweets with location information and event-related keywords for evaluation. As a result of analysis of those data, Twitter user's interest in the event could not be extracted except for one content. Based on past research results, it is necessary to have more than a certain number of echoes (tweets and retweets) in order to observe the interest of events using Twitter data. Therefore, Twitter data may not be suitable for evaluation of small events. On the other hand, being able to evaluate compared with other events is considered to be superior to the questionnaire.

3. Publications

3.1 Environmental Management Unit

Toshio KIKUCHI

Presentations

■ International Conference

- Kikuchi, T. "Development of wineries and its impact on rural commodification of Cowichan Valley in Vancouver Island, Canada" Regional Conference of International Geographical Union(IGU), Quebec City, Canada, 6-10, August 2018.
- Iizuka, R., Kikuchi, T. and Phillips, M. "A new perspective on the landscape restructuring caused by rural gentrification in a cosmopolitanised commuter village" Regional Conference of International Geographical Union(IGU), Quebec City, Canada, 6-10, August 2018.
- Kikuchi, T. "Commodification of rural spaces with the development of urban farming in the Vancouver metropolitan area, British Columbia, CANADA" EUROGEO Conference, Paris, France, 14-15, March 2019.

■ Domestic Conference and Meeting

- Kikuchi, T. "Keynote Speech, The outline of development promotion in Ogasawara Islands", The symposium commemorate the 50 anniversary of Ogasawara Islands' retrocession, Tokyo Metropolitan Government Hall, 24th, May 2018.
- Kikuchi, T. "Keynote Speech, Gentrification in the metropolitan area as the coaction and cooperation regional researchs", International Forum on Gentrification in the Metropolitan Area, Tokyo Metropolitan University International Hall, 21th, September, 2018.
- Kikuchi, T. " Possibility of gentrification in metropolitan studies; through a case study of Gower Peninsula, Wales", International Forum on Gentrification in the Metropolitan Area, Tokyo Metropolitan University International Hall, 21th, September, 2018
- Kikuchi, T. " Keynote Speech, Contribution of tourism education to geographical investigation of new subject in Japanese high school programs", The General Meeting of the Association of Japanese Geographers, Wakayama University, wakayama, 22th, September 2018.
- Kikuchi, T. " Keynote Speech, The frontier of gentrification", The General Meeting of the Association of Japanese Geographers, Wakayama University, wakayama, 23th, September 2018.
- Kikuchi, T. " Keynote Speech, The international symposium related with regional coaction activities", The annual meeting of Research Center for Co-creating System of Regional Planning and Management, Tokyo Metropolitan University International Hall, 28th, January, 2019.

Articles

■ Refreed paper

- Kikuchi, T. 2018. The meaning of tourism education's existence

in geographical investigation of a new subject in Japanese high school programs. *The New Geography* 66(3): 81-85.

- Kikuchi, T. 2019. The commodification of rural spaces with the development of urban farming in Vancouver metropolitan area, British Columbia, Canada. *The International Journal of Tourism Science* 12: 11-20.

■ Other articles

- Kikuchi, T. 2019. Sustainable development of tourism in Ogasawara Islands. A Branch Office of Ogasawara, Tokyo Metropolitan Government ed, *The History of 50 Years on a Branch Office of Ogasawara*. Tokyo: 98-101.
- Kikuchi, T. 2019. Gentrification in the metropolitan area as the coaction and cooperation regional researches. *The Report on Gentrification in Metropolitan Area*: 1-3.
- Kikuchi, T. 2019. Possibility of gentrification in metropolitan studies; through a case study of Gower Peninsula, Wales. *The Report on Gentrification in Metropolitan Area*: 64-70.

Books • Reports

- Kikuchi, T. and Sugai, T. ed. 2018. *Tokyo as a Global City; New Geographical Perspectives*. Springer, Singapore, 334p.

Shinya NUMATA

Presentations

- Nugroho, P., S. Numata, S. Lucyanti. *Community Based Tourism in Gunung Ciremai National Park, Indonesia* 日本熱帯生態学会 静岡 2018年6月
- Yeoh, S. H., A. Satake, S. Numata, T. Ichie, S. L. Lee, N. Basherudin, N. Muhammad, T. Kondo, T. Otani, and N. Tani. *Assessment of plant phenological responses in the tropics based on gene expression analyses and mathematical modeling*. ATB2018, Kuching, Malaysia. July 2018.
- Numata, S., *Why biodiversity? Current status and prospects in natural and urban ecosystems*. TMU-TSU Joint Symposium 2018 "The natural and artificial environments, the cultural Trends!". Tomsk, Russia. September 2018 (Invited).
- Jacobs, M. Zulkhairi A. Z. A., T. Staka, S. Dubolis, T. Hosaka, S. Numata, E. Renaweewage, Y. Yamane, Huda Farhana M. M., K. K. Miller, A. Shaw, M. A. Weston, V. Lavadinović. *A cross-cultural comparison of wildlife value orientations*. Pathways Europe 2018, Goslar, Germany. September 2018

Articles

- Mohamad Muslim H.F., Yahya N.A., Numata S., Hosaka T. (2018) *Ethnic Differences in Satisfaction with the Attractiveness of Tropical Urban Parks*. In: McLellan B. (eds) *Sustainable Future for Human Security*. Springer, Singapore. Pp147-159.
- Numata, S. & Hosaka, T. (2018) *The Current Status and Prospects for Biodiversity in Tokyo*. *Tokyo as a global city: New Geographical Perspectives*. In T Kikuchi and T. Sugai (eds), Springer Singapore. pp 53-68.
- Cao, L., K. Fukumori, T. Hosaka, S. Numata, M. Hashim, T. Kosaki (2018) *The distribution of an invasive species, Clidemia hirta*

along roads and trails in Endau Rompin National Park, Malaysia. *Tropical Conservation Science*. 11: 1940082917752818. DOI: 10.1177/1940082917752818

- Mahmud, M. R., M. Hashim, S. Numata, T. Hosaka, T. and H. Matsuyama, H. (2018) Spatial downscaling of satellite precipitation data in humid tropics using site specific seasonal co-efficient. *Water*. 2018; 10(4):409
- Mohamad Muslim, H. F., T. Hosaka, S. Numata, N. A. Yahya (2018) Nature experience promotes public preference for and willingness to coexist with wild animals in Malaysia. *Ecological Processes*. 7: 18. <https://doi.org/10.1186/s13717-018-0127-7>
- Hosaka, T., Numata, S., Sugimoto, K. (2018) Relationship between childhood nature play and adulthood participation in nature-based recreation among urban residents in Tokyo area. *Landscape and Urban Planning*. 180: 1-4.
- Ngo, K. M., T. Hosaka, S. Numata, N. (2019) The influence of childhood nature experience on attitudes and tolerance towards problem-causing animals in Singapore. *Urban Forestry and Urban Greening*. 41 : 150-157."

Takeshi OSAWA

Presentations

- Osawa T. Eradication strategy for beautiful ornamental invasive plants, The 66th Annual Meeting of the Ecological Society of Japan, Public lecture ESJ 66th Kobe, 2019.3.15-2019.3.19, Kobe International Conference Center. (in Japanese)
- Osawa T. Is citizen science same as Open science? -Perspective and challenge with common-, Japan Open Science Summit 2018 (JOSS 2018) : New insights from Citizen Science: Toward co-creative innovation, 2018.6.18-2018.6.19, National Center of Sciences, Tokyo. (in Japanese)
- Osawa T. What is a fair community based mapping activities? -Lesson from the university education-, The 27th Annual Meeting of the Geographic Information Systems Conference, Planning Session: Civic Collaboration and toward the next step by Open x Citizen Science, 2018.10.19-2018.10.21, Minami-Osawa Campus, Tokyo Metropolitan University, Hachioji, Tokyo. (in Japanese)"

Articles

■ Refreed paper

- Hata K, Osawa T, Hiradate S, Kachi N (2019) : Soil erosion alters soil chemical properties and limits grassland plant establishment on an oceanic island even after goat eradication, *Restoration Ecology*, 27(2), pp333-342.
- Yamamoto Y, Matsumoto T, Kobayashi H, Osawa T, Kachi N, Eguchi E (2018): Preliminary Report on Unnoticed Establishment of *Pheidole parva* Mayr Complex (Insecta: Hymenoptera: Formicidae: Myrmicinae) in the Ogasawara Islands: a Potential Risk to Native Ground-dwelling Invertebrates, *Taiwanese Journal of Entomological Studies*, 3, pp.53-59.

- Oo AZ, Sudo S, Inubushi K, Umamageswari C, Yamamoto A, Ono K, Mano M, Hayashida S, Vanitha K, Osawa T, Terao Y, Jothimani P, Elayakumar P, Ravi V(2018): 「Mitigation Potential and Yield-Scaled Global Warming Potential of Early-Season Drainage from a Rice Paddy in Tamil Nadu, India, *Agronomy*, 8(10), 202.
- Koyanagi TF, Furukawa T, Osawa T (2018) : Nestedness-resultant community disassembly process of extinction debt in a highly fragmented semi-natural grassland, *Plant Ecology*, 219, pp.1093-1103.
- Osawa T, Yamasaki K, Tabuchi K, Yoshioka A, Ishigooka Y, Sudo S, Takada MB (2018) : Climate-mediated population dynamics enhances distribution range expansion of the pest insect, *Stenotus rubrovittatus*, *Basic and Applied Ecology*, 30, pp41-51.

Koun SUGIMOTO

Presentations

- Sugimoto,K., Ota,K. and Suzuki,S. A study of visitors' behavior toward sustainable urban tourism management, The 23th Annual Conference of GIS Association of Japan, Tokyo, Japan, 20-21, October, 2018.
- Nishimura,K., Sugimoto,K. and Kikuchi,T. Analysis of cycling tourists' movement using geo-social data: A case study in Hokkaido, The 23th Annual Conference of GIS Association of Japan, Tokyo, Japan, 20, October, 2018.
- Sugimoto,K. The potential of geo-spatial data for urban tourism analysis: Focusing on people flow data, The 23th Annual Conference of GIS Association of Japan, Tokyo, Japan, 20, October, 2018.
- Sugimoto,K. Gentrification and tourism, International meeting: Gentrification in a metropolis, Tokyo, Japan, 21, September, 2018.

Articles

- Sugimoto Koun, Ota Kei, Suzuki Shohei(2019)Visitor mobility and spatial structure in a local urban tourism destination: GPS tracking and network analysis. *Sustainability*, 11(3):919.
- Hosaka Tesuro, Numata Shinya, and Sugimoto Koun(2018) Relationship between childhood nature play and adulthood participation in nature-based recreation among urban residents in Tokyo area. *Landscape and Urban Planning*, 180, 1-4.
- Hattori.Y., Sugimoto,K. and Kikuchi,T. 2018. Psychological reactions of visitors who participated in the eco tours on Ogasawara Island, *Ogasawara Research*, 41, 65-81.
- Sugimoto,K., Ota,K. and Suzuki,S. (2018) A study on visitors' behavior towards sustainable urban tourism management, *Proceedings of Annual Conference of GIS Association of Japan 27,CD-ROM*. (in Japanese)
- Nishimura,K., Sugimoto,K. and Kikuchi,T. (2018) Analysis of cycle tourists' movement using the social-geo data: A case

study in Hokkaido, Proceedings of Annual Conference of GIS Association of Japan 27,CD-ROM. (in Japanese)

- Koike,T., Uehara,A. and Sugimoto,K. (2018) Relationship between the distribution of anime shops and the destination image in cities. *Geography(Chiri)*,63-9,26-31. Sugimoto,K. (2018) Youth tourist behavior in the metropolis. *Geography(Chiri)*,63-9,10-17.

Books • Reports

- Sugimoto,K. (2019) *Tourism, "Introduction of Geography in Tokyo"*, Asakura Publishing Co, Ltd. in press
- Sugimoto,K.(2018)*Gentrification and Tourism, "Gentrification in the Metropolis"*, 57-63. (Proceedings) Tokyo Metropolitan University.

Etsuro TAKAGI

Presentations

- Hosaka, T., Takagi, E. Study group on seed predatory insects, The 66th Annual meeting of Ecological Society of Japan, Kobe, Japan, March 2019.
- Takagi, E. *Macrodasyceras hirsutum*, a seed parasitoid wasp exploiting *Ilex integra* in clever manners, The 66th Annual meeting of Ecological Society of Japan, Kobe, Japan, March 2019.
- Sugiyama, N., Hosaka, T., Takagi, E., Numata, S. Effects of childhood nature experience on negative affective attitudes toward nature: a case of Japanese university students, The 66th Annual meeting of Ecological Society of Japan, Kobe, Japan, March 2019.
- Smith, Z.M., Chase, K.D., Kees, A.M., Takagi, E., Aukema, B.H. Competition between mountain pine beetle (*Dendroctonus ponderosae*) and native Minnesotan bark beetle (*Ips grandicollis*), Upper Midwest Invasive Species Conference, Rochester, MN, USA. October 2018."

Articles

- Takagi, E., Masaki, D., Kanai, R., Sato, M., Iguchi, K. (2018) Mass mortality of *Abies veitchii* caused by *Polygraphus proximus* associated with tree trunk diameter in Japan. *Forest Ecology and Management*, 428, 14-19..

Books • Reports

- Machida, R. with Sugadaira Research Station, Mountain Science Center, University of Tsukuba (Ed.) (2019) *Insect Tales of Insect Lovers*. University of Tsukuba Press, Tsukuba, Japan.

Ranaweerage Eranga

Articles

- Ranaweerage, E. 2019. Travel Motivations of Malaysian exchange students in Japanese universities: a case study of participants in the AIMS program at Tokyo Metropolitan University, *Journal of Tourism Science* 12: 21-27

Kei OTA

Presentations

- Ota, K., Recent trends in night cruises and the restructuring of the Tokyo waterfront, Regional Conference of the International Geographical Union, Quebec Canada, August 2018
- Sugimoto, K., Ota, K., Suzuki, S. A Study on Tourists' Movement towards Sustainable Urban Tourism Management, 27th Conference of the Geographic Information Systems Association, Tokyo, Japan, October 2018 (in Japanese).

Articles

- Ota, K., Iizuka, R. and Ikeda, M. 2018. Nightlife tourism for young in Tokyo. *Monthly Magazine "Chiri"*, 63, 40-47. (in Japanese).
- Sugimoto, K., Ota, K., and Suzuki, S. 2018. Visitor Mobility and Spatial Structure in a Local Urban Tourism Destination: GPS Tracking and Network analysis. *Sustainability*, 11: 919-936.

Reports

- Department of Tourism Science TMU. 2019. Event report of the UENOYES Balloon Days.
- Department of Tourism Science TMU. 2018. Pedestrian behavior survey report around the Ueno station.

3. 2 Regional Planning and Management Unit

Tetsuo SHIMIZU

Presentations

- Choi, S., Kurihara, T. and Shimizu, T.: Progress and challenge in tourism statistics utilization in Japan: Regional tourism organizations and data management level, 2018 TTRA Conference, Miami, 2018.6.

Articles

■ Refreed paper

- Ghani, N. A. and Shimizu, T.: Model Development of Pedestrian Satisfaction Index for Street Evaluation by Traffic and Non-Traffic Functions in Tourism Area, *Journal of the Eastern Asia Society for Transportation Studies*, Vol.12, pp.1038-1057, 2018.
- Nguyen, V. T. and Shimizu, T.: Input-Output Table for Transportation and Tourism Analysis: Construction and Applications, *Journal of the Eastern Asia Society for Transportation Studies*, Vol.12, pp.2117-2132, 2018.
- Choi, S., Kurihara, T. and Shimizu, T.: Progress and challenge in tourism statistics utilization in Japan: Regional tourism organizations and data management level, 2018 TTRA Proceedings, 2018.
- Marpaung, N. and Shimizu, T.: Road-Development Strategies to Support Self-Drive Tourism (SDT) in Bali Based on SWOT Analysis, *Journal on Tourism and Sustainability*, Vol.2, No.1,

pp.23-33, 2018.

- Watthanaboon, T. and Shimizu, T.: The Dimension Of Risk Perception In The Context Of Political Crises, *Journal on Tourism and Sustainability*, Vol.2, No.1, pp.57-65, 2018.
- Khanal, B. P. and Shimizu, T.: Factor Affecting the Development of Health Tourism in Nepal: Regarding the Views of Health Tourists, *Journal of Tourism Research and Hospitality*, Vol.7, Issue 3, pp. 1-6, 2018.

Books • Reports

- Tokyo as a Global City, Chapter 12: Transport Planning and Management in Tokyo Metropolitan Region: Its History, Current Situation and Future Perspective, *AJF Library 8, International Perspective in Geography*, Springer, 2018

Susumu KAWAHARA

Presentations

- KOUDA Ryosuke, KAWAHARA Susumu, 2018, Research on the Expectations of Foreign Tourists and the Responses of the Bars for Each of Their Intentions in Shinjuku Golden Gai , Summaries of technical papers of annual meeting (selected summary) , 2018.09, pp.47-50, Architectural Institute of Japan (in Japanese)
- NAKAMURA Yuri, KAWAHARA Susumu, KATAGIRI Yukiko, A study on the Legacy and Sustainability of the Japan Urban Green Fair, Summaries of technical papers of annual meeting (selected summary) , 2018.09, pp.11-14, Architectural Institute of Japan (in Japanese)

Articles

- NAGASHIMA Shono, Susumu Kawahara, NODA Mitsuru, 2018, Fundamental Study on Inheritance of Fishery Assets and Diversion to Tourism Industry by I Turns: Focusing on the Response to Barriers When Inheritance, (in Japanese) , *Journal of the City Planning Institute of Japan*, 53(3), pp.1029-1035. DOI: 10.11361/journalcpj.53.1029

Yu OKAMURA

Books

- Toshio KIKUCHI and Toshihiko SUGAI: Tokyo as a Global City: New Geographical Perspectives (International Perspectives in Geography), Springer, April 2018. Yu OKAMURA: Chapter 11. Past, Present, and Future Views in Tokyo.

Yukiko KATAGIRI

Presentations

- Nakamura, Y., Kawahara, S. and Katagiri, Y.(2018) : A study on the Legacy and Sustainability of the Japan Urban Green Fair ,Summaries of technical papers of Annual Meeting Architectural Institute of Japan, 2018.9 [In Japanese]
- Katagiri, Y. and Shiihara, A. (2018) : Local Communities Digital Archive Resource Archive for Sustainable Work and Innovation

in Local Community, Summaries of technical papers of Annual Meeting Architectural Institute of Japan, 2018.9[In Japanese]

- Shiihara, A. and Katagiri, Y.(2018) : Area Management System for Sustainable Works and Innovation in Local Community(Part3) -Possibility of Cooperation between Inhabitants, Companies, Experts, University and Governments in the case of Yanaka,Tokyo Central North East.,Summaries of technical papers of Annual Meeting Architectural Institute of Japan, 2018.9 [In Japanese]
- Kitagaki, R., Ishida, T., Nagane, A. and Katagiri, Y. (2018) : Estimating financial stringency of funds for repairing condominiums in Tama district and its spatial distribution ,Summaries of technical papers of Annual Meeting Architectural Institute of Japan, 2018.9 [In Japanese]
- Sadahisa Kato, Takanori Fukuoka and Yukiko Katagiri(2018) : City-scale Green Infrastructure Implementation Strategies through the Examination of City of Philadelphia's Green Infrastructure Plans,International Symposium on Architectural Interchange in Asia,Pyeongchang, Korea,2018.10
- Takanori Fukuoka, Sadahisa Kato and Yukiko Katagiri(2018) : Linking Site-scale Projects to City-scale Green Infrastructure Strategies,International Symposium on Architectural Interchange in Asia, Korea,2018.10
- Katagiri, Y.(2019): Results and Subject of the Project School in Yanaka Area, the 6th Forum of the Tokyo Cultural Heritage Alliance "Potential of the Project School for Town management: - As System for Developing Personnel Working with the Cultural Resorce ", 2019.1.19, Academy Common Meiji Univ. [In Japanese]
- Katagiri, Y.(2019):"Teito Monogatari" (The tale of the Imperial Capital) with the Maps in Digital Archive Systems, the 9th Symposium of the Tokyo Cultural Heritage Alliance " "Teito Monogatari" and Edo-Tokyo with the Maps : To enjoy the layered Cultural Resorces ",Kandamyojin Hall [In Japanese]

Articles

- Katagiri, Y.(2018): Tourism Promotion and Local Landscape on the "Journal of the Japanese Institute of Landscape Architects",*Journal of the Japanese Institute of Landscape Architecture* 82(4),264 [In Japanese]
- Shiihara, A. and Katagiri, Y.(2018): Urban Green in Yanaka Area based on the Nature, History of Temple district and Life Culture, *Urban green tech*, No.107, 12-13 [In Japanese]

Mitsuru NODA

Presentations

- Noda, M., Kamimura, M., Fuwa, M., Nomura, R. : Basic research on the Today's Issue of Operating of Tourism Zone Development, *AIJ Kanto Branch Research Report*, 2018.03 (in Japanese)

Articles

- Nagashima, S., Kawahara, S., Noda, M. : Fundamental study

on inheritance of fishery assets and diversion to tourism industry by I turns -Focusing on the response to barriers when inheritance-, Journal of the City Planning Institute of Japan, Vol.53 No.3, pp.1029-1035, 2018.10 (in Japanese)

- Noda, M. : A Tentative Assumption on the Reconsideration of Outside Supporters, PD Reference Book of Architectural Institute of Japan, pp.75-78, 2018.09 (in Japanese) "

Naoaki FURUKAWA

Presentations

- N.Furukawa, Miyuu Nakanishi, Y.Terazawa, T. Akazawa, S. Susumu, S.Satoh, "On the Possibilities and the Challenges of Ecotourism as means of the Management of the Cultural Landscape being formed in the Periphery of the Gia-Long Tomb (A study of urban transformation, in HUE-VietNam,Part 24)" , Summaries of technical papers of Annual Meeting, Architectural Institute of Japan (Tohoku) p31-34, Sep 2018

Books • Reports

- " On Characteristics and the Potentials of Cultural Landscape and Traditional Water System designed in the peripheries of Nguyen Imperial Tombs", Final Record International Symposium of Sustainable Management and Appropriate Utilization of the Cultural Landscape and Historical-Eco System at Royal Tombs of Nguyen Dynasty and Huong River's Upstream Region, Hue-Vietnam, Annual Report of Hue Monuments Conservation .p.66-85 May 2019

Norie HIRATA

Presentations

- Hirata, N. Comparison of tourism policies by municipalities in the Tama area of Tokyo. Conference Lectures on Architectural Institute of Japan. Selected Abstracts OS, Sendai, Japan, 4-6, September 2018.
- Hirata, N., Shimizu, T., Kawahara, S. and Okamura, Y., Practice and Evaluation of Education Program on Regional Planning and Management for Local Government Officials- Regional Revitalization School of two years of efforts -, The City Planning Institute of Japan, Osaka, Japan, 16-18, November 2018.

Articles

- Hirata, N., Shimizu, T., Kawahara, S. and Okamura, Y., 2018. Practice and Evaluation of Education Program on Regional Planning and Management for Local Government Officials- Regional Revitalization School of two years of efforts -. Journal of the City Planning Institute of Japan, Vol.53 No.3 : pp.474-481 (in Japanese)
- Hirata, N. 2018. Comparison of tourism policies by municipalities in the Tama area of Tokyo. Abstracts of Academic Lectures Architectural Institute of Japan. Selected Abstracts OS 7008 : pp.19-22. (in Japanese)
- Hirata, N. and Kawahara, S. 2019. Possibilities of Blue Flag as a tool to promote sustainable tourism development. Abstracts

of Academic Lectures, Architectural Institute of Japan. Selected Abstracts OS (in Japanese : Publication decision)

Books

- Shimizu, T. and Hirata, N. et al., 2019. Report of the Survey on Advanced Tourism Management Human Resources Development "Tokyo Metropolitan Tourism Management Human Resources Development Project", Edited by Shimizu, T. and Hirata, N. (in Japanese)"

3. 3 Behavior and Management Science Unit

Taketo NAOI

Presentations

- Okano, Y., Naoi, T., & Kurata, Y. (May, 2018) The effects of experiences during a trip on attachment to remote islands as tourism destinations: the case of Yoron Island [Kankochi toshiten no Rito no Bashoichaku ni Ataeru taizaichu no Keiken: Yoron-to wo case toshite], MERA (Man-Environment Research Association) The 25th Annual Conference, Kogakuin University, Tokyo, Japan. (Japanese)
- Nakamata, R., Naoi, T., & Iijima, S. (June, 2018). Potential visitors' evaluation of photographs of destinations with volcanoes and the effects of their past experiences with natural disasters. Proceedings of Travel and Tourism Research Association 2018 Annual International Conference, Miami, USA. (English)
- Kawada, H., & Naoi, T. (June, 2018). Defining factors of destination loyalty that are unrelated to tourist satisfaction: A review of preceding studies. Proceedings of Graduate Student Research Colloquium at Travel and Tourism Research Association 2018 Annual International Conference, Miami, USA. (English)
- Naoi, T., & Iijima, S. (December, 2018). Using others' behaviors as an intervention to foster pro-environmental behavior in tourists: A case of beach cleaning. Proceedings of Travel and Tourism Research Association Asia Pacific Chapter 2018 Conference, Ho Chi Minh City, Vietnam. (English)
- Yasuda, S., Naoi, T., & Okano, Y. (December, 2018). The effect of push and pull motives on university students' intention to visit remote islands. Proceedings of Travel and Tourism Research Association Asia Pacific Chapter 2018 Conference, Ho Chi Minh City, Vietnam. (English)
- Okano, Y., & Naoi, T. (December, 2018). Elucidation of the chronological formation of destination attachment: Applying the Trajectory Equifinality Approach. Proceedings of Travel and Tourism Research Association Asia Pacific Chapter 2018 Conference, Ho Chi Minh City, Vietnam. (English)
- Nakamata, R., & Naoi, T. (Accepted, to be presented in June, 2019). The effect of information intervention on a model

of potential visitors' intentions to avoid visiting volcanic destinations. Proceedings of Travel and Tourism Research Association 2019 Annual International Conference, Melbourne, Australia. (English)

Articles

■ Refreed paper

- Okano, Y., Kurata, Y., & Naoi, T. (September, 2018). Effects of Tourist Experiences on Destination Attachment. *The Tourism Studies*, 30(1), 5-18. (Japanese)
- Ryo, T., & Naoi, T. (March, 2019). The relationship between the mix of referenced tourism information and destination image: The case of tourism information UK non-Japanese residents refer to and their image of Japan as a tourism destination. *The International Journal of Tourism Science*, 12, 1-10. (Japanese)
- Uehara, A., Naoi, T., & Iijima, S. (To be published in March, 2009). Investigate on servicescape that fosters tourists' purchase intention: Relationship between store characteristic and purchase intention in a cognitive viewpoint of tourists and employees of tourism industry, *Man-Environment Research Association (MERA) Journal*. (Japanese)

■ Refreed articles

- Kawada, H., & Naoi, T. (March, 2019). Determinants of destination loyalty regardless of the satisfaction level of tourists: Review of preceding studies. *The International Journal of Tourism Science*, 12, 59-64. (Japanese)
- Uehara, A., Naoi, T., & Iijima, S. (To be published in March, 2009). Relationship between servicescapes and tourists' evaluation of shops: Case of a shopping district in Naha city. *Advances in Tourism Marketing*. (English)

Katsuya HIHARA

Presentations

- HIHARA Katsuya, "Analysis of Airport- Airline Relationship with a Third Party Tourism Promotion" Association of Transport Research Society (ATRS) Annual Meeting,, Seoul, South Korea, July 2018
- HIHARA Katsuya, " Analysis of Airport- Airline Relationship with a Third Party Tourism Promotion" Applied Regional Science Conference Annual Resarch Meeting, Nanzan University, Nagoya City, Aichi Prefecture, Japana, December 2018

Books • Repot

- HIHARA Katsuya and MAKIMOTO Naoki(2018), "Analyses of Risk Sharing Contract -- Bargaining and Agency Analysis, Airline Economics in Asia (Advances in Airline Economics 7th edition, J.K. Brueckner, M. Dresner, T. Oum et al. ed.)(Emerald Group Publishing), pp. 267-286

Articles

- HIHARA Katsuya (2018), "Analysis of Airport- Airline Relationship with a Third Party Tourism Promotion", Applied Regional Science Conferecne Annual Meeting at Nanzan University, Nagoya, working paper

Yu OGASAWARA

Presentations

- Yu Ogasawara, Yuto Hisano and Masamichi Kon, Comparing Two Clustering Methods for Interval-valued data, research meeting of Optimization and Stochastic Model, Feb. 2019, Japan.
- Yu Ogasawara, Comparing approximation method for choice-based seating position model, research meeting of Decision Making Modeling Under Uncertainty, Dec. 2018, Japan.
- Yu Ogasawara, Yuto Hisano and Masamichi Kon, Hierarchical Clustering Method and Its Dendrogram Using Interval-valued Distance, 2018 RIMS Workshop Mathematics of Decision Making under Uncertainty and Related Topics (Research Institute for Mathematical Sciences), Nov. 2018, Japan.
- Yuki Soma, Yu Ogasawara, Shigeyuki Nakaji, Examination for Causal Relationship of Factors of Dementia by Structural Equation Modeling, Anual Meeting of Japan Society for Dementia Prevention, Sept. 2018.

Articles

- Yu Ogasawara and Masamichi Kon: Choice-based Seating Position Model with Undistinguished Multi-Lines in Revenue Management, *The Journal of the Operations Research Society of Japan* 62(1) 37-52, 2019.
- Yu Ogasawara: Approximation solutions for Choice-based Seating Position Model, *RIMS Kokyuroku* (2078), July 2018.

Makiko ASO

Presentations

- Aso,M., and Tsujino,K., Mechanism of value co-creation of " OLI 'OLI system "33th Annual meeting of ,Japan Institute of Tourism Research,Atomi University,Tokyo Japan,December 2018

Articles

- Aso,M., and Tsujino,K., Mechanism of value co-creation of " OLI 'OLI system.proceedings of 33th Annual meeting of ,Japan Institute of Tourism Research,pp.85-88 Aso,M., Takasawa,Y.,and Tsujino,K.Consideration on Internal Marketing in Destination Management Organization.The International Journal of Tourism Science Voi.12:49-58.

Shohe SUZUKI

Presentations

- Sugimoto, K., Ota, K., Suzuki, S. A Study on Tourists' Movement towards Sustainable Urban Tourism Management, 27th Conference of the Geographic Information Systems Association, Tokyo, Japan, October 2018 (in Japanese).
- Suzuki, S. Social Media Usage by Tourism Associations, 15th Conference of Society for Tourism Informatics, Iizuka, Japan, June 2018 (in Japanese).

Articles

- Sugimoto, K., Ota, K., Suzuki, S. (2019): Visitor Mobility and

Spatial Structure in a Local Urban Tourism Destination: GPS Tracking and Network Analysis, Sustainability 11(3)

- Suzuki, S. (2019): The Analysis of the Thumbnail on the Booking Site -Focusing on Hotel and Japanese-Style Inn, Bulletin of Institute for Information Science (39)

4. Awards and Honors

Susumu KAWAHARA

- Leading Professor 2018, Department of Urban Environmental Sciences, Tokyo Metropolitan University.

Young Excellent presentation award

- KOUDA Ryosuke, KAWAHARA Susumu, 2018, Research on the Expectations of Foreign Tourists and the Responses of the Bars for Each of Their Intentions in Shinjuku Golden Gai , Summaries of technical papers of annual meeting (selected summary) , 2018.09, pp.47-50, Architectural Institute of Japan (in Japanese)
- NAKAMURA Yuri, KAWAHARA Susumu, KATAGIRI Yukiko, A study on the Legacy and Sustainability of the Japan Urban Green Fair, Summaries of technical papers of annual meeting (selected summary) , 2018.09, pp.11-14, Architectural Institute of Japan (in Japanese)

Koun SUGIMOTO

- Leading Scientist Prize (Tokyo Metropolitan University)



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

1-1 Minami-Osawa, Hachioji-shi, Tokyo, 192-0397, Japan
Tel: +81 42 677 2664
Fax: +81 42 677 2665

Email: yukiko-k@tmu.ac.jp