

## VISUAL QUALITY EVALUATION APPROACHES OF SACRAL LANDSCAPE OF LATGALE

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### Abstract

The aesthetic quality of landscape is one of the most threatened values in our environment. The methodology chosen to evaluate the landscape for the first time has to be precise and effective. The objective of this study was to find the most appropriate method for the first time evaluation of sacral landscapes. The paper compares two methods – the Scenic beauty estimation method, and the Q sorting method for evaluating the scenic beauty. Comparison of the two methods was made in the winter of 2010 – 2011. The Scenic beauty estimation method is effective for getting a quick estimation of general scenic beauty. The Q method gives the estimation of general scenic beauty and the explanation of perception priority. The visual quality is deeply connected with perception. Placing perception in numbers leaves some doubt, but it is quite an effective way of observing the main visual qualities in the perception of spectators. Both methods give the first impression of the landscape elements. But Q method gives more significant results than the Scenic beauty estimation method.

**Key words:** sacral landscape, visual quality, evaluation methods.

### Introduction

The sacral landscape of Latgale is unique, it has a different development history than the rest of Latvia. Latgale is the region in Latvia richest with lakes and that makes landscapes so picturesque.

The aesthetic quality of landscape is very difficult to define and also to evaluate. These qualities are easier to destroy and more difficult to protect than the ecological quality. There are methods for restoring the aesthetic values of landscape, the visual diagrams method and the 3D visualisation (Kašparova and Sklenička, 2008). It is important to preserve, not destroy and then restore.

Why is it important to think about the visual quality of landscape? Firstly, the visual quality is needed for the life quality, it provides us with positive emotions. Secondly, the landscape includes the cultural heritage that reminds about our achievements, the recreation places that give us energy, and the sacred places that offer meditation experience.

We can understand quality very differently. The landscape quality encompasses everything from simple everyday needs to spiritual and emotional needs. This research is about the visual evaluation of landscape. All of us love beautiful people, things, and sceneries. Scenic beauty involves planning, materials and, most importantly, time – long term planning.

There are different ways of reading landscapes. For a long time, the methods used by students of landscapes, notably landscape architects and geographers were highly individual (Taylor et al., 1987). It is possible to use different paradigms; some of them are expert, psychophysical, cognitive, and experiential. The landscape analysis has actualized quite late. The reason for it could be the spreading of man-made landscape, and that makes our responsibility for surrounding to grow. Systematic visual landscape quality assessment has been invested in and has matured in the last half of the 20<sup>th</sup> century. It has come to play an important role in environmental management

and policy and it has become a well-recognized field of scientific research with a substantial literature base (Daniel, 2001).

No typology of landscape is used in this research, because the focus of research is on sacral landscapes. All these landscapes are man-changed; they are cultural landscapes with social significance. The sacral landscapes are defined mostly by prominent features and valuable landmarks – churches. Sacral landscape in Latgale is a resource that we need to assess.

K. Unwin (Unwin, 1975) describes three phases of landscape evaluation:

- 1) landscape measurement: an inventory of what actually exists in the landscape;
- 2) landscape value: an investigation and measurement of value judgements or preferences in the visual landscape;
- 3) landscape evaluation: an assessment of the quality of the objective visual landscape in terms of individual or social preferences for different landscape types.

Today, the assessment of visual quality has become more important in gathering data to be used in planning studies (Bulut and Yilmaz, 2008).

The chosen methodology has to be precise and effective, because the landscape changes all the time. The landscape changes are seen as a threat, a negative evolution, because the current changes are characterized by the loss of diversity, coherence and identity of the existing landscape (Antrop, 2005).

The objective of this study was to find the most appropriate method for the first time evaluation of sacral landscapes.

### Materials and Methods

The sacral landscapes of Latgale were evaluated using two methods Scenic beauty estimation method (Fairweather

and Swaffield, 2001), and Q method developed by William Stephenson. Comparison of the two methods was made in the winter of 2010 – 2011.

The photos were taken by the author in the summer of 2008 in good weather conditions. All photos depict the sacral landscapes of Latgale. They are taken from different viewpoints. 30 photos out of 450 photos of 35 sacral landscapes were randomly chosen for evaluation. Each chosen photo is from a different sacral landscape. Photos with a close view on the church, a closer view on some details of church garden, a picturesque landscape seen from the church, and the sacral landscapes from a distant viewpoint were chosen for the study. The same 30 photos were used in both methods. Despite a range of attempts to develop alternative ways of representing landscape experience to subjects, photography remains the most widely used technique in the research of landscape perception (Fairweather and Swaffield, 2001).

80 respondents were observed within the research. Using each method, 40 people of different ages (between 24 and 57) and from different regions of Latvia were observed. The respondents were from different interest groups. There was no time limitation for evaluating the photos.

The Scenic beauty estimation method asks respondents to rate landscape scenes, represented by colour slides, on a 0-to-9 scale where 0 is a low scenic beauty and 9 is a high one.

There were two phases in using the Q method. The first was assessing the scenic value. The respondents had to arrange the photos as it is shown in Table 1. During the second phase the respondents were asked to explain the choice of six top and bottom scored photographs. They had to explain the choice in their own words and using as many expressions as they wanted.

Each photography value in both methods was found by getting average value by Microsoft Excel.

Table 1

Photography arrangement using Q method

Number of pile	1	2	3	4	5	6	7	8	9
Number of photography in pile	1	2	3	5	8	5	3	2	1
Score for photography in this pile	-4	-3	-2	-1	0	1	2	3	4

## Results and Discussion

The psychophysical paradigm, like the expert one, is used more for the landscape management purposes and for analyzing a landscape. Two psychophysical paradigms were used in this research – the Scenic beauty estimation method, and the Q method. The Scenic beauty estimation method has primarily been developed and tested in the context of the scenic beauty assessment of forest (Daniel and Schroeder, 1979).

Numerous researchers have used regression procedures to produce prediction models for scenic beauty (Blinn, 2000). To start with, it is important to analyse the existing situation. There are several methods for the process of analysis, such as 'Scenic Beauty Assessment' or 'Law of Comparative Judgment' – a new version of scenic beauty assessment suggested by Yu (Wang et al., 2008).

The Scenic beauty estimation method and the Q method gave similar results in arrangement of photography by evaluation.

The data presented in Figure 1 and Figure 2 indicates that even if the results of both methods are similar, distribution of landscape scenic evaluation using the Q method is much wider. The Q method gives a more explicit representation of respondents' perception. Only three values are mainly used in the Scenic beauty estimation method by the respondents. The whole evaluation scale has to be used in the Q method.

The most important are the top and bottom scored photographs. The Scenic beauty estimation method helps to find the same result as the Q method. But then some other method needs to be used to find out why? Without answering this question the evaluation of landscapes loses its purpose.

The Q method in its second phase answers these questions. The explanation of choice gave the characteristics of landscape with high scenic beauty in the observer's perception and explained the negative sides of landscapes with low scenic beauty.

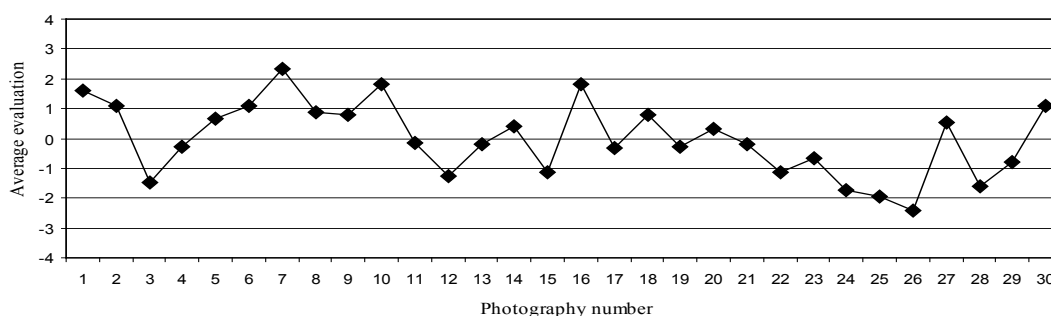


Figure 1. Average values of landscapes using the Scenic beauty estimation method.

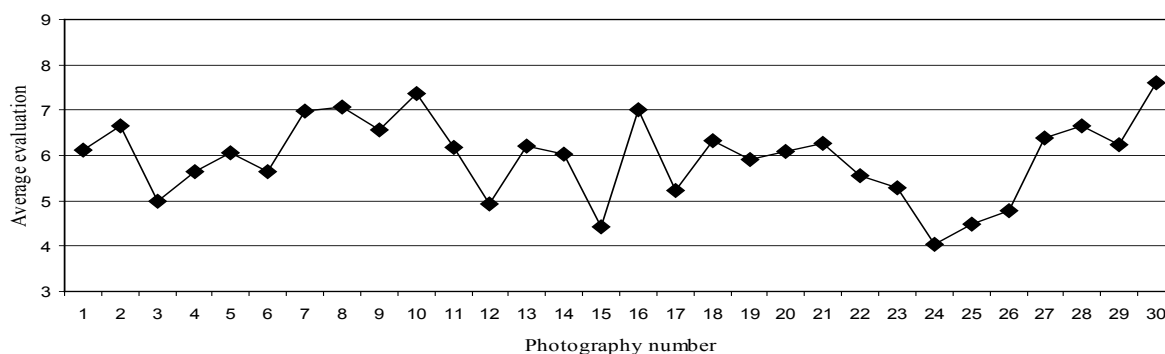


Figure 2. Average values of landscapes using the Q method.

The landscapes with high scenic beauty were mainly described with the presence of beautiful and interesting architecture (31%), such as wide landscape (21%) and spruce landscape (16%). The respondents have pointed out that in evaluating landscape by photography a viewpoint is important (Figure 3). The sacral architecture with its symbolic and historic meanings adds a value to the scenic beauty of landscape.

The landscapes with low scenic beauty were mainly described as having a bad viewpoint, underlining, the possibility of finding some value in them (Figure 4). In some cases a landscape loses its value due to some particular elements, like gloomy, abandoned buildings and neglected meadows. The absence of dominant sacral architecture is also important. The landscape loses its visual quality if the

sacral architecture is hidden within.

It is important for the economic development of Latgale how landscapes are perceived by the observer. The aesthetic values can influence the tourists' perceptions of the tourism destination, and their excursion experience (Wang et al., 2008).

The visual quality is deeply connected with perception. Placing perception in numbers leaves some doubt, but it is quite an effective way of observing the main visual qualities in the perception of spectators. In my opinion it is important to involve people and ask them – 'why do they think so?' as much as possible.

What is common for the top scored photos and what we can learn from the bottom scored ones will be studied in the further research.

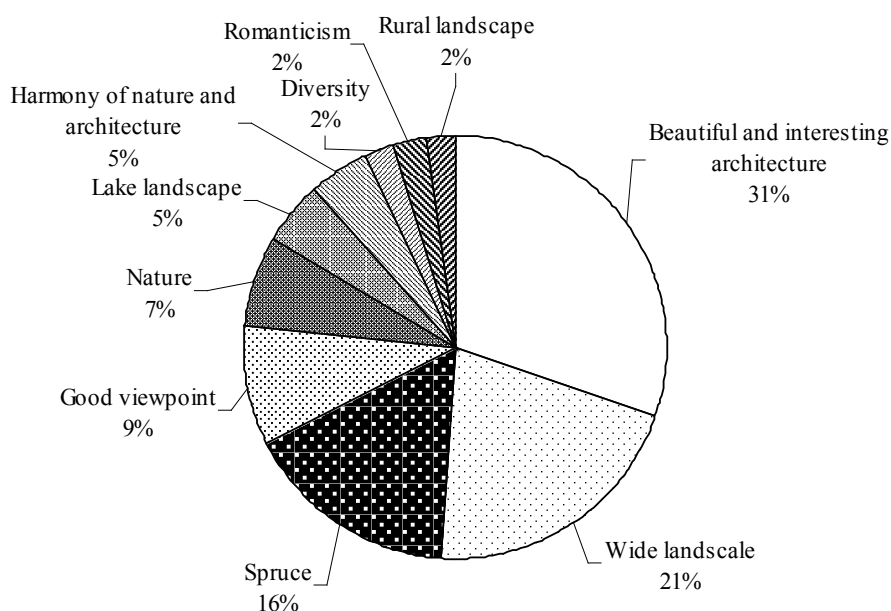


Figure 3. Characteristics used for describing landscapes with high scenic beauty.

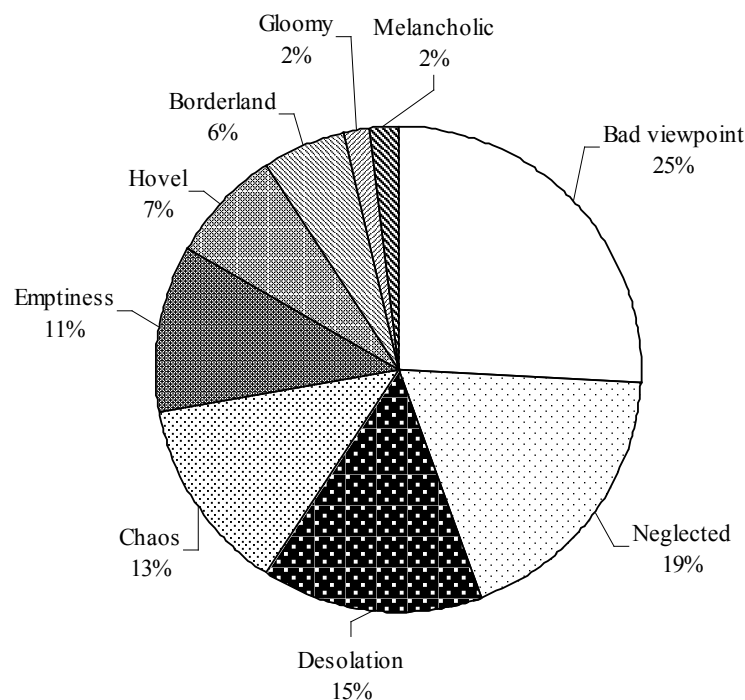


Figure 4. Characteristics used for describing landscapes with low scenic beauty.

## Conclusions

1. Both methods give the first impression of the landscape elements that are important in improving the visual quality of landscape.
2. The Q method gives more significant results than the Scenic beauty estimation method in evaluating the scenic beauty of landscape.
3. The Q method is effective for the observing the spectators' first-time perception of landscape.
4. Further researches are needed to assess the importance of individual elements in explaining the preferences for certain landscapes.

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