# Landscape Appreciation in Russian Haiku: Plant Names and "Seasonal Words"

\*Anastasia Petrova<sup>1</sup>

1. Institute of Oriental Studies of the Russian Academy of Sciences

A poetry form called haiku originated in Japan, but gained popularity also in many other countries. Nowadays there are many poets who compose haiku in Russian. It is obvious that Russian haiku differ markedly from the haiku written in Japanese, in particular in terms of the environmental experience they describe. A characteristic feature of Japanese haiku is the usage of kigo, seasonal words, while Russian haiku poets usually don't rely on such words, as Russian tradition hasn't developed set of words which could be compared to kigo. However, Russian haiku, like any other poetry form, often describe the natural environment and can include plant names and words connected to different seasons (such as snow, rain etc.) For this presentation the main Russian haiku journals and collections of haiku (such as 'Haikumena', 'Ulitka' etc.) were examined for such words. Analysis has been provided on what kind of words are used, which of them are more frequent, and what kind of environment they describe.

Keywords: haiku, kigo, natural environment descriptions, plant descriptions, landscape appreciation

# Natural scenery and hydro-meteorological phenomena in Russian landscape painting

### \*ELENA PETROVA<sup>1</sup>

#### 1. Lomonosov Moscow State University, Faculty of Geography

Landscape occupies a special place in Russian painting. For the first time, schematically transferred landscape motives appeared in ancient iconography. In the ancient icons, the figures of Christ, the Virgin, the saints and angels were depicted sometimes in the background of very schematic scenery. Sparse trees, which species could not be determined precisely, symbolized the forest; buildings, without any volumes, were temples and chambers. However the landscape painting did not exist actually as a separate genre of easel painting in Russia until the 18th century. In the 18th century landscapes were used as a background in the state and home portraits. Vladimir Borovikovsky, for instance, depicted his images on the background of Russian nature. The first sceneries, which appeared in Russia in the 18th century, were topographical views of imperial palaces and parks by Semen Shchedrin. He can rightly be called the founder of Russian landscape painting, although his works were generally decorative. Working with real nature, the study of Italian nature and the discovery of original Russian national landscape - these are the three directions of developing of the Russian landscape painting in the first half of the 19th century. Sylvester Shchedrin, Mikhail Lebedev, Alexander Ivanov developed a tradition of Romantic painting, which based in the Russian landscape painting, similar to the European landscape painting, on the working with real nature in the open air (plein-air painting). With discovering the sea, the Russian art of the 19th century was developing such popular type of landscape painting as a Marine art. In seascapes, tradition of Romanticism is living, which inspired creativity of the famous Russian Romantic painter Ivan Aivazovsky. He is considered one of the greatest marine artists in history. The artist has developed his own individual painting style, in which there are no strict classic rules of composition. Aivazovsky painted sea as a living matter and was able to convey such effects as of moving water, of reflected sun and moonlight. In the mid-nineteenth century the Russian art was characterized by the distinct transition from Romanticism to Realism. The starting points were works by Alexey Venetsianov, who created a collective image of peasant Russia. Landscape backgrounds of his paintings have introduced into Russian painting the theme of nature as the scope of labor applications of human hands. The leading role in Russian art began to acquire a national landscape (Vasily Perov, Ivan Shishkin, Alexey Savrasov, etc.). In the second half of the 19th century, Fyodor Vasilyev and Arkhip Kuindzhi have introduced the lyrical landscape style in Russian art. Kuindzhy' s works are especially remarkable for their light effects by capturing the illuminative aspect of the natural condition.

Keywords: Russian landscape painting, natural scenery, hydro-meteorological phenomena, national landscape

## Surveying preferences for an urban park and visualizations of potential scenarios

\*Gulsah Bilge<sup>1</sup>, Sigrid Hehl-Lange<sup>1</sup>, Eckart Lange<sup>1</sup>

1. The University of Sheffield

Value+ is a European Union funded collaborative project to enhance public participation by using novel techniques during the participatory planning and design processes. Edward Street Park, located in Sheffield, UK city centre, is one of the six real-world project sites besides other five North West European cities. The advent of advances in computer and mobile technologies currently allows users to visualize and experience historical or future landscapes in real-time. According to Ervin (2001), landscape(s) consists of six components: 'landform, vegetation, structure, water, animals and atmosphere'. Research to date has investigated landform, vegetation, structure, and water influencing the user' s landscape preferences in a given scene. It has been shown that all these mentioned components and animals and atmosphere affect the perceptions and preferences of the users, both individually and collectively. Structure, manmade or natural (de Vries et al., 2012), landform including topographical features and the presence or absence of water and vegetation, all have significant impact on a user' s preferences (Hagerhall et al., 2004). This research investigates user preferences in the urban parks and how these preferences potentially affect the park use and sense of place. Additionally, the way users can contribute to the improvement of the park environments by sharing their opinions and have their say in the decision-making process. Our latest research showed that 3D visualisations have high potential for improving the communication between users and professionals (Bilge et al., 2016). In this research, participants were asked to articulate how they feel about the site after viewing the 3D model of the park by answering questions about their likes and dislikes in the park's layout and functions. Another group of participants were shown the 3D walk-through and were asked to suggest improvements by deciding on one of the six pre-determined viewpoints. These suggestions were sketched on a mobile device application, ZoomNotes, to share improvements they want to be made in the park. After collecting all the sketches from public for the preferred developments under the light of place-making criteria (Project for Public Spaces, 2010), the most frequent options were visualized as an individual scenario for each viewpoint according to user' s preferences. Based on the answers from the surveys and sketches made by participants, our study describes how people's preferences on design of the parks influences the park use and sense of place and how mobile devices can contribute to engaging public for improvements of existing landscapes during the decision-making process.

#### References

Bilge G., Hehl-Lange S. & Lange E., (2016). The use of mobile devices in participatory decision-making. JoDLA –Journal of Digital Landscape Architecture, 234-242.

de Vries, S., De Groot, M. & Boers, J., (2012). Eyesores in sight: Quantifying the impact of man-made elements on the scenic beauty of Dutch landscapes. *Landscape and Urban Planning.* 105, pp. 118-127.

Ervin, S. M., (2001). Digital landscape modeling and visualization: a research agenda. *Landscape and Urban Planning*, 54 (1-4), pp. 49-62.

Hagerhall, C. M., Purcell, T. & Taylor, R., (2004). Fractal dimension of landscape silhouette outlines as a predictor of landscape preference. *Journal of Environmental Psychology.* 24, pp. 247-255.

PPS (Project for Public Spaces), (2000). How to turn a Place Around. New York: Project for Public Spaces

Keywords: Landscape preferences, landscape appreciation, 3D landscape visualization, public participation



## A Study on Look up View's Evaluation: A Case of Takao Quasi-National Park

\*水内 佑輔<sup>1</sup>、古谷 勝則<sup>2</sup> \*Yusuke Mizuuchi<sup>1</sup>, Katsunori Furuya<sup>2</sup>

1. 東京大学大学院農学生命科学研究科、2. 千葉大学大学院園芸学研究科

1. The University of Tokyo Forests, 2. Graduate School of Horticulture, Chiba University

In natural recreational site, visitors experience a variety of landscapes. Visitor' s satisfaction comes from not only a superb landscape but also an accumulation of many landscape experiences. Hence, identifying pattern of landscape experience leads to better planning and management. In this study, focusing on the Look up View (LUV), we aimed to clarify its features through comparison with other landscape types. A survey was conducted with 60 respondents, and the Inariyama trail of Takao Quasi-National Park was selected as a site. The respondents were instructed to take over 15 photographs of landscapes which respondents prefer. They were also instructed that carrying GPS. Immediately after walking the site, respondents selected 15 photographs, and noted down 15 photographs profile (contents of photographs). Each 15 photographs were evaluated into five measures, 1) aesthetic, 2) naturalness, 3) rareness, 4) atmosphere, and 5) total evaluation, on a scale of one to five. 900 photographs were collected and categorized into 12 types. To compare four major landscape types (LUV, Prospect, Surroundings, Spatial trees) MANOVA with Tukey HSD post-hoc test was used. GIS analysis also conducted to examine spatial features of LUV.

The result of GIS analysis, LUV's distribution was sparse, and spatial features were undetected. In the measure of aesthetic, mean value of LUV was the largest (4.15). It highly scored as well as Prospect (4.11) than Surroundings and Spatial trees (3.64, 3.76) in 99 % confidence. In the naturalness, LUV also scored the largest (4.11) as well as prospect and Spatial trees (4.03, 3.76), was higher than Surroundings (3.64). In the total, LUV scored 3.85 was equal to prospect (4.01) which is the best landscape type on the site. In the rareness, however, LUV was low scored (3.00) than Prospect (3.50). These showed that Look up View was a landscape type that had visitors feel deep impression despite being familiar with it. The findings lead us to conclude that variety of landscape experiences should be taken in account for landscape planning and management.

 $+ - \nabla - \kappa$ : landscape, photographs, GIS, GPS Keywords: landscape, photographs, GIS, GPS

# Landscape Experience, Landscape Appreciation and Landscape Visualisation

\*Eckart Lange<sup>1</sup>

1. Department of Landscape, The University of Sheffield, United Kingdom

Our environment has a range of sensory qualities. Humans possess a number of sensory systems that allow them to sense and perceive these qualities. These include an auditory system (the sense of hearing), a tactile system (the sense of touch), a kinaesthetic system (the ability to sense and coordinate movement), a vestibular system (the sense of balance), an olfactory system (the sense of smell), a gustatory system (the sense of taste) and a visual system (the visual sense). Of all senses, the visual sense is by far the most dominant component of human sensory perception (Bruce et al. 1996). The planning and design disciplines, including e.g. Landscape Architecture, Architecture, Planning, etc., deal with the analysis, planning, and design of our physical environment. In terms of addressing the range of senses they tend to focus on the visual landscape. The visual environment with its numerous visual stimuli can be represented via a palette of analogue and digital media. They are essential to communicate proposed changes to experts as well as to the public in the decision-making process.

The level of sophistication of visual representations is constantly improving. However, a landscape when experienced off-site and as represented through a representation medium will always be a rather reductionist experience. Most planning and design experts tend not to be aware of this fact. Neither do our planning and design approaches take this into account. On the other hand, an entire artificial representation of our sensory experiences in a laboratory environment poses rather insurmountable technological hurdles. Only recently, visual and acoustic stimuli are combined in a virtual environment (Lindquist et al. 2016).

Through an on-site experience it is possible to experience the multitude of sensory impressions. However, by visiting a real site one would only be able to perceive the existing situation. On rare occasions 1:1 scale models are erected to indicate proposed changes or display boards on construction sites are used to show new developments. Recent innovations in Augmented Reality permit to overlay digital visualisations on real-world imagery, e.g. showing only the future changes on top of the existing environment (Lange 2011). Increasingly, mobile devices are able to display complex 3D graphics (Haynes & Lange 2016), while at the same time access to high-capacity mobile phone networks is available. Mobile devices such as tablet PCs and smart phones can support augmented reality, thus providing an expansion of the currently available planning and design toolkit allowing to experience an augmented reality view of the real world on-site while also providing the user with a complex sensory experience.

#### References

Bruce, V., P. R. Green and M. A. Georgeson 1996. *Visual perception, physiology, psychology and ecology*. Psychology Press, East Sussex.

Haynes, P. and E. Lange 2016: In-situ Flood Visualisation Using Mobile AR. *IEEE Symposium on 3D User Interfaces* 2016 (3DUI), 19–23 March, Greenville, SC, USA, 243-244.

Lange, E. 2011. 99 volumes later: We can visualise. Now what? *Landscape and Urban Planning* 100, 403-406.

Lindquist, M., E. Lange and J. Kang 2016. From 3D Landscape Visualization to Environmental Simulation: The Contribution of Sound to the Perception of Virtual Environments. *Landscape and Urban Planning* 148, 216-231.

Keywords: Visual representation, virtual reality, augmented reality, communication, sensory environments, landscape appreciation



### Forest Landscape of Wood Burial in Japan and Germany

\*上田 裕文<sup>1</sup> \*Hirofumi Ueda<sup>1</sup>

#### 1. 北海道大学 1. Hokkaido University

This study compared forest landscape of wood burials between Germany and Japan. Japan introduced forest study and forestry technique since 19th centry and the forest landscapes in the both countries have a lot of resemblance. Recently, a new type of forest use namely wood burial is spreading similarly, but the forest landscapes of the wood burials differ from each other in appearance. The actual states of wood burials in Germany and Japan were figured out through literature researches, fieldworks and interview researches. German wood burial is placed as a new forest use in addition to the multiple public functions of forest. In contrast, Japanese wood burial is a new form of graveyard. In addition to that, German wood burials are managed by private enterprises which contract with forest owners and controlled by foresters in a sustainable nature based forest management. This is the reason why the wood burials in Germany show similar forest landscape. Japanese wood burials have already diversified and some forest-type wood burials are usually managed by Buddhist monks, which face similar challenges in sustainable forest management.

キーワード : 樹木葬墓地、森林景観、ドイツ、日本 Keywords: wood burial, forest landscape, Germay, Japan



## Cross-cultural Comparison of Preferences for Birds as Landscape Elements

### \*WAHYUNI Sry<sup>1,2</sup>, Katsunori FURUYA<sup>2</sup> \*Sry WAHYUNI<sup>1,2</sup>, FURUYA Katsunori<sup>2</sup>

1. Graduate School of Bogor Agricultural University、 2. Graduate School of Horticulture, Chiba University 1. Graduate School of Bogor Agricultural University, 2. Graduate School of Horticulture, Chiba University

#### 1. Introduction

Birds are both a landscape element and common form of wildlife found in parks. However, human preferences for birds as landscape elements need to be understood to know how to create better environments. In this study, we determined people' s preferences for birds as landscape elements in parks, comparing Indonesia and Japan.

#### 2. Study Methods

The survey was conducted using a purposive sampling method, with respondent groups consisting of Indonesian and Japanese people. The data were obtained through a questionnaire survey in Japan, while Indonesian respondents were tested using an online questionnaire. In this questionnaire, respondents were asked to evaluate six landscape images (consists of three original and three modified images) on a scale ranging from "strongly like and very high scenic beauty" (10) to "strongly dislike and very low scenic beauty" (1). Besides this, respondents were also queried on their personal information and perceptions towards birds as landscape elements. The data were analyzed using scenic beauty estimation and the Mann-Whitney U Test.

#### 3. Results and Considerations

A total of 252 respondents participated in this study, consisting of 135 Indonesians and 117 Japanese. Among the Indonesian respondents, there were more females (69.63%) than males (30.37%); conversely, there were more males (60.68%) than females (39.32%) among the Japanese respondents. A majority of Indonesian respondents visited a park less than once a month (50.37%) and spent one and a half hours or less there (53.33%). A majority of Japanese respondents visited a park once a month (45.30%) and spent one and a half hours or less there (71.79%). About 6.13% of Indonesian respondents and 3.24% of Japanese respondents visited a park for the purpose of bird watching. A majority of respondents agreed that birds are interesting (94.07% of Indonesian respondents and 65.81% of Japanese respondents) and did not feel disturbed by their presence in parks (97.78% of Indonesian respondents and 92.31% of Japanese respondents).

The results revealed that respondents from both countries preferred birds as landscape elements in parks; however, in evaluating scenic beauty (Figure 1), Japanese respondents tended to give lower scenic beauty scores for two landscape images with birds (L4=33.40 and L7=26.69) than Indonesian respondents (L4=37.69 and L7=71.17). Mann-Whitney U Test revealed that there were significant differences in preferences between Indonesian and Japanese respondents for two landscape images (L2 and L7). Landscape image two (L2) was a modified version of landscape image seven (L7) that featured birds.

#### 4. Conclusion

In this study, a majority of respondents agreed that birds are interesting and did not feel disturbed by their presence in parks. It was evident that people from both countries appreciated birds as landscape elements in parks. However, there was a slight difference in how they appreciated birds as landscape

#### elements.

 $t = - \nabla - \kappa$ : Birds, Landscape Images, Preference, Urban Wildlife Keywords: Birds, Landscape Images, Preference, Urban Wildlife



Indonesia Japan



Note: \* original image \*\* modified image

## Comparing people's visiting preferences for Chinese autumn-colored landscapes based on color preference evaluations in China, Japan, and Indonesia

\*Sai Guan<sup>1</sup>, Sry WAHYUNI<sup>2</sup>, Katsunori Furuya<sup>3</sup>

1. Nanjing agricultural University, 2. Graduate school of Bogor agricultural University, 3. Graduate School of Horticulture, Chiba University

#### 1. Introduction

Many researchers have reported that people's color preferences differ owing to geography, culture, and traditions, but few have paid attention to climate conditions and color changing processes produced by climate change. In this study, we attempt to uncover people's differing color preferences in different climate zones (temperate and tropic), and compare people's visiting preference based on a color preference evaluation. Autumn-colored landscapes were selected as our research object because they are unique to temperate zones, which witness the shedding of leaves from deciduous trees. The expected results are as follows: 1) viewing experiences influence people's color preferences; 2) and tropical-zone dwellers prefer colored scenery more than temperate-zone dwellers.

#### 2. Study Methods

In this study, we chose five famous Chinese autumn-colored landscapes and developed three photos that showed the color changing process in each spot. Firstly, we asked about respondents' viewing experiences of autumn-colored landscapes, and then respondents were required to choose their preferred photo. Finally, they were asked to add content that described the photo (such as landscape type, attraction point, psychological feelings, etc).

#### 3. Results and Considerations

A total of 105 respondents participated in this study (35 from each country). All respondents were students (from undergrads to doctoral students) to ensure they had a similar background. The results revealed that Indonesian respondents most preferred colored scenery, while respondents from China and Japan almost had the same result—they did not have very strong preferences for colored scenery.

Keywords: color preference, visiting preference, autumn colored landscape, coloring changing process, cross-national study

### Spatial typology in informal urban green spaces: The case of Ichikawa city, Japan

\*minseo kim<sup>1</sup>, Christoph D. D. Rupprecht<sup>2</sup>, Katsunori Furuya<sup>1</sup>

1. Chiba University Graduate School of Horticulture , 2. FEAST Project, Research Institute for Humanity and Nature

Today, more than half of the world' s population lives in urban areas, and there is a large body of research on urban green spaces where one can experience nature directly and indirectly. Studies have found that properly established, designed, and managed urban green spaces such as urban parks, second growth, etc., provide not only social, environmental, and economic benefits for cities, but also mental, physical, and physiological benefits for human beings. These studies, however, focused on formal urban green spaces such as urban parks and second growth, which are managed by governments. In order to improve people's quality of life, governments have tried to make and manage green spaces, but encountered financial and spatial challenges. Even if the volume of green spaces in urban areas is quantitatively met, will it actually be sufficient in terms of availability? Given the current circumstances of urban green spaces, this research responds to the situation by addressing the following questions: (a) What criteria can by categorized between formal urban and informal urban green spaces? (b) How much informal green space (IGS) is distributed in one city? (c) Can IGS be viewed as a new type of green space in urban areas? (d) And how is the spatial distribution of IGS related to population density and land use? Green spaces in urban areas have become more important; however, most studies in this area have focused on public or mass green spaces such as urban parks, second growth, etc. However, in terms of existing park management systems, it costs a lot to maintain these spaces, and they may fail to satisfy residents' varied needs. Comparatively less research has focused on IGS or minor green spaces; actually, little outside of major green spaces has been considered. Some scholars have begun to study urban wild-scapes or ambiguous landscapes to determine their potential in urban areas. Rupprecht and Byrne (2014) argued that IGS such as vacant lots, brownfields, and street or railway verges comprise part of this urban nature. They noted that IGS is an emerging topic in urban greening research; however, IGS can also be vulnerable to being contested politically, legally, and aesthetically. Rupprecht and Byrne identified nine potentially different types of IGS: street verge, lot, gap, railway, brownfield, waterside, structural, microsite, and power line IGS. IGS can also be called ambiguous, in-between, liminal, and ambivalent vegetated spaces.

Ichikawa city is located in northwestern Chiba Prefecture, Japan. The city has an estimated 481,790 people (as of February 2016) and a 5,745ha area. Facility green spaces including urban parks, public facilities, and private facilities in the city make up 382ha. The volume of urban parks per person is 2.70m<sup>2</sup>. This is not sufficient under the Urban Park Act of Japan. The Act states that the standard volume of urban parks per person is 10m<sup>2</sup>. The volume of all of the green spaces in Ichikawa per person, even though these green spaces include public facilities, is just 7.28m<sup>2</sup>. This means that there are not enough actually usable green spaces.

Vacant lots make up much of Ichikawa city's IGS. IGS in Ichikawa city can be classified by accessibility, soil conditions, and vegetation structure. Some IGS are accessible, while others are not. Some IGS may fulfill a role in the urban ecology, in which they can provide habitat for flora and fauna such as biotopes, and other IGS may serve urban society by providing recreational spots for residents. In present Ichikawa city, the volume of parks and green spaces per person is low compared to surrounding cities. The volume of parks per person in Ichikawa is 2.70m<sup>2</sup>, which is lower than the Urban Park Act of Japan stipulates (10m<sup>2</sup>). Potential green spaces such as IGS can be functional places instead of urban parks, affecting not only residents' health but also providing habitat for flora and fauna. The following research can conduct an

analysis on the land use patterns, population density proportion, and perspectives of residents, because there are diverse types of land use pattern in Ichikawa city and the perceptions or preferences of residents may differ depending on these patterns.

Keywords: Typology green space, Informal urban green space, Urban wildscape, Vegetation

## The relationships between alun-alun and urban facilities based on old maps

\*小堀 貴子<sup>1</sup>、古谷 勝則<sup>1</sup> \*Takako Kohori<sup>1</sup>, Katsunori Furuya<sup>1</sup>

#### 1. 千葉大学大学院園芸学研究科

1. Graduate school of Horticulture, Chiba University

#### 1.Introduction

In recent years, due to swift changes in the shift from a local to a globalized environment, cities are facing a crisis of how to standardize identities, which in turn forces them to compete with each other to become attractive tourist destinations. This means that cities develop strategies to support, sell, and advertise within the global market. Recent surveys have revealed that there are mainly three approaches to promoting cities: cultural mega events, restoring and promoting heritage, and constructing iconic buildings.

This study focuses on *alun-alun*, which are iconic open spaces in Java, Indonesia. In Southeast Asia, cities are facing a crisis of change due to rapid expansion and development. To preserve iconic open spaces, this study sheds light on their historical value, especially in terms of urban planning. This research aims to clarify the conditions of *alun-alun* and what kinds of facilities relate to them.

#### 2.Method

This study used maps from the Dutch colonial period (1893 to 1943) and a map from the Japanese colonial period (1943 to 1945), which can be found in Leiden University's online library. Facilities within a 500-meter radius around *alun-alun* were extracted and analyzed.

#### 3.Results

*Alun-alun* can be found all over Java. According to the survey, 11 cities included the names of *alun-alun* directly in maps: Bandung, Cirebon, Tegal, Banyumas, Megelang, Wonosari, Madiun, Kediri, Malang, Banyuwangi, and Bangkalan. This means that during the era when the maps were created, *alun-alun* were recognized.

Some findings became clear in terms of the relationship between urban facilities and *alun-alun*. The presence of mosques was confirmed in 10 cities. All of them were directly connected to the western side of *alun-alun*. Office of regents were confirmed in all 11 cities, but there was no rule regarding the direction of regents. They were in the north in four cities, in the east in four cities, and in the south in three cities. Other administrative facilities were confirmed as well: post offices (five cities), prisons (five cities), telegram offices (four cities), telephone offices (four cities), city halls (two cities), office of assistant resident (two cities), police departments (one city), water offices (one city), fire stations (one city), cadaster offices (one city), and barisan barracks (one city). In the maps, schools were confirmed in all 11 cities. Several schools were confirmed in each city. Certain types of schools (such as vocational and European ones) were verified as well. Regarding other facilities supporting cities, the following were found: hotels (six cities), banks (six cities), markets (four cities), sociëteit (three cities), hospitals (two cities), parks (two cities), pharmacies (two cities), Chinese captain houses (two cities), kindergartens (one city), restaurants (one city), shops, stations (one city), and theaters (one city).

#### 4.Conclusion

In this research revealed that mosques and regents had a strong relationship with alun-alun. In terms of

location, mosques were directly connected to the western side of *alun-alun*, but office of regents were not bound by any specific rules, especially regarding direction. There were many administrative facilities and other facilities supporting cities near *alun-alun*.

キーワード:インドネシア、オープンスペース、都市施設、都市のアイデンティティ、都市計画 Keywords: Indonesia, open space, urban facility, city identity, urban planing

			West	North west	North	North east	East	South east	South	South west
	1	Bandung	• Mosque		• School		• Theater		• Bank	
	2	Cirebon	• Mosque		• Hotel		<ul> <li>Assistant resident</li> <li>Bank</li> </ul>		• Regent	
	3	Tegal	• Mosque						<ul> <li>School</li> </ul>	
	4	Banyumas	• Mosque		• Regent • School	• Europian school	<ul> <li>Hospital</li> <li>Telephone office</li> <li>prison</li> <li>Bank</li> </ul>			
0 E	5	Megelang	• Mosque	Church     Telephone     office	• Regent • School • Church • Sociëteit	• School	<ul> <li>Telegram</li> <li>office</li> <li>Hotel</li> </ul>		<ul> <li>Cadastre office</li> <li>Water office</li> <li>School</li> </ul>	• Fire station • Prison
- 2 5 0 m	6	Wonosari			<ul> <li>The house for Mayor</li> <li>Hospital</li> <li>Prison</li> </ul>			• School	Post office	• Assistant resident
	7	Madiun	• Mosque		• School		• School • Bank		<ul> <li>Chinese captain house</li> <li>shop</li> </ul>	
	8	Kediri	• Mosque				<ul><li>Regent</li><li>School</li></ul>		• Market • School	
	9	Malang	• Mosque • School		• Church • Hotel • Bank		• Regent		<ul> <li>Hotel</li> <li>School</li> <li>Pawn shop</li> </ul>	
	10	Banyuwangi	• Mosque		• Regent • School		<ul> <li>Prison</li> <li>Christian cemetery</li> </ul>	• Market		
	11	Bangkalan	• Mosque				• Regent	<ul> <li>Barisan barracks</li> </ul>		

			West	North west	North	North east	East	South east	South	South west
	1	Bandung	Pharmacy	Post office		<ul> <li>School</li> </ul>	• Restaurant		• Regent	
	2	Cirebon		Station			• School			
	3	Tegal			• Market		• Park		• Regent	
	4	Banyumas				• Hotel	• Market	• District chief	<ul> <li>Europian school</li> <li>Telegram office</li> <li>Post office</li> <li>Sociëteit</li> </ul>	
3	5	Megelang	• Police	<ul> <li>Hotel</li> <li>Training college</li> <li>School</li> </ul>	• City Hall • Kindergarten		Paint factory			
2 5 0 m - 5	6	Wonosari					• Regent	<ul> <li>Telephone office</li> <li>Bank</li> <li>Hotel</li> </ul>		
0 0 m	7	Madiun			• Regent • School • Prison	<ul> <li>Telephone office</li> <li>Hotel</li> </ul>	• Hotel	• Bank	• Pharmacy • Hotel	
	8	Kediri			• Chinese captain house					
	9	Malang	• Bank	<ul> <li>Telegram office</li> <li>Post office</li> </ul>	• City hall				• School	• School
	10	Banyuwangi					<ul> <li>Sociëteit</li> <li>School</li> <li>Teachers house</li> <li>Telegram office</li> </ul>	Post office     Square		
	11	Bangkalan					School			

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## 2015年までの景観現象の理解の観点からの景観評価研究の動向 A trend of landscape appreciation studies from the view point of understanding of landscape phenomenon until 2015

\*青木 陽二<sup>1</sup>、熊谷 圭介<sup>2</sup> \*yoji aoki<sup>1</sup>, keisuke kumagai<sup>2</sup>

1. 国際俳句交流協会、2. 長野大学

1. Haiku International Association, 2. Nagano University

#### 1.はじめに

心理測定法を用いた景観評価は、Peterson(1967)によって始まった。このような研究は1970年から 1990年にかけて普及したが、最近このような研究は減少傾向にある。図1は論文数が同様の傾向にあることを 示し、この減少の背景は、世界中の景観評価研究が直面している問題にある。これまで、測定と分析で様々な 技術開発が試みられ、風景の嗜好を説明するための最初の予測モデルはShafer、Hamilton and Schmidt(1969)によって提案された。このアプローチはCarlson(1977)によって批判されたが、この批判 は決してこれらの問題を解決する方法を提案しなかった。

2.日本での理解

このような研究は、1970年代には日本と米国はこの分野の技術開発をリードした。日本の研究者は、普遍 性とその結果の信頼性を前提として、実験結果の適用に興味を持った。日本では、近くいる大学生で得られた 結果を簡単に利用することによって形成された。彼らは、全国で統一された効果的な教育システムで教育され てきた。

3. 西欧諸国における理解

一方、アメリカの研究者は、移民が多く、多様な文化的、民族的背景の影響に興味を持っていた。彼ら は、社会のさまざまな属性に関心を持ち、地域社会でのコンセンサスを必要としていた。計画者は、計画に データを適用するために、より多くの考察が必要だった。結果として、彼らは学術雑誌に数多くの研究を蓄積 した(図2)。

4.理解の進化

日米からヨーロッパや世界に広がった景観評価研究は、アメリカと同様の民族的・文化的背景のために異なる結果が得られた。研究者は、得られた結果が何を意味するか、すなわち景観評価とは何かという問題にぶつかった。私たちは現在、景観評価という現象は、人間が現場での経験を通して体験した精神的側面の一部であり、景観の評価に対する人間の理解は、歴史的時代を通じて進化したことを認識した(Appleton

1986、Bourassa 1991、Aoki and Kitamura 2001)。

5.壁に直面する

この問題は、我々が考慮すべき新たな疑問、すなわち時代を通した普遍性と不変性、そして地域における景 観評価の問題をもたらした。物理的な計画で景観を形作った計画者は、その結果に不安を感じ始め、ある時点 で得られた景観評価の結果が真実であり、計画の有用性をいかに保つかを知りたくなった。ここで、景観評価 調査が大きな壁に直面した(青木2014、青木2015)。

6.最近の動向

しかし、近年、途上国では景観評価が積極的に研究されており、2011年から再び論文数が増加している。開発途上国からのこの研究は、景観評価の分野で現在直面している壁を突破する可能性がある。 JpGU2013とJpGU2014での議論に基づき、今年のワークショップの成果がこれらの努力を支えてくれることを願う。

#### 謝辞

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参考文献

Aoki, Y. (2014) Landscape Appreciation reported at the Conference of Japan Geoscience Union 2013 in term of Landscape Experience, J. of Environmental Information Science 42(5), 111-118.

Aoki, Y. (2015) A historical review of landscape appreciation studies published in English journals until 2013, J. of Environmental Information Science 43(5), 115-124.

Aoki, Y. and Kitamura, S. (2001) Ontogenic and phylogenic evolution of the human appreciation of the landscape, 38th IFLA World Congress Singapore 2001 conference proceedings, Singapore, P114-122pp. Appleton, J.H. (1986) The Experience of Landscape, Hull University Press, 293pp.

Bourassa, S.C. (1991) The Aesthetics of Landscape, Belhaven Press, London, 168pp.

Carlson, A.A. (1977) On the possibility of quantifying scenic beauty, Landscape Planning 4, 131-172.

Peterson, G.L. (1967) A model of preference: quantitative analysis of the perception of the visual appearance of residential neighborhoods, J. of Regional Science, 7(1), 19-31.

Shafer, E.H., Hamilton, J.F. and Schmidt, E.A. (1969) Natural Landscape Preferences: A Predictive Model, J. of Leisure Research, 1(1), 1-19.

#### キーワード:景観現象の理解、景観研究の歴史、2015年まで

Keywords: understanding of landscape phenomena, trend of landscape study, until 2015



# Cross-cultural culinary mapping —How locals and tourists navigate the foodscape of Chiang Mai, Thailand

\*Christoph Rupprecht<sup>1</sup>

1. FEAST Project, Research Institute for Humanity and Nature

Local food and food culture is integral to residents' everyday lives, but also an important driver of tourism. Whether we explore as visitors, or know exactly where to find our favourite treats, shapes how we experience the local foodscape and interact with it. These diverging roles may also result in radically different personal foodsheds, including different social and environmental impacts associated with our food consumption behaviour. Understanding these differences may help to inform not only tourism and environmental planning, but also provide a glimpse into how we as individuals navigate the local foodscape and how food connects us with other people, animals, plants.

This study reports preliminary results from a case study comparing how the local foodscape of Chiang Mai, Thailand, is navigated by locals and tourists. Drawing upon theoretical work by Cohen and Avieli (2004) on food in tourism, the central questions were: How do locals and tourists look for, find, and eat local food? Why do they chose one food over another? What do they eat? Where do they eat? How does their food connect them with the environment? In a three day joint workshop with Japanese students (tourists) and Thai students (local), they took turns as participant observers and observation subjects in the food and drink on offer, then shared their observations and attempted to conceptually and spatially map the results together. These results are then further discussed to probe whether this approach allows to map the differences in local and tourists foodshed, with implications for future research.

Keywords: foodscape, foodshed, tourism, participant observation, cross-cultural comparison, geography



The Effect of Forest Management of Secondary Coniferous Forests on User's Landscape Appreciation and Psychological Restorativeness. The Effect of Forest Management of Secondary Coniferous Forests on User's Landscape Appreciation and Psychological Restorativeness.

\*高山 範理<sup>1</sup> \*Norimasa TAKAYAMA<sup>1</sup>

1. 国立研究開発法人 森林総合研究所

1. Forestry and Forest Products Research Institute in Japan

-INTRODUCTION: We investigated the influence of forest management on landscape appreciation and the psychological restorative effect in an on-site setting by exposing respondents to an unmanaged coniferous forest (U.F.), and a managed coniferous forest (M.F.) for a particular period. The both forests, which consisted of Japanese larch and Japanese red pine (a second-growth forest), were fairly similar in the land cover type and vegetation one another.

-METHODS: We considered the experiment in late July. We set the two experimental plots (0.25 ha) in the both forests of Fuji lyashinomoroi Woodland Study Center as U.F. setting and M.F. setting. Here, the mean temperature, relative humidity and sound pressure were almost the same during the experiment except illuminance. The respondents were eighteen individuals (eighteen males; aged twenties to fifties) for the experiment. As for eliminating an order effect, the respondents were divided into the two groups (Group A and Group B) in every nine-person. The respondents of Group A were exposed to U.F. setting at first and then were done to M.F. setting. However, the respondents of Group B were exposed to each setting by the opposite order. They were individually exposed to the both settings while sitting for 15 min. In the both settings, the respondents were required to answer the three questionnaires to investigate the psychological restorative effect at before and after the experiment (mood; POMS, affect; PANAS, subjective restorativeness; ROS). For comparison of landscape appreciation, the respondents were required to answer other two questionnaires at after the experiment (scene appreciation (SD), a restorative property of environment (PRS)).

-RESULTS: As a comparison result by the statistical test, regarding a restorative property of environment (PRS), M.F. setting had statistically higher property in "Being away" and "Coherence",

"Compatibility" than U.F. setting (p< .05). About scene appreciation (SD), M.F. were appreciated statistically higher in "brightness," "openness," "comfort," "beauty," "safeness" and "healthiness" (p< .05), and "order" and "thin" (p< .01). On the other hands, by the result of two-way repeated ANOVA (difference of setting (U.F. -M.F.) × presence of experience (before exposure -after exposure)), there were no statistical relationship with the mutual interaction between difference of setting and presence of experience in "mood" (POMS), "affect" (PANAS) and "subjective restorativeness" (ROS).

Then, as a result of having checked both the main effects, the difference of setting did not seem to raise a psychological restorativeness. Otherwise, the presence of experience could give a statistical influence negative "affect" (PANAS; p<.05) and "tension and anxiety" (POMS; p<.05). The difference of setting also reduced numerical values for them in M.F. setting. In contrast, before and after exposure could give a statistical influence and raise "vigor" in U.F. setting (POMS; p<.05).

-CONSSIDERATION: Consequently, negative affect, tension, and anxiety might come to decrease because the managed forest setting had a sufficient restorative property of the environment and the better scenic environment. Conclusively, respondents would obtain a psychological restorativeness to some extent by being exposed to M.F. setting. On the other hand, even though vigor rose in U.F. setting, we would consider the reason for it by these three hypotheses as follows;

 all the respondents were men. 2) the sample group had a tendency toward a relatively low neuroticism and a high extroversion by the personality traits test which we also conducted as one of the optional tests.
 if we referred to the Kaplan's landscape preference theory, we could think of the possibility that U.F. setting would bring a sense of mystery and exploration to the respondents who had the trait mentioned above.

#### キーワード:景観評価、回復特性、間伐、針葉樹二次林、森林管理

Keywords: Landscape appreciation, restorativeness, Thinning, Secondary Coniferous Forests, Forest Management

category		Landscap	e appreciation	Psychological restorativeness			
abbreviated form		SD	PRS	POMS	PANAS	ROS	
official name		Semantic differential method	Perceived restorativeness Scale	Profile of mood states	Positive and negative affect schedule	Restorative outcome scale	
contents		scene appreciation	restorative property of environment	mood	affect	subjective restorativenes	
number of subscales		25	5	6	2	1	
timing of the measurement		after	exposure	befor	e and after exposu	ire	
wilcoxon signed rank test		higher in 'brightness', "openness", "comfort", "beauty", "safeness", "healthiness", "order" and "thin" than U.F. (p<.01 to p< .05).	higher in "Being away", "Coherence" and "Compatibility" than U.F. (p<.05).				
two-way repeated ANOVA	mutual interaction			n.s.	n.s.	n.s.	
	main effect			U.F.: vigor (p< .05)↑ M.F.: tension and anxiety (p< .05)↓	M.F.: negative affect (PANAS; p .05)↓	< n.s.	

. U. F.: unmanaged forest, M. F.: managed forest,  $\uparrow$  :increased,  $\downarrow$  :decreased

## Study About Childhood and Recent Memories of Daily Life Sceneries Among University Students Study About Childhood and Recent Memories of Daily Life Sceneries Among University Students

\*劉 成玉<sup>1</sup>、高瀬 唯<sup>2</sup>、大畠 拓真<sup>3</sup>、古谷 勝則<sup>1</sup> \*Liu chengyu<sup>1</sup>, Yui Takase<sup>2</sup>, Takuma Oohata<sup>3</sup>, Katsunori Furuya<sup>1</sup>

1. 千葉大学大学院園芸学研究科、2. 茨城大学農学部、3. 千葉大学園芸学部

1. Graduate School of Horticulture, Chiba University, 2. Faculty of Agriculture, Ibaraki University, 3. Faculty of Horticulture, Chiba University

#### 1. Introduction

A sustainable society is one that coexists with nature. What is nature which affects our daily life? In this study, sketches of daily life sceneries during childhood and those during young adulthood have been analyzed, and individual memories towards surrounding nature have been revealed.

#### 2. Study Methods

Research on "Familiar Sceneries in Daily Life" was conducted from November until December, 2016. The survey was conducted with Japanese university students at Chiba University, and 200 responses were collected. In this survey, respondents were asked to draw sketches of daily life sceneries during their childhood and young adulthood. In addition, the following items were studied: structural elements of the sketches, areas where they have experienced nature, and the distance between people and the scenery. The current address and the address during childhood were collected, and each of impression of green space in those addresses was also evaluated by respondents.

#### 3. Results

During childhood, respondent's places of residence spreads across 35 prefectures. During their young adulthood, they become concentrated in Chiba Prefecture, Tokyo and three other surrounding prefectures. Over 60% lived in residential areas in the suburbs during both childhood and young adulthood; however, the proportion of respondents who feel that green space around residency was plentiful varied at 78.5% in childhood versus 40.5% in young adulthood. They recognized surrounding green space lesser during young adulthood than during childhood.

The categories of the spaces drawn were: inside school, parks, farm land, compound spaces, river/water side, a way home, mountains, and forests. Parks were drawn most often (18.5%) for childhood, and inside school (42.5%) for young adulthood. Those strong tendencies were observed in young adulthood sketches compared to the childhood sketches. The distance to the scenery drawn was as follows: within 10 meters counted 67.0% for childhood, and 55.0% for young adulthood. Sceneries drawn were both in short distances.

Their own actions and geographic landscape/geography left stronger impressions during childhood than young adulthood (p<.01).

#### 4. Considerations

It has been confirmed that "surrounding nature" is influenced by the space where one usually spends time, rather than influenced by the distance to the scenery .This study showed that there was a difference of impressions of "surrounding nature" between childhood and young adulthood.

キーワード:風景スケッチ、児童期、青年期、日常生活

Keywords: Landscape Sketch, Childhood, young adulthood, Daily Life



## 善光寺本堂とその参道から見ることのできる近辺の地形の視特性 Visual Characteristics of Landforms in the Seeable Near Area Surrounding Hon-do Hall at Zenko-ji Temple and its Approach Road

### \*横関 隆登<sup>1</sup>、高山 範理<sup>2</sup>

\*Takato Yokoseki<sup>1</sup>, Norimasa Takayama<sup>2</sup>

1. 東京大学大学院農学生命科学研究科、2. 国立研究開発法人森林総合研究所

1. Graduate School of Agricultural and Life Sciences, The University of Tokyo, 2. Forestry and Forest Products Research Institute

A town that develops in the vicinity of a temple or shrine is called "Monzen-machi" in Japan, and the unique atmosphere of these towns attracts tourists. A "Monzen-machi" town in Japan challenges practical sustainable use while conserving the value of its unique atmosphere. The central section of Nagano city (Nagano Prefecture, Japan) is a "Monzen-machi" town in the vicinity of Zenko-ji temple. The locals believe that Zenkoji temple brings value to the town. However, the value has not been assessed to define the environment surrounding Zenkoji. Determining an evaluation method for Zenkoji will be helpful when considering the harmony between development and conserving other "Monzen-machi" towns in Japan. Discussing the setting is a way to harmonize the relationship between land use as the figure and landform as the ground. One previous study has focused on the approach road, whereas another study investigated the Zenko-ji-daira basin. The purpose of this study was to target the landforms in the seeable near area surrounding Hon-do hall at Zenko-ji temple and its approach road to clarify the visual and landscape characteristics.

The target area was a mountainous hill area within 2.4 km of Hon-do hall at Zenko-ji temple and its approach road. The ground precincts of the temple were formed due to erosion and deposition by the Yubuku-gawa River. San-mon and Nioh-mon gates were built on the approach road to the temple. Nioh-mon gate can be seen from Shinden-cho cross-point outside the Zenko-ji temple precinct.

This study defined the landscape as the space with visual meaning and structure. A survey was conducted to grasp the composition and display characteristics from a number of perspectives. Eight survey points, including objects on the approach road, buildings, the historic site, a culvert, and a cross-point were chosen. The perspective was set at a height of 1.5 m from the ground. A digital elevation model (DEM) with 5-m mesh intervals was provided by the Geospatial Information Authority of Japan. These data were last updated on November 25, 2015. Just for information, before this survey, features of the target area in the middle of early modern times are also arranged. The material used the map "Shinano-minochigamiwakejinjya-isekinozu".

We summarized the significance of the characteristics of the three visual perspectives of the landforms in the seeable near area surrounding Hon-do hall at Zenko-ji temple and its approach road. The Zenko-ji temple precinct is surrounded by mountains and hills, which formed a visual boundary. The Zenko-ji temple precinct is a visual "focus, center, and goal" because of these visual boundaries. The approach road to Zenko-ji temple generated a variety of views using the landform and buildings. The approach road to Zenko-ji temple is extended in the north-south direction where there are three buildings has a dynamic feeling. The outside of the approach road has landmark and vista feelings due to the landforms. Nioh-mon gate can be seen from Shinden-cho cross-point outside the Zenko-ji temple precinct. The visual

"Domain" in this area can be divided into two visual types by the different perspectives of seeing Nioh-mon gate. The three perspectives summarized above suggest that the visual characteristics of the landform in the seeable near area surrounding Hon-doh hall at Zenko-ji temple and its approach road are composed of four elements: Boundary; Focus, Center, and Goal; Direction; and Domain. These four elements describe the meaning of the space featured by the three perspectives. Our concept of four components based on a survey is consistent with previous studies.

#### キーワード:視特性、周辺環境、善光寺

Keywords: Visual Characteristics, Surrounding Environment, Zenko-ji Temple

## Current Situation of and Improvement Ideas for Sukiyabashi Park in Ginza, Tokyo Current Situation of and Improvement Ideas for Sukiyabashi Park in Ginza, Tokyo

\*山田 陸<sup>1</sup>、古谷 勝則<sup>2</sup> \*Atsushi Yamada<sup>1</sup>, katsunori Furuya<sup>2</sup>

#### 1. 千葉大学園芸学部、2. 千葉大学大学院園芸学研究科

1. Faculty of Horticulture, Chiba University , 2. Graduate school of Horticulture, Chiba university

Sukiyabashi Park was renovated in 2016; however, visitors are still scarce even as of now. Before the renovation, "Fountain of Meguriai" was placed in the park; and this park was historically admired as a space surrounded by an outer moat and Yanagi-dori. After the renovation, "Young Clock Tower" by Taro Okamoto remains in the park; however, a space to touch water has vanished. The following study methods were applied to clarify the issues: 1) understanding the current situation by field survey, and 2) understanding the historical transitions through literature search. Furthermore, improvement ideas to address the issues have been presented with a ground plan, a cross section, and a model.

The idea was thus presented to preserve a historical meaning through designs which are associated with water scenery. It was accomplished, as this research and suggestions focused on parks and historical elements of its location and the neighboring area. Finally, the park also allows workers in the area and visitors who came for shopping to casually rest, as this place offers plants and water in the space surrounded by buildings.

キーワード:設計計画、水辺、数寄屋橋公園 Keywords: design and planning, Water, Sukiyabashi Park

