

Research methods of ski resorts' visual perception

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Abstract – The paper describes the research methods of visual perception of ski complexes. It explains the basic paradigms of visual research in the context of the problem of visual impact of ski complexes on natural mountain environment.

Key words – visual impact, research methods, paradigm, expert approach, public preferences.

I. Introduction

Ski resorts construction has a great visual impact on natural mountain landscapes. The clear-cuts, which are made for ski runs organization and construction of ski lifts, sport and recreational buildings for visitors cause a notable change of the visual image of the mountains.

Thereby, it is important to investigate and characterize the visual impact of ski resorts construction on natural-built environment. In this article the research methods and approaches to visual perception of ski resorts are presented.

II. Existing Approaches to Landscape Perception Research

Existing approaches to landscape perception research are broadly enlightened in scientific literature. For example, the Dutch scientific journal "Research in Urbanism Series" published the volume in 2011 devoted to visual research of the landscape [1]. In this publication the authors distinguish two basic models of landscape perception research: expert model and public landscape preference model. According to first model, the evaluation of visual landscape is carried out by trained experts and observers, characterized by heuristic methods and the use of systematic descriptive inventories, visual management systems, etc. Public preference model is based on three approaches: psychophysical-approach, psychological-approach, phenomenological-approach. The first approach is characterized by testing general public or selected populations' of landscape aesthetics/properties by the use of photo questionnaires. The second approach is searching for human meaning associated with landscape or landscape properties by environmental psychologists, characterized by mapping landscape experience. The phenomenological-approach concentrates on subjective experience of the landscape and is characterized by the interpretation of paintings, poetry, etc.

There are also other classifications in studying of human perception of the landscape and its visual, aesthetic qualities. For example, Andrew Lothian [2] divides landscape studies into two paradigms:

1) the objectivist or physical paradigm – a conventional view that the quality of the landscape is an intrinsic attribute of the physical landscape (famous scientists that work in this approach are Zube, Sell & Taylor, Daniel & Vining);

2) the subjectivist or psychological paradigm considers landscape quality as solely a human construct, based on the interpretation of what is perceived through the memories, associations, imagination and any symbolism it evokes.

A. Lothian considers that the promising approach in exploring the visual landscape is subjectivist's approach.

Terry C. Daniel makes a suggestion about the transition from the objectivist and subjectivist approach to the ecological approach. Namely he predicts in the article "Whither scenic beauty? Visual landscape quality assessment in the 21st century" [3] the dominance of ecological oriented approach in landscape visual quality assessment in the future.

III. Application of Existing Research Methods in Ski Resorts' Investigation

In ski resorts investigation it is preferable to combine expert approach and public preference approach. The combination of these two approaches gives to the researcher deeper understanding of the existing problems in visual perception of mountain landscapes. Trained observer (for instance, landscape architect or scientist) can better than random visitor estimate the current features and damages of the landscape and characterize the aesthetic value of it. Trained observer can also make some behavioral observations, which can help to allocate the basic places of people's concentration and viewpoints. But using only expert approach is a very poor methodology nowadays. It should be accompanied by public preference studies, using any of existing approaches. The behavioral and experience mapping by site observations, the foto-questionnaires about the landscapes' aesthetic quality by questioning visitors and, finally, the interviews with stakeholders of the ski resort's construction process – all these methods can be applied in visual perception of ski resorts research.

In the context of the problem it is preferable to mention the practical applications, which are usually used by the reserchers in this field. In particular, the usage of GIS-based methods and techniques in order to map the visual landscape is very common (Fig 1).

Conclusion

In this paper the existing approaches to landscape perception research are highlighted. Current studies in landscape visual research make an accent on subjectivist approach, which means that our psychological interpretation of the landscape is dominant. But in the same time it is very insecure to make any generalizations of public landscape preferences, because of it's boundless diversity. Nevertheless, in scientific literature there are attempts to identify some social, geographical, economical and other trends in visual landscape preference studies.

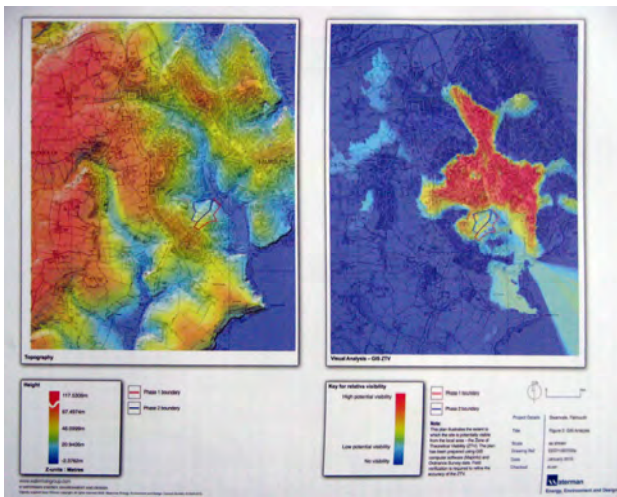


Fig. 1. Topographical analysis and Zone of Theoretical Visibility for proposed urban development [4]

The paper summarizes, that it is preferable to combine expert approach and public preference approach in ski resorts' investigation. The basic research methods of visual perception of ski resorts, mentioned in the article, are: behavioral and experience mapping by site observations, the foto-questionnaires about the landscapes' aesthetic quality by questioning visitors and, finally, the

interviews with stakeholders of the ski resort's construction process. The basic research techniques, which can be used in visual perception of ski resorts investigation, are: GIS-based methods and techniques, panoramic photo capturing, 3-D visualizing.

The basic research methods and techniques, which are presented in the article, are based on the current theories and approaches in landscape visual perception research and are used in landscape management and planning practice nowadays.

References

- [1] Exploring the Visual Landscape. Advances in physiognomic landscape research in the Netherlands (2011). Research in Urbanism Series, Vol 2.
- [2] Lothian, A. (1999). Landscape and the philosophy of aesthetics: is landscape quality inherent in the landscape or in the eye of the beholder? *Landscape and Urban Planning*, 44, 177-198.
- [3] Daniel, T. C. (2001). Whither scenic beauty? Visual landscape quality assessment in the 21st century. *Landscape and Urban Planning*, 54, 267–281.
- [4] Landscape Institute and Institute of Environmental Management & Assessment (2013). *Guidelines for Landscape and Visual Impact Assessment*, 3d edition, USA and Canada, 164 p.