ASSESSING PUBLIC PERCEPTION OF URBAN LANDSCAPE WITH USE OF PHOTOGRAPIC METHOD

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Abstract

The study looks at a non - traditional way of perception and assessment of urban landscape, using the photographic method. Advantages and disadvantages of this method have been explained. As an example, a complicated urban area with different landscape types, including historical, aesthetical, functional and emotional aspects, has been studied. The territory in the existing functional zones was mapped. Typical or representative views of each functional zone were photographed. Out of 590 slides, 25 were chosen and presented on a wall in an auditorium. For each slide, six questions were asked, which represented a public perception of landscapes from the standpoint of Environmental Psychology. These were: the aesthetical value, harmony, order and sense of locality, variety of forms and diversity, secrecy, safety. The results show differences of perception between men and women, younger and older people, and locals and visitors. Most of the respondents were Latvian, and for that reason cultural and mentality aspect was one of the most important in the results of this study. Almost everybody chose slides with harmonized, safe and greener space, which are the main features of the historical Latvian country yard.
Key words: landscape perception, urban landscape, Environmental Psychology, photographic method.

Introduction

Numerous approaches have been used to study people's aesthetic reactions to landscapes. In all approaches the visualization of the landscape can be a good instrument. While people are usually good at understanding images, they tend to have difficulties in understanding information presented in other forms. While also other senses influence the perceiving and experiencing of landscape, the main part of landscape perception occurs through the sense of sight. Thus visualizations are the primary method in the description of landscapes (Karjalainen et al., 2001).

Many of the traditional landscapes in Europe and other parts of the world combine high natural values with high cultural values and may also be considered as aesthetically pleasing (Phillips, 1998). There is also movement towards an increased generation of these different values in research and policy. For planning and conservation the aesthetical perspective is important, since humans' wishes and consequent use of landscape is a major force in landscape change (Hägerhäll, 1999b). This study is looking for a different method of perception of landscape. This method is used to look at the landscape through a photo camera. Of course, there are advantages and also disadvantages. There are mainly two directions of the photographic method. Both start with taking photos. One of the directions is to compare two visual unedited slides or analyze one slide by elect criteria or questions (Gracia et al., 2002; Fairweather et al., 2002; Hägerhäll, 2000; Hägerhäll, 1999b). The other is to compare two slides, from which one is visually edited to add or remove some features from a slide (Rodiek et al., 2004; Tyrväinen et al., 2003; Karjalainen et al., 2001; Hägerhäll, 1999a). In Latvia this method has been used for the fist time.

There are some main aspects, which substantially affect the results of the study. At first, the process of taking photographs. The experience of the photographer and quality of slides are important. Secondly, the process of sampling slides.

Concerning the sampling of visual stimuli, it is agreed by all researchers that it is of utmost importance for the outcome of the study. The criteria, upon which to choose the stimuli are, however, in most studies based much on the intuition and experience of the researcher as well as criteria used in earlier studies. Furthermore, the purpose of the study plays a large role in the sampling of scenes. This sometimes leads to samples that are broad in content and include many different landscape types. It is also entirely up to researcher to judge whether or not the scenes are representative. The sample could also be considered as more narrow in content than many studies, since slides represented the variation within one landscape type (Hägerhäll, 2000).

The last aspect is the sampling of respondents. Choosing different categories of respondents, the results would be different. They can fall under several categories such as professional experience and field of research or interests, age, gender, place of residence: urban or rural area, locals or visitors.

In Latvia this method has been used for the fist time in current research. There was creating mobile landscape research laboratory. The aim of the current study was with help of this laboratory proposed to use photography for assessment of public perception of structure and texture of Latvia urban landscape. After according findings there has been formulate recommendations for future landscape development planning. The photographic method and use

possibilities of this method in analysing Latvian land-scape are estimated in this article.

Materials and Methods

Object of the study

The capital of Latvia – Riga - with a wide-ranging landscape was chosen as a study object. It is a complicated urban landscape, having parts with high heritage value, as well as territories with soviet time's architecture, and territories developed nowadays. The main objective of the study was to find out differences in the emotional, aesthetical and cultural aspects and perception of them. To divide the territory of the study for taking photographs, the existing division based on functional zones of urban space was used (Buka et al., 1987).

Visual stimuli

The visual stimuli were chosen to cover different functional areas of the urban landscape. For detailed classification visual and scale aspects were taken. The photographed territories were mapped in the areas related to the history of civilization – the old town and heritage elements like churches and bridges; residential areas – landscapes of many-storied dwelling houses, garden and cottage houses; industrial and transit areas –railway, main roads and streets; water landscapes – the main river Daugava, smaller rivers and channels, lakes and ponds; green spaces – parks, small public gardens, protected natural areas, cemeteries, city forest (Tyrväinen et al., 2003) and natural grasslands; recreational territories – sport complexes and public places for swimming (Figure 1.).

The photographs were taken by the researcher, with the help of a digital camera, in autumn 2005, in different weather conditions – sunny, cloudy and rainy days, and full daylight. All the photographs were taken from places accessible to general public for a better and more complete analysis of the site and views.

Out of 590 photos, 25 slides (Figure 2) were chosen for the assessing of emotional perception of the respondents, each time showing one picture. The criteria for preference were quality aspects of the photographs: contrast, darkness, lightness, colors, absence of the sun light and smudgy defects; typicality or representation of functional area; and most affected perception of the respondents' specific elements or actions represented on slides.

The questionnaire and respondents

The presentation started with explanation of the task. The color slides one by one were shown on a wall in the auditorium. Each slide was examined for ten seconds. Questions were asked and graded. Three sessions were held.

Six questions for each slide were asked. The preference of questions was based on criteria of landscape perception in Environmental Psychology (Hägerhäll, 2000; Ziemeļniece, 1998). These aspects affect a person's senses in landscape most of all. These are: aesthetical value, harmony, order and sense of locality, a variety of forms and diversity, secrecy and safety. The question of aesthetical value was asked: "How much do you like this view? Is it visually attractive?" The criterion – harmony – means the level of unity and consensus of landscape features. The
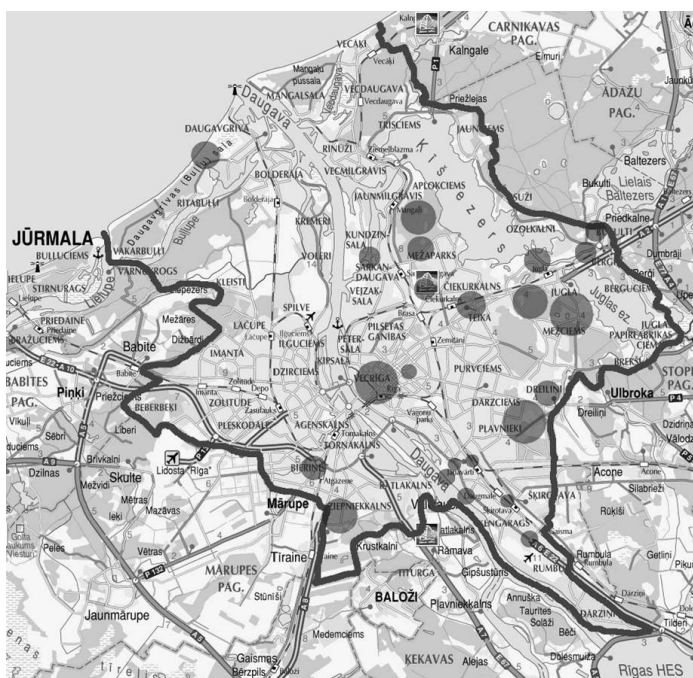

Figure 1. Location of photographed areas.

Figure 2.1. New area of dwelling houses.

Figure 2.2. New area of dwelling houses with playground.

Figure 2.3. Soviet time block houses.

Figure 2.4. Housing estate with pond.

Figure 2.5. Soviet time five-storied block houses.

Figure 2.6. Soviet time block houses.

Figure 2.7. Soviet time block houses.

Figure 2.8. Soviet time block houses.

Figure 2.9. Soviet time block houses with new playground.

Figure 2.10. Soviet time architecture of block houses.

Figure 2.11. Cottage houses in urban forest (Mežaparks).

Figure 2.12. Cottage houses.

Figure 2.13. Contrast between historical and nowadays buildings.

Figure 2.14. Area related to the history old town.

Figure 2.15. Area related to the history with new fashion landscape features solution.

Figure 2.16. Old town with flower beds.

Figure 2.17. Area related to the history with new architectural features.

Figure 2.18. Water landscape. Costal territories.

Figure 2.19. Water landscape.

Figure 2.20. Water landscape with transformed banks.

Figure 2.21. Water landscape. Costal area.

Figure 2.22. Natural grasslands and urban forest.

Figure 2.23. Water landscape. City lake.

Figure 2.24. Industrial area near housing estate.

Figure 2.25. Typical view of the center of the city.

Figure 2. - continuation. Photos analysed in the study.

question of order and sense of locality was asked, if the landscape was easy to understand and oriented oneself, or the landscape was complicated. The variety of forms and diversity indicate views from biological, ecological, geographical, and aesthetical and visual aspects. The criterion of secrecy presents the level of mystery and intrigue in the chosen view of the landscape. The question, regarding safety, was asked, if you felt safe, and if it included some feeling of refuge in that landscape.

For every question, three variants of judgment – high, medium, and low were given.

The respondents were chosen from different fields of research and interests to give a diversity of response. Three major groups consisted of specialists from horticultural, environmental and landscape architectural fields of science. The smallest group was made of people from different other fields. In all, 18 respondents were chosen who represented a diversity of differences in many aspects – the professional field, gender, and age and research level. These aspects were taken into consideration in the process of data sorting and analyzing. All participants were older than 19 years. The main role was played by the place

of residence. The respondents were divided into two groups – residents of the city of Riga and nonresidents. It was important because the features, which seem to be customary and common for the residents of Riga, for most of the nonresidents were unusual and interesting.

After filling in the questionnaire all respondents were asked to offer their opinion about advantages and disadvantages of that method.

All results were collected, sorted and computerized by using simple statistic operations – setting up dominance between the chosen criteria. The simple statistic operations were chosen due to several considerations. Firstly, the aim of the study was to point out advantages and disadvantages of the method. Secondly, the small number of the respondents.

Results and Discussion

At first, data were sorted by criteria. Aesthetical evaluation is the main and important, and easiest indicator to understand, which gives attraction to a landscape. The slides with views of the old town (Figures 2.14., 2.15.) and a cottage near the city lake (Figure 2.23.) got the highest scores. The slides with visually degraded Soviet time block houses and yards near them (Figures 2.6. and 2.7.) got the lowest number of points. The next criteria were harmony and unity of landscape. They were mostly pointed out in the areas related to history – views of the old town (Figures 2.14. and 2.15.) The most disharmonized views were in the degraded yards of the Soviet time block houses (Figure 2.7.) and in the slide with a historical house beside a modern house (Figure 2.13.). The third criterion – order and sense of locality - was highly rated almost in all slides. A slide with the old town (Figure 2.15.) and a newly built multi-stored house (Figure 2.1.), with a clear and understandable landscape, got a higher score. The sense of disorder was perceived in the slides with bushes and neglected grasslands (Figures 2.3. and 2.4.). The criterion – diversity – makes an attractive and dynamic landscape, but this criterion should be looked at together with the aspect of harmony. Great, noncompositional diversity may cause chaos in the landscape. More diversity of a landscape was shown in Figure 2.15., less diversity – in Figure 2.1. The next criterion – secrecy – provides the sense of intrigue and mystery. The most secret views develop in a narrow, intercept landscape with great greenery (Figures 2.4. and 2.12.). Open landscapes with block houses (Figures 2.1., 2.6. and 2.7.) got the lowest score. The indicator of safety characterized the level of comfort in the landscape. The slides with the old town (Figures 2.15. and 2.17.) got more points. The slides with block houses (Figures 2.3. and 2.7.) and the old / new house (Figure 2.13.) got a negative evaluation. By summarized marks of all criteria

there were two main leading groups – positive and negative. Slides with areas related to history (Figure 2.15.) got positive scores, and areas of Soviet time block houses (Figure 2.7.) negative.

Some recommendations for future prospects

For better results, it is necessary to formulate the subjects and objects clearly, as well as the aims of using the photographic method. For example, tourism route planning, developing panorama of the city, etc. The quality of photos affects the respondent's choice to a large extent. For this reason high quality technical equipment and a professional photographer is needed in the process of the study. An optimal number of slides for keeping attention of respondents and paying more attention to the explanation of the meaning of criteria are needed.

Conclusions

The advantages and disadvantages of the photographic method are explained.

The advantages are as follows: an easy way of analyzing the landscape and features in it. A good practice for planning a tourist route. Easy to estimate what changes are needed for the depicted view, because photos are taken from places accessible to people. Good conditions for respondents: they could fill in a questionnaire in an auditorium in silence. Weather and light conditions did not affect the process of survey. Without traveling, the respondents could see landscapes and interesting features, which they had never seen before.

The respondents pointed out the unusual way of analyzing the urban landscape, which was more different and interesting than the traditional methods of site analyzing, like functional, visual, etc., mapping.

The disadvantages are as follows: it was not possible to feel all the spectrum of landscape preferences, like sounds, smells, cold or warmth, streams of wind, etc. It was difficult to assess a view without feeling the whole context of the surrounding landscape. The questionnaire, using six specific criteria, was complicated and required great attention during all the presentation time. For that reason, most of the respondents lost their attention and patience at slide 25. The chosen criteria, in terms of Environmental Psychology, required certain preliminary knowledge of this study. Therefore respondents from research fields other than landscape architecture hardly oriented in and answered the given questions.

The subjectivism of the photographic method was pointed out, having positive and also negative aspects.

Acknowledgements

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