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Management of cultural heritage areas in rural-urban interface zones in Lithuania: the elaboration of provisions of the National Landscape Management Plan

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The management of rural-urban interface areas must take into account their local peculiarities including heritage features and, vice versa, the management of cultural heritage in the rurban zones should consider the unusual dynamic and heterogeneous character of these areas. The document under analysis in this research - the National Landscape Management Plan of the Republic of Lithuania - presents the outline for heritage management in the landscape context, although contains no particular guidelines for rurban landscapes. Consequently, the aim of this research was elaborating the provisions of the National Landscape Management Plan regarding the management of heritage areas in the active rurban zones surrounding the largest cities of the country. The article includes the discussion of the rurban problematics in Lithuanian landscape planning and the analysis of the heritage questions (landscape approach, distribution, and typology) in the National Landscape Management Plan. The research result is the provisions for management of cultural heritage in the rurban zones based on the National Landscape Management Plan. They include the general management provisions, the protection regimes and preservation means, possible uses and protection zones, the aesthetic goals, the image and identity of rurban zones in the context of heritage management, and the need and intensity of innovations in the context of heritage management provisions as peculiar to rurban areas.

KEYWORDS: rural-urban interface, rurban areas, immovable cultural heritage, heritage area, cultural landscape, heritage management, Lithuania.

The article deals with the management of immovable cultural heritage in the rural-urban interface (further referred to as rurban with reference to A. Buciega et al. (2009) and others) areas (where the characteristics of rural and urban landscapes have become blurred (Ogdul, 2010; Soini et al., 2012)) surrounding the largest Lithuanian cities. The earlier research has demonstrated the theoretical possibility to operate in the framework of existing territorial planning system including the planning levels and the document types for the successful management of rurban areas in Lithuania (Zaleskiene et al., 2015). It was also ascertained that the development and management of rurban areas should address their local peculiarities (Zaleskiene and Grazuleviciute-Vileniske, 2013) and it is possible to presume that the management of immovable cultural heritage and

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Introduction



Journal of Sustainable Architecture and Givil Engineering Vol. 1 / No. 18 / 2017 pp. 5-18 DOI 10.5755/j01.sace.18.1.16753 © Kaunas University of Technology valuable cultural landscapes in the zones of influence of urbanization should take into consideration the characteristics of the rurban areas as well.

The particular object of this research is the recently adopted territorial planning document of the national level - the National Landscape Management Plan of the Republic of Lithuania (Nacionalinio..., 2015). The solutions of this document cover the entire territory of the country (except the territorial waters in the Baltic Sea). The document aims at the awareness of the values and diversity and the sustainable development of the landscape of the country as a whole. The aims of document include the identifying the actions for preservation, restoration or development of traditional landscape, the development of landscape quality standards, the implementation of international and national legal documents, and the integration of the landscape management goals and means into other planning documents of different levels. These multiple are undoubtedly relevant to the development of the rurban areas of the country and to the more particular subject of this research - the management of immovable cultural heritage in the active rurban zones. The authors of the National Landscape Management Plan declare in its explanatory text that due to document's scale and scope it does not offer the specific recommendations for the rural-urban interface areas. However, the 9th section of the text with the corresponding graphic solutions concerning the preservation of cultural identity of the country's landscape together with the rest of the document and the previous knowledge of the rurban problematics allow implementing the aim of this research. The aim of the research is further elaborating and detailing the provisions of the National Landscape Management Plan regarding the management of heritage areas in the rurban zones.

The methods of the research include:

- the analysis of literature including the previous knowledge of the rurban problematics, especially in the context of heritage preservation and sustainable landscape development (Antrop and Eetvelde, 2000; Westphal, 2001; Sullivan et al., 2004; Buciega et al., 2009; Gallent and Andersson, 2009; Overbeek, 2009; Ogdul, 2010; Bardauskienė and Pakalnis, 2012; Soini et al., 2012; Ramanauskas and Dringelis, 2013; Zaleskiene and Grazuleviciute-Vileniske, 2013, 2014; Tu et al., 2016 and many others);
- _ the analysis of territorial planning documents mainly focusing on the drawings and the text of the National Landscape Management Plan;
- _ the synthesis of the previous research experience and the obtained data and the formulation of the proposals for the management of heritage areas in the rurban zones.

Rurban problematics in Lithuanian landscape planning

The authors of the National Landscape Management Plan use the concept "problem areas" in the context of development of the natural framework and the ecological balance. They define the problem areas as the concept and the tool used in the contemporary territorial planning. They see the problem areas as the integrated multidimensional whole of the problem territories including (Nacionalinio..., 2015):

- _ the damaged, degraded territories;
- _ the territories undergoing the sharp conflicts between the use and preservation;
- _ the sensitive areas from the geo-ecological point of view, which require the stronger preservation regulations;
- the areas with inadequate or conflicting legal statuses;
- _ the territories characteristic for their competing or conflicting functions;
- _ the territories characteristic for poor land use indicators.

Rurban and heritage problematics in the context of National Landscape Management Plan

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This definition of the problem areas presented by the planners closely corresponds with the characterization of the rurban zones (Zaleskiene and Grazuleviciute-Vileniske, 2013). We see them as remnant, transient, contested, complex, and interdependent with the central city. Thus it can be concluded that the rurban zones, especially the active ones surrounding the largest cities of the country, can be referred to as the problem areas not only form the natural framework or ecological, but also from the functional, legal, aesthetic, heritage preservation etc. points of view. The authors of another interesting document related with the rurban landscape problematics - the concept of the Special Landscape Management Plan of Klaipeda District Municipality (Klaipedos..., 2013) - provide the detailed overview of the landscape development and heritage protection problems at the level of this district municipality. This overview can be extended and applied to the zones of influence of other large Lithuanian cities as well. They note that the problematic situations concerning the development and management of landscape of the municipality reflect the non-sustainable development of landscape including the conflict situations in the development of natural and culturized (anthropogeneous, anthropogenized) landscape and the conflict situations involving land use, land management and territorial planning. The obvious problems in the rurban areas are related with the conflicting overlapping regulations of different planning documents, the conflicts between the ecological function of the natural framework and the intensive urban, agricultural and other developments. The dispersed chaotic urbanization of the countryside and non-harmonious contrasting architecture, the visual disturbance from the emerging engineering infrastructure, such as wind farms (Abromas et al., 2015) and advertisement development are characteristic problem issues as well. However, they are complemented with the issues of abandonment, decline and renaturalization including the decline of cultural heritage objects and areas especially in the natural areas significant from the ecological point of view, abandonment and re-growth of the agricultural areas, decline of the agricultural complexes and other structures of the Soviet era (Klaipedos..., 2013). Consequently, according to the authors of the document, the aesthetic problems in the rurban zones rise not only due to the intensive development, but also due to the abandonment, the decline of heritage and the spontaneous renaturalization.

Another issue, evident in the solutions of the National Landscape Management Plan, especially in its 7th section concerning the protection of visual aesthetic potential of landscape and in the 3rd drawing, where the graphical solutions for the visual aesthetics potential of the country are presented, is the expressiveness and representative potential of landscapes extending in the active rural-urban interface zones. The authors of the document here identify 27 areas and sites of exceptionally protected visual aesthetic potential of the country and the proposed seaside visual protection zone. This zone and three of the areas and sites of exceptionally protected visual aesthetic potential partially overlap with the zones of influence of Vilnius, Kaunas, and Klaipeda. Moreover, the combinations of landscape aesthetic potential indicators demonstrate the diverse and expressive character of the zones of influence of the largest cities of the country. This situation raises not only the questions of landscape accessibility, representation, but shows the need of the increased attention towards the landscape quality and preservation in the rurban zones as well.

Heritage question in National Landscape Management Plan

The 9th section of the explanatory text of the National Landscape Management Plan "Preservation of landscape's cultural identity" and the 4th drawing entitled "Territorial priorities of cultural heritage preservation" deal with the issues the most relevant to this research and must be more closely analyzed.

The landscape aspect or territorial aspect in heritage preservation employed by the authors of the document is important in the context of heritage management in the rurban zones as well as it helps at least partially preserving the fragments of authentic rural environment under the urban pressures. The text and the 4^{th} drawing identify not only the separate landmarks or objects, such

as objects of architectural, memorial heritage etc., but the areas, the zones of areas, the accumulations of areas, the framework of cultural heritage (Fig. 1).

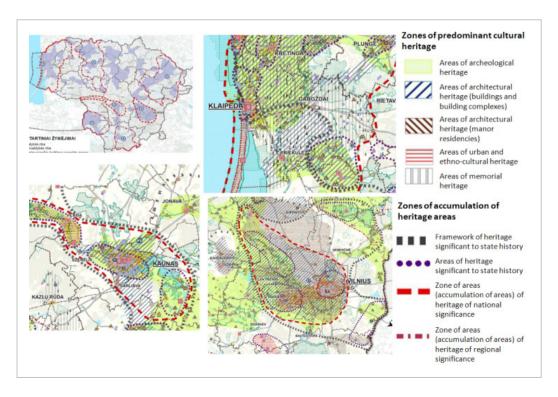
The findings of the document under analysis regarding the *distribution of immovable cultural heritage and valuable cultural landscapes* in the territory of the country prove the importance of rural-urban interface landscapes, especially those surrounding the largest Lithuanian cities, from the heritage preservation and presentation points of view.

The explanatory text of the document states that the largest accumulations of cultural heritage (15–24 units per 25 km² and 25–68 units per 25 km²) extend in the surroundings of the largest Lithuanian cities. The distinguished areas of cultural heritage of national significance extend in the zones of influence of the largest cities of the country as well. The document identifies the zone of accumulation of cultural heritage areas of Vilnius region, the zone of accumulations of cultural heritage areas of Kaunas Region and Panemune, and the zone of accumulations of cultural heritage areas of Klaipeda region and western Samogitia. According to the authors of the document, these areas of national significance encompass the most significant objects in the country's historical cultural framework dating from the second millennium B.C. to the middle of the 20th century. The text explains that "these are the areas of cultural and natural landscape in which all the types of historical urban and rural landscape characteristic to the country can be traced – mounds and historic settlements (the relicts of landscape that was predominant until Valakai land reform), manor residencies (the relicts of landscape developed after Valakai land reform), historic urban settlements and their parts, ethnographic villages" (Nacionalinio..., 2015), thus underlining the representative aspect of the distinguished areas.

The typology of the heritage areas developed in the National Landscape Management Plan distinguishes five types of areas:

_ the areas where the archeological heritage is predominant (areas with heritage objects, such as the remains of prehistoric settlements, burial sites, defensive structures etc. common near the water bodies, in the lake shores and river valleys and the seaside zone);





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- _ the areas where the architectural heritage (buildings and complexes of buildings) of different types and historic periods is predominant;
- _ the areas where the urban (historic towns and their parts) and ethnocultural heritage (ethnographic villages) is predominant;
- _ the areas where the heritage of manor residencies is predominant (mainly in the central and eastern parts of the country);
- _ the areas of memorial heritage (graveyards, burial sites etc.).

The typology of ethnographic villages distinguished as a separate group of heritage areas in the 9th section of the document under analysis needs to be clarified in detail as it is very important for the identity of the rurban areas. According to J. Bucas (2005), the heritage of ethnographic villages can be subdivided into: the ethnographic Valakiniai villages (as the units of land use and land management developed after Valakai land reform); ethnographic settlements of Valakiniai villages; ethnographic Vienkieminiai villages (as the units of land use and land management mainly developed after the land reform of the inter-war period); ethnographic homesteads of Vienkieminiai villages (as the units of land use and land management); ethnographic farmsteads; individual valuable buildings of homesteads of Valakiniai and Vienkieminiai villages.

The presented typologies help expanding and detailing the dimension "remnant" of rurban areas identified in the previous research (Zaleskiene and Grazuleviciute-Vileniske, 2013) and denote the existence and importance of cultural heritage and cultural landscape in rurban areas and rurban research. This typology, when applied to the rurban areas in Lithuania, can be integrated with the typology of the relicts of historic rural landscape types developed by J. Bucas (2001) for the more sustainable heritage management and preservation in the rurban zones.

The mutual influence of rurban areas and cultural heritage

As it is clearly seen in this overview, the concepts of the problem area, the rurban area and the area with heritage features or heritage area are closely interlinked. The rurban problematics (the characteristics of rurban landscapes) affect the heritage management and of course the heritage objects and areas themselves in the zone of influence of the city both manifesting as the conflicting uses, the pressure for development, the limited possibilities to maintain the authentic function and environment, the contrasting aesthetics and the decline and abandonment. For example, the treatment of the sensitive archeological heritage in the potentially transient, complex, contested, interdependent rurban landscape raises additional issues and the sustainable development of such landscape in accordance with the traditional principles of spatial arrangement, as mentioned in the document, might be compromised or influenced by those features. Thus, the heritage management should incorporate the rurban issues (Fig. 2).

Provisions of management of heritage areas in the context of rurban problematics

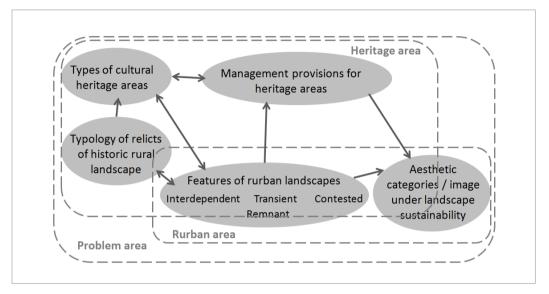
The explanatory text of the document distinguishes the priority management aims, the trends of management and the complex preservation means, which should be applied for the heritage areas of national significance. It is possible to see that the identified aims, trends and means tend to be more conservative and more directed towards preservation and maintenance and not towards renovation, interpretation or innovations due to the high importance of these areas. For example, the *management aims* for the heritage areas of the national significance are the following: the preservation of the authenticity of valuable properties and the surrounding landscape; the maintenance of the harmony of historical and cultural landscape, its' plan and spatial structure; the revealing and highlighting of values of associative landscape elements (Nacionalinio..., 2015). The last goal of revealing and highlighting values might involve some interpretation and innovation

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of the
provisions of
the National
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as a means; however, the conservative goals of preservation and maintenance can conflict with the dynamism of the rurban sphere and may require the amendments. Moreover, all the three heritage areas of national significance are closely linked with the rurban problematics, as it was mentioned before that all of them encompass the largest cities of the country. However, the management goals as well as trends discussed below in principle do not reflect the issues of urban pressure and the rural-urban interactions.

Fig. 2

The possible influences of the features of the rurban zones on the provisions for management of heritage areas from the National Landscape Management Plan



The characteristics of the rurban landscapes can influence the aesthetic expression of the rurban areas, the heritage management approaches and are mutually interdependent with the cultural heritage existing the rurban zones; meanwhile the heritage management provisions in the rurban areas can affect both the heritage objects and sites themselves and the image of the rurban landscapes; the relicts of historic rural landscapes of different types in the rurban zones are very important as they both determine the character and identity of rurban areas and influence heritage classification in the rurban zones.

The distinguished trends of management of the territories of valuable cultural properties include conservation, restoration, adaptation to historical or close to historical functions, and the adaptation to the needs of tourism and recreation (Nacionalinio..., 2015). All these trends are common in heritage preservation practice and can be applied in the rurban context as well. The adaptations to the needs of tourism and recreation are of considerable importance in the rurban space, bearing in mind the increased flows of visitors and recreational loads due to the presence of urban center. The adaptation to historical or close to historical functions might undergo some amendments as the urban influence often induces radical changes of functions in the heritage objects of rural origin. The authors of the document recommend the maintenance of the valuable links between the natural areas and the existing built structures, and the preservation of the characteristic features of natural-cultural landscape complex and the historical elements of the structure of the territory, when dealing with the territories included into the Register of Cultural Properties (Nacionalinio..., 2015). This of course is of increasing importance under the urban pressure; however, the coordination of the integration of the new rurban developments with the existing valuable landscapes and developing the specific rurban identity become a challenge directly linked with the landscape aspect of heritage preservation as well. The authors of the document note that in some territories in the heritage areas of national significance the concentration of heritage properties is very high reaching from 25 to 68 objects per 25 km². They also underline the tradition of heritage preservation in these territories, as some of the heritage objects are under the state protection for more

than fifty years (Nacionalinio..., 2015). The relatively long lasting tradition of heritage preservation mentioned in the document should be complemented with the new knowledge, experience, new issues of heritage management under pressures of urbanization, under the increasing anthropogenization, rapid landscape changes and conflicting interests.

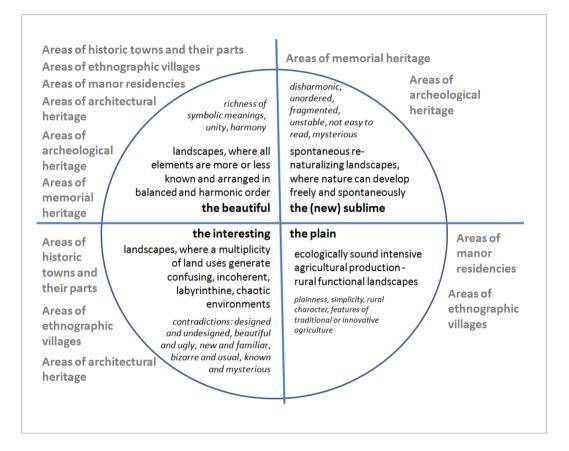
In order to preserve the most valuable structural elements of the country's historical cultural framework and to implement the priority aims of cultural heritage preservation, the text of the document provides the *complex preservation means* from the landscape point of view for the heritage areas of national and regional significance. They include: constant monitoring of changes of cultural landscape and heritage; providing the status of the property protected by the state or municipality for the valuable cultural properties existing in these territories; providing the adequate support from the state for the management of valuable cultural properties existing in these territories; the inventory and the adjustment of inventories of valuable cultural properties existing in these territories; more comprehensive and complex planning of heritage preservation including the preparation of the special plans for cultural heritage sites and their protection zones, grouping and integrating into the territorial units the adjacent heritage objects with similar landscape features; applying intensively the principles of territorial protection of cultural heritage by creating different kinds of protected areas; considering the possibilities to create the additional protection zones for valuable cultural heritage properties (Nacionalinio..., 2015).

The importance of the distinguished means from the rurban landscape point of view can be confirmed as well. For example, the constant heritage and landscape changes monitoring and inventory, ranging from the information regarding land use and land cover changes (Alphan and Guvensoy, 2016; Alphan and Derse, 2013; Ramachandra et al., 2013) to the recording on site of specific heritage objects, in the context of rapid changes of the rurban spaces is increasingly important. Providing the legal status is the priority in the rurban territories vulnerable to change. The emphasis on the territorial protection and protection zones helps coping with the urban pressures and other difficulties in protecting the cultural and natural resources at the rural-urban interface (Westphal, 2001). However, this deepens the conflicts of interests between preservation and development as well and should be wisely managed, otherwise excess protection zones can be frequently violated, sometimes can hinder useful development or cause the territorial urban expansion, so-called sprawl. Moreover, the same principle of the increasing territorial protection of cultural landscape is not reflected in the 1st drawing of the document, where the perspective recommended protected areas and recreational parks are identified, as none of these new proposed protected areas are situated in the rurban areas.

Provisions of management of heritage areas are summarized in the table at the end of the explanatory text of the National Landscape Management Plan. We present the modification of the table and its adaptation to the heritage preservation in the rurban context (Table 1). Here we identify the areas of historic towns and their parts in rurban zones, the areas of ethnographic villages in rurban zones, the areas of manor residencies in rurban zones, the areas of architectural heritage in rurban zones, the areas of archeological heritage in rurban zones, and the areas of memorial heritage in rurban zones. They are listed in the table according to the importance in shaping the identity of the rurban areas. The most relevant types of the relicts of historic rural landscapes are linked with these categories as well. The provisions of management of heritage areas from the National Landscape Management Plan including management, protection regimes and means, uses, and protection zones are modified bearing in mind the rurban context. The aesthetic categories or the categories of the image of the rurban areas are linked with the types of cultural heritage areas as well (Fig. 3). Protection regimes and preservation means identified in the table can be defined as follows: conservation - elimination of the influence of the factors detrimental to the valuable properties of heritage object and consolidation of the authenticity features of the object by research based heritage preservation, construction, and land management works (Lietuvos..., 2005); restoration – conservation of all the extant authentic parts or elements of the heritage object, re-creation of the lost parts or elements, preservation, revealing, and highlighting heritage features by research based heritage preservation, construction, and land management works (Lietuvos..., 2005); renovation – improvement of the physical condition of existing objects (Heritage..., 2011) preserving the extant valuable authentic parts or elements of the heritage object, re-creating or replacing the lost parts or elements; interpretation – diverse ways of presenting the cultural significance of a heritage object (Heritage..., 2011), innovations – new ideas and technologies applied for modifying the historic structure in order to highlight its cultural significance and extend its useful life (Heritage..., 2011).

Fig. 3

The descriptions of the aesthetic perceptual categories under sustainable landscape development distinguished by W. Nohl (2001) and their possible application to the different types of heritage areas existing in the rurban zones



Aesthetic goals, image and identity of rurban zones in the context of heritage management

The distance from the urban areas and the degree of urbanization influence the attributes of natural and rural as well as recreational (Liu et al., 2016) areas. The question can be posed what kind of identity the territories rich with heritage surrounding the large cities of the country will have, where the processes of rural-urban interface take place. However, the National Landscape Management Plan does not envision any clear image or identity for these areas.

The 2nd drawing of the document, where the landscape management regulation strategy and trends are presented, distinguishes only two types of regulations for the present and perspective urbanized areas: the intensive urbanization regulations and the extensive urbanization regulations. It is easy to see that these broad categories can encompass a very vast array of landscape images and identities from sustainable cultural landscapes to degraded or monotonous unsustainable territories. In the previous research (Zaleskiene and Gražuleviciute-Vileniske, 2013) we

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Table 1
Provisions for management of heritage areas in the rurban zones adapted from the National Landscape Management Plan (Nacionalinio..., 2015)

| Types of cultural heritage areas as distinguished in the National Landscape Management Plan in the rurban context | The most relevant types of the relicts of historic rural landscape | Provisions for management of heritage areas in the rurban zones | | | |
|---|--|---|--|---|--|
| | | Management provisions | Protection regime and preservation means | Use | Protection zones |
| 1. Areas of historic towns and their parts in rurban zones | - | Highlighting valuable features of landscape in the rurban environment; Sustainable development of rurban landscape; Identity development of rurban areas respecting the traditional formation of spaces | Conservation; Restoration; Renovation; Interpretation; Innovations | Residential use; Uses for recreation and tourism; Commercial use; Public and general use; | Improvement of observation possibilities of silhouettes and panoramas; Revealing and highlighting visual links; Protection from aggressive urbanization |
| 2. Areas of ethnographic villages in rurban zones | Valakinis Vienkieminis | Highlighting of the features of historic landscape in the rurban environment; Protection and development of the local identity; Development of links between traditional, new architecture, and nature | Conservation; Restoration; Renovation; Interpretation; Innovations | Authentic and similar to authentic use; Agricultural use; Residential use; Uses for recreation, cultural tourism | Preservation and maintenance of agricultural environment; Protection form aggressive urbanization |
| 3. Areas of manor residencies in rurban zones | Valakinis | Preservation and re-use of manor heritage and preservation of relicts of historic rural landscape in rurban environment; Identity development of rurban areas | Conservation; Restoration; Renovation; Innovations | Uses for recreation, tourism; Public, general uses; Residential, commercial, agricultural uses | Maintenance of immediate surrounding environment; Preservation of the relicts of agricultural environment; Maintaining possibilities to observe silhouettes and perspectives |
| 4. Areas of architectural heritage in rurban zones | Valakinis Vienkieminis | Preservation and highlighting of values; Sustainable development of rurban landscape; Identity development of rurban areas respecting the traditional formation of spaces | Conservation; Restoration; Renovation; Interpretation; Innovations | Public use; Residential use; Uses for recreation and tourism | Highlighting valuable heritage objects; Maintaining their immediate environment |
| 5. Areas of archeological heritage in rurban zones | Ikivalakinis | Highlighting and presenting the archeological heritage | Conservation; Interpretation; Innovations | Recreational use; General use bearing in mind more intensive visitor flows; | Formation of open spaces for observation; Protection from immediate aggressive urbanization |
| 6. Areas of memorial heritage in rurban zones | - | Protection of memorial heritage with its surroundings significant for its value and presentation | Conservation; Interpretation; Innovations | Authentic use; Use for tourism | Formation of open spaces for observation; Protection from immediate aggressive urbanization |

had employed the four aesthetic perceptual categories under the sustainable landscape conditions - "the beautiful", "the new sublime", "the interesting", and "the plain" - originally formulated by W. Nohl (2001) (for the details see the Fig. 3). They can function as the possible guidelines in the development of the image of the rurban areas of the country, reflecting relationship between the aesthetics and functionality of landscape (Gallent and Andersson, 2009).

The question of the heritage objects and valuable cultural landscape existing in the rurban zones was partially addressed there as well: the most suitable trends for the specific type of rurban area were identified bearing in mind among other factors the presence and typology of the relics of historic rural landscapes characteristic in Lithuania. In this research we further elaborate the links between the possible image and aesthetics of the rurban area and the typology of cultural heritage existing in it. For example, the concepts "the beautiful" and "the interesting" are identified as the most suitable concepts for heritage preservation in the rurban areas for all six types of cultural heritage areas distinguished in the National landscape management plan (Fig. 3). However, the category "the (new) sublime" can be applied to the areas of archeological and memorial heritage, where the radical innovations or even any kind of disturbances are not allowed and the formation of open spaces surrounding the valuable properties are necessary in order to protect them from the immediate and sometimes aggressive urbanization. The category "the plain" denoting the sustainable agricultural use of various kinds can be suitable for the areas of ethnographic villages or sometimes even to the areas of manor residencies, where the character of the rural landscape must be maintained under the urban pressures. As the urban areas most often expand by converting farmland into residential sites (Sullivan et al. 2004) and increasingly rural areas find themselves in an ambivalent urban context (Overbeek, 2009); thus the land management tools must be applied to protect agricultural environment (Westphal, 2001).

The identity of the rurban areas cannot be seen in isolation. The high heritage values and distinguished landscape aesthetics outlined in the document under analysis in the zones of influence of Vilnius, Kaunas, and Klaipeda dictate the need to incorporate the image of the rurban areas into the development of the image of the central city as well as of the country. The Fig. 4 demonstrates how the image of the central city could incorporate or be shaped by not only the urban heritage mainly located the central part, but also by the rural heritage and landscapes extending at the ur-

Natural areas

Priban cultural heritage

Rural areas

Rural, vernacular cultural heritage

Fig. 4

The identity of the city should be constructed integrating both the urban dimension and the features of the surrounding landscape. The scheme shows the identity of the central city driven by the culture and nature; by the urban heritage and the rural heritage encompassed by the city, by the green areas in the inner urban fabric and the nature at the urban fringe, by the urbanity and the agricultural, rural activities structured by the city

ban fringe as well as the natural elements and landscapes.

The need and intensity of innovations in the context of heritage management provisions as peculiar to rurban areas

As it was mentioned above, the document underlines the land-scape approach, the territorial approach to heritage management. It is easy to see that larger territorial units extending in the zones of

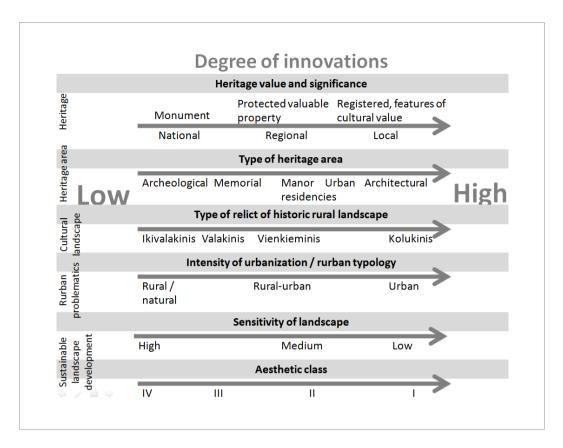


Fig. 5

Factors determining the degree of innovations in heritage management in the rurban zones

influences of the cities would be inevitably affected by the urban pressures and forced or must inevitably accommodate some changes or innovations occurring due to the intensification of anthropogenic activities. In the context of heritage preservation in such dynamic territories as the rurban ones, one of the most important factors is to determine the possible character and degree of changes. The main idea here is that the allowed and even welcomed changes are the sustainable innovations that do not diminish the heritage values, even create new values, and help developing specific rurban identity. The Fig. 5 demonstrates the factors, which influence the degree of innovations in the heritage areas in the rurban zones. As it can be seen below, these factors are linked with the value of the heritage object itself, the type and corresponding vulnerability of the heritage area, with the aspects of typology of cultural landscape, and with the intensity of urban influence as well as such issues as general landscape sensitivity and the identified aesthetic class. The figure shows four aesthetic classes (VI is the highest denoting the most aesthetically pleasing and valuable landscapes). The issues of landscape sensitivity and aesthetic classes of rurban areas are elaborated in detail the earlier research (Zaleskiene and Grazuleviciute-Vileniske, 2014).

Bearing in mind the importance of innovations in heritage management in the rurban context, the four degrees of innovations (more meaning the visible interventions in heritage objects and areas, not the innovations in heritage preservation field or techniques) were distinguished. The definition of each degree are presented below:

I Very intensive (changes of function, layout, volume, use of contemporary contrasting materials) innovations. The conditions for these radical interventions may be: the I, II aesthetic classes, low sensitivity of landscape, high degree of urbanization, Kolukinis type of relicts of historic rural landscape, architectural heritage area, comparatively low heritage value, and regional, local heritage significance.

II Intensive (changes of function, layout, slight changes of volume, use of contemporary materi-

als). The conditions for this type of interventions may be: I, II aesthetic classes, medium and low sensitivity of landscape, high and medium degree of urbanization, Vienkieminis and Kolukinis types of relicts of historic rural landscape, urban or architectural heritage area, comparatively low or medium heritage value, regional or local heritage significance.

III Medium (close to authentic or authentic function, slight changes of layout and volume, use of authentic and contemporary materials). The conditions for this type of interventions may be: II, III aesthetic classes, medium and high sensitivity of landscape, medium to low degree of urbanization, Ikivalakinis, Valakinis, Vienkieminis types of relicts of historic rural landscape, manor residencies or urban heritage area, medium heritage value, national or regional heritage significance.

IV Low (close to authentic or authentic function, slight changes of layout, use of authentic or close to authentic materials). The conditions for this type of interventions may be: III, IV aesthetic classes, high sensitivity of landscape, low degree of urbanization, Ikivalakinis, Valakinis, Vienkieminis types of relicts of historic rural landscape, archeological or memorial heritage area, high heritage value, national heritage significance.

Conclusions

The problems of heritage preservation in rurban areas should be dealt within the wider context of urban and landscape development as the rurban problematics both affects the heritage under consideration and its preservation aims, trends, and means.

Rurban areas surrounding the largest Lithuanian cities reflect the general problematics characteristic to the rural-urban interface zones. However, their potential related with rich cultural and natural landscape and high concentration of diverse immovable cultural heritage reflected in the National Landscape Management Plan and other documents as well as the representation possibilities deserve the specific attention from cultural heritage preservation point of view.

The provisions of the National Landscape Management Plan can be used as a valuable resource for developing the strategies for management of immovable cultural heritage in the rurban context. The priority heritage management aims, the trends of management and the complex preservation means in the landscape context identified in the document can be adapted to the rurban areas with heritage features. However, the characteristics of the rurban space, such as transient, contested, complex, and interdependent with the central city and the resulting pressure for changes and the need of innovations must be taken into account.

The proposals for heritage management in the rurban zones elaborated using the solutions of the National Landscape Management Plan include:

- _ the discussion and modifications of the typology of and management provisions for the heritage areas;
- _ the proposals for determining the intensity of innovations;
- _ the links between the typology of heritage areas, the management provisions, and the desirable aesthetics and the image of the rurban area.

They can be applied developing the strategies for heritage management in the rurban context.

References

Abromas J., Kamičaitytė-Virbašienė J., Ziemeļniece A. Visual impact assessment of wind turbines and their farms on landscape of Kretinga region (Lithuania) and Grobina townscape (Latvia). Journal of Environmental Engineering and Landscape

Management, 2015; 23 (1): 39–49. https://doi. org/10.3846/16486897.2014.919921

Alphan H., Guvensoy L. Detecting coastal urbanization and land use change in Southern Turkey. Journal of Environmental Engineering and Landscape

Management, 2016; 24 (2): 97–107. https://doi.org/10.3846/16486897.2015.1113976

Alphan H., Derse M. A. Change detection in Southern Turkey using normalized difference vegetation index (NDVI). Journal of Environmental Engineering and Landscape Management, 2013; 21 (1): 12-18. https://doi.org/10.3846/16486897.2012.663091

Antrop M., Eetvelde V. Holistic aspects of suburban landscapes: visual image interpretation and landscape metrics. Landscape and Urban Planning, 2000; 50: 43–58. https://doi.org/10.1016/S0169-2046(00)00079-7

Bardauskienė D., Pakalnis M. Foresighted urban planning. Environmental Research, Engineering and Management, 2012; 59: 63-72. https://doi.org/10.5755/j01.erem.59.1.679

Berte E., Panagopoulos T., Zanon B. 2013. An interpretative model for the management of contemporary cultural landscapes in linear infrastructure projects. Journal of Environmental Engineering and Landscape Management, 2001; 21(4): 248-262. http://dx.doi.org/10.3846/16486897.2012.745412. https://doi.org/10.3846/16486897.2012.745412

Bučas J. Kraštotvarkos pagrindai. Kaunas: Technologija; 2001.

Bučas J. Etnografinių kaimų atrankos kriterijų vertinimas [Evaluation of Selection Criteria for Ethnographic Villages] 2005 (accessed 14 August 2016). Available at: http://www3.lrs.lt/pls/inter/w5_show?p_r=2229&p_d=40879&p_k=1

Buciega A., Pitarch M. D., Esparcia J. The context of rural-urban relationships in Finland, France, Hungary, the Netherlands and Spain. Journal Of Environmental Policy & Planning, 2009; 11(1): 9-27. https://doi.org/10.1080/15239080902774929

Gallent N., Andersson J. Representing England's rural-urban fringe. Landscape Research, 2009; 32(1): 1-21. https://doi.org/10.1080/01426390601097495

Gražulevičiūtė-Vileniškė I., Zaleskienė E. Nacionalinio kraštovaizdžio tvarkymo plano sprendinių aptarimas miesto ir kaimo sąveikos kraštovaizdžių aspektu [Discussion of the solutions of the National Landscape Management Plan from the point of view of rural-urban interface landscapes]. Miestų želdynų formavimas, 2016; 13(1): 112-129.

Gražulevičiūtė-Vileniškė I., Gadal S., Zaleskienė E. Peculiarities of rural-urban interface in Lithuania and implications for landscape management. Proceedings of the 17th Conference for Junior Researchers Science – Future of Lithuania 10 April 2014. Vilnius, Lithuania. 2014; 211-219.

Heritage conservation terminology 2011(accessed 15 December 2016). Available at: http://ip51.ico-

mos.org/~fleblanc/documents/terminology/doc_terminology_e.html

Kauno rajono savivaldybės bendrasis planas [General Plan of Kaunas District Municipality] 2009 (accessed 14 August 2016). Available at: http://www.kaunoplanas.lt/bendrieji_planai/kauno_rajono_savivaldybes_bendrasis_planas_tikroji_bukle

Klaipėdos rajono savivaldybės teritorijos kraštovaizdžio tvarkymo specialusis planas [Special Landscape Management Plan of Klaipeda District Municipality] 2013 (accessed 14 August 2016). Available at: http://www.webpartner.lt/klaipeda_raj/subsystems/web/doc.php?itemID=13218

Lietuvos Respublikos nekilnojamojo kultūros paveldo apsaugos įstatymas [The Law on the Protection of Immovable Cultural Heritage of the Republic of Lithuania] 2005 (accessed 15 December 2016). Available at: https://www.e-tar.lt/portal/lt/legalAct/TAR.9BC8AEE9D9F8/zBmVREvcUs

Liu Ch., Qi T., Ma X. The research on the impact assessment of visual landscape of country parks in Beijing. Journal of Environmental Engineering and Landscape Management, 2016; 24(1): 37-47. https://doi.org/10.3846/16486897.2015.1106545

Nacionalinio kraštovaizdžio tvarkymo plano sprendiniai [Solutions of the National Landscape Management Plan of the Republic of Lithuania] (accessed 14 August 2016). Available at: http://www.am.lt/VI/index.php#a/12733

Nohl W. Sustainable landscape use and aesthetic perception - preliminary reflections on future landscape aesthetics. Landscape and Urban Planning, 2001; 54: 223-237. https://doi.org/10.1016/S0169-2046(01)00138-4

Öğdül, H. G. Urban and rural definitions in regional context: A case study on Turkey. European Planning Studies, 2010; 18(9): 1519-1541. https://doi.org/10.1080/09654313.2010.492589

Overbeek G. Opportunities for rural-urban relationships to enhance the rural landscape. Journal of Environmental Policy & Planning, 2009; 11(1): 61-68. https://doi.org/10.1080/15239080902775058

Ramachandra T. V., Bharath S., Bharath A. Spatio-temporal dynamics along the terrain gradient of diverse landscape. Journal of Environmental Engineering and Landscape Management, 2013; 22(1): 50-63. https://doi.org/10.3846/16486897.2013.808639

Ramanauskas E., Dringelis L. The impact of urban planning on the development of territorial land resources: experience in Lithuania. Architecture and Urban Planning, 2013; 8: 34-39. https://doi.org/10.7250/aup.2013.017

Soini K., Vaarala H., Pouta E. Residents' sense of place and landscape perceptions at the rural-urban

interface. Landscape and Urban Plansning, 2012; 104 (1): 124-134. https://doi.org/10.1016/j.landurb-plan.2011.10.002

Sullivan W. C., Anderson O. M., Lovell S. T. Agricultural buffers at the rural-urban fringe: an examination of approval by farmers, residents, and academics in the Midwestern United States. Landscape and Urban Planning, 2004; 2-3(69): 299-313. https://doi.org/10.1016/j.landurbplan.2003.10.036

Tu G., Abildtrup J., Garcia S. Preferences for urban green spaces and peri-urban forests: an analysis of stated residential choices. Landscape and Urban Planning, 2016; 148: 120-131. https://doi.org/10.1016/j.landurbplan.2015.12.013

Westphal, J. M. Managing agricultural resources at the urban–rural interface: a case study of the Old Mission Peninsula. Landscape and Urban Planning, 200; 57(1): 13-24. Zaleskienė E., Gražulevičiūtė-Vileniškė I. 2013. Rurban landscape classification: case of Lithuania. Proceedings of the 6th international conference Rural Development 2013 November 28-29 2013. Aleksandras Stulginskis University, Akademija. 2013; 6: 463-467.

Zaleskienė E., Gražulevičiūtė-Vileniškė I. Landscape aesthetics theories in modeling the image of the rurban landscape. Journal of Sustainable Architecture and Civil Engineering, 2014; 7: 10-21. https://doi.org/10.5755/j01.sace.7.2.6731

Zaleskienė E., Gražulevičiūtė-Vileniškė I., Gadal S. Perspective of multiscale planning of rurban development: case of Lithuania. Journal of Sustainable Architecture and Civil Engineering, 2015; 10: 13-25. https://doi.org/10.5755/j01.sace.10.1.8801

Zaleskienė E., Kamičaitytė-Virbašienė J., Graluževičiūtė-Vileniškė I. Aesthetic aspects of landscapes in the rural-urban interface zones. Acta Biologica Universitatis Daugavpiliensis, 2013; 13: 15-30.

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