Landscape Preferences of Indonesian People Towards Colored Trees in Japan

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1. Introduction

Deciduous trees are intriguing because they offer seasonal visual variations. Their visual variation might impact people's perceptions and preferences differently. Japan offers landscapes of beautiful colored trees in autumn and spring. They are interesting tourist attractions, especially for tourists from tropical countries, such as Indonesia. The number of Indonesian tourists visiting Japan has been increasing with time; therefore, it is beneficial to learn about their preferences. This study aimed to identify the preferences and perceptions of Indonesians towards colored tree landscapes in Japan.

2. Study Methods

In this study, picture stimuli and an online questionnaire were used. There were 4 groups of photos representing different landscapes: trees forming a pathway, trees with water in the foreground, trees with a bridge element, and trees with a Japanese castle. Each group consisted of 3 photos of trees in different colors: green (control), autumn colors, and spring colors (12 photos in total). The participants of this study comprised 52 Indonesians with knowledge of landscape architecture. They were asked to rate the pictures using the Scenic Beauty Estimation method on a 10-point scale from 1 (strongly dislike) to 10 (strongly like). Their perceptions were evaluated using semantic differential (SD) scales with 13 paired adjectives that describe exoticness, diversity, complexity, pleasantness, harmony, openness, naturalness, colorfulness, flexibility, relaxedness, willingness to visit, focal point existence, and typical Japanese style existence. Their favorite part of each photo was also assessed with a heatmap analysis.

3. Results and Discussions

About 46.15% of the respondents experienced traveling to countries with four seasons, but only 66.67% had travelled to Japan. Among those who travelled to Japan, only 31.25% had seen autumn colored landscapes in person, and 81.25% of them had seen blooming cherry blossom landscapes in person. This showed that more tourists came to Japan during spring than autumn. When they were asked to choose their most preferred landscape from a brief view, majority of them chose autumn-colored waterfront landscapes, but when the actual preference score was calculated, spring-colored waterfront landscapes got the highest score. Regardless of the landscape type, spring-colored landscapes tended to score higher, followed by autumn-colored landscapes, and green-colored landscapes. The pictures that scored lower tended to show an average score in the SD perception test. This shows that people did not get any special impression from those pictures. The heatmap analysis showed that the most preferred area in a picture is a combination of different colors and natural and man-made landscape features that look balanced.

4. Conclusion

Majority of the respondents in the study preferred spring-colored landscapes more than autumn-colored ones because they were perceived as more pleasant, colorful, and exotic. Green-colored landscapes were preferred the least because people are familiar with the scenery.

Keywords: Colored Tree, Scenic Beauty Estimation, Semantic Differential, Heat Map, Japan Tourism
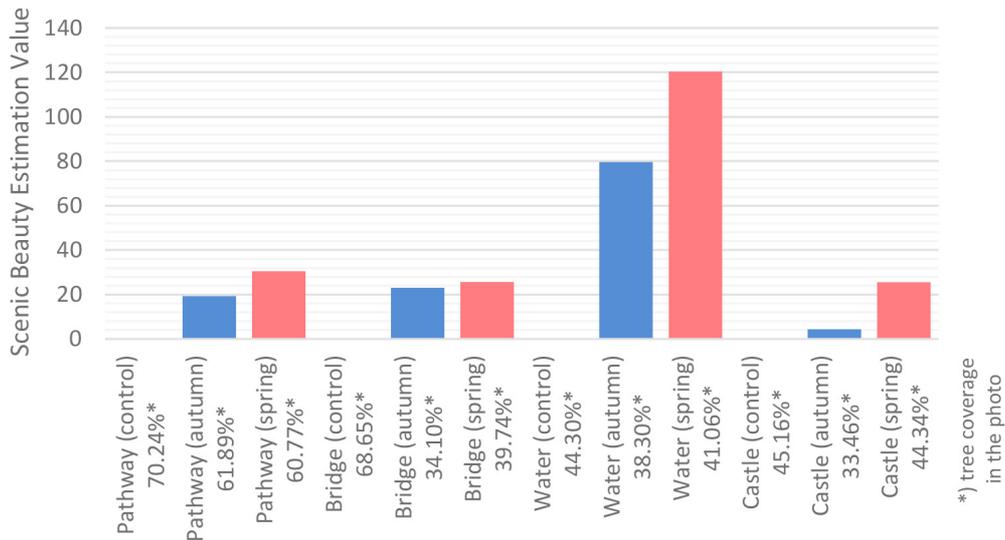
Figure 1. Respondents' Preference of Different Types of Colored Trees Landscapes

Characteristics	Path (con.)	Path (aut.)	Path (spr.)	Bridge (con.)	**Bridge (aut.)**	Bridge (spr.)	Water (con.)	**Water (aut.)**	**Water (spr.)**	Castle (con.)	Castle (aut.)	Castle (spr.)
Complexity	2.21	2.77	3.31	3.94	4.17	3.48	3.87	5.02	3.06	4.04	4.42	3.69
Diversity	2.02	2.46	3.10	3.67	4.96	3.75	2.98	5.13	3.29	3.40	4.10	2.79
Exoticness	2.96	4.50	4.27	3.65	4.65	4.06	3.50	4.92	4.31	4.71	4.81	4.54
Pleasantness	4.77	5.04	5.21	4.79	4.83	4.88	3.65	5.21	5.50	4.73	4.50	5.25
Harmony	5.12	4.87	5.00	5.15	4.58	4.87	3.73	5.15	5.33	4.83	4.65	5.25
Openness	3.88	4.33	3.29	5.33	4.77	4.23	4.81	4.56	5.15	4.81	4.40	4.98
Naturalness	3.90	2.81	3.48	4.52	4.13	3.67	3.04	4.81	4.25	3.29	3.00	3.83
Colorfulness	2.65	4.33	4.38	3.48	5.79	4.19	3.25	6.27	4.73	3.83	5.10	3.87
Flexibility	4.29	3.73	4.42	4.90	5.15	4.35	4.10	5.83	4.75	4.04	4.06	4.37
Focal point	4.10	4.77	5.21	4.29	5.27	4.63	3.23	5.29	5.48	4.71	5.10	5.23
Relaxedness	4.85	4.33	4.88	5.13	4.31	4.61	3.79	4.81	5.21	4.19	3.75	4.65
Will to visit	4.92	5.15	5.37	4.94	5.08	5.08	3.48	5.48	5.50	5.10	5.12	5.67
Japanese style	3.63	3.88	5.48	4.88	4.77	5.17	3.33	5.46	5.60	5.42	5.48	5.92
Average**	3.79	4.07	4.42	4.51	**4.80**	4.38	3.60	**5.23**	**4.78**	4.39	4.50	4.62

) minimum score = 1 (low), maximum score = 7 (high); **bold = three highest values

Figure 2. Respondents' Perception Scores of Different Types of Colored Trees Landscapes
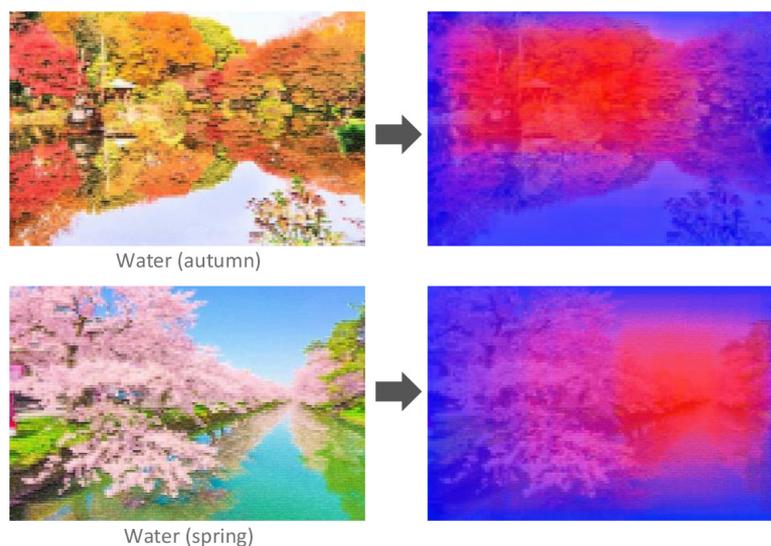

Water (autumn)

Water (spring)

Figure 3. Heatmap of Most Preferred Area in Water (autumn) and Water (spring) Pictures