

# Landscape Aesthetics of Watermills and Small-scale Hydroelectric Power Plants

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**Abstract.** In this research study, landscapes of watermills and small-scale hydroelectric power plants (HPP) have been researched. Research in these particular areas is part of a complex research of the watermills and small-scale HPP landscapes in Latvia. The aim of this research study is to examine the existing situation in landscapes of watermills and small-scale HPP in Latvia by the aspect of aesthetics resulting in the definition of common tendencies in transformations of landscape character. This paper reflects the data which was obtained as a result of interrelationship between landscape elements in the landscape inventory matrix. The Landscape Identification was made in the local planning level (open space structure planning level). The research included 42 territories from Latgale, Kurzeme and Vidzeme uplands' distribution ranges. These landscapes were selected from more than 400 territories. The concept of Morphological Matrix Method has been used in the development of landscape inventory matrix. A list of identifying features of landscape was compiled in morphological matrix, after the matrix was filled, followed by the appraisal, which contained creation of links between the characteristic markers and expressions. The results of the research reflected aesthetically the quality in the researched landscapes according to previously developed criteria.

**Keywords:** Local Planning Level, Morphological Matrix.

## Introduction

The situation of landscapes in these hydropower territories until now has been unclear. Researched areas are required to have an in-depth research for the future-effective decision making. The need for landscape assessment is also important in territories with the potential for tourism or other territories that have potentials for public access. Some of the territories which were built for producing only power (e. g., watermills, small-scale hydroelectric power plants (HPP)), presently have been transformed into renovated territories with new functional uses (e. g., guest houses, restaurants, private apartments, tourism objects, etc.).

In the beginning of the 19<sup>th</sup> century Latvia, there existed more than 400 territories, where small-scale hydropower objects were built and used as watermills until the electricity modernisation period began. Electricity production with the help of hydropower in Latvia started at the end of the 19<sup>th</sup> century [15]. In Latvia, the use of hydroenergy at the start of the 20th century was developing very fast, while active construction process of small-scale HPP also started. By 2002, 149 small-scale HPP were producing hydroenergy in Latvia, but the result of the total cumulative produced energy was approximately only 1 % of the total amount of electricity usage in Latvia. In 2011, 68 % of energy was produced in Latvia, 33.4 % of

which was produced by the utilisation of renewable resources, and 33 % of energy was produced by HPP,

but of course, the largest amount of this hydroenergy was being produced by large-scale HPP [16].

The territories of watermills in Latvia were researched in recent years by different scholars with the aims to chronicle the historical review [28, 14, 23, 27], to document the ecological reviews and the impact of small-scale hydroelectric power plants onto fishery [30, 31], to explore the possibilities of using hydroelectric power from rivers in Latvia [19], or to illustrate important personal or emotional experiences in associations of watermills in literary manner [35]. Thus, the aim of this research was to conduct an examination of the existing situation in landscapes of watermills and small-scale hydroelectric power plants in Latvia in terms of aesthetics to define common tendencies in the transformations of landscape character.

The author of this paper has made several research studies in this field of study, with publication of a review on historical landscape structure development of these territories, the publication of public notions of these territories, and a conference report in terms of sensory perceptions.

## Aspect of Aesthetic

The term 'aesthetic' is derived from the Greek word, 'aisthesis', meaning sensory perception, experience as well as feeling [32]. The definition of

the term 'aesthetic,' which could be used in the framework of this research is 'the study of the mind and emotions in relation to the sense of beauty' [5].

Aesthetic is defined as the study of sensory or sensory-emotional values (a pleasing appearance or effect), sometimes called judgments of sentiment and taste, and the condition of a judgment of taste is that it is essentially subjective [34, 20]. For better understanding of the aim of the senses by aspect of aesthetics, two definitions of the term 'sense' in the framework of this research could be used:

- 1) any of the faculties, as sight, hearing, smell, taste, or touch, by which humans and animals perceive stimuli originating from outside or inside the body;
- 2) a faculty or function of the mind analogous to sensation – the moral sense' [6].

The idea that a designed landscape ought to be visually beautiful is at least as old as the Renaissance [11]. Complexity and elusiveness contribute to the sense of the sublime [32, 1]. In the 18<sup>th</sup> century, the English landscape beauty objective was to make an ideal landscape, and the ideas for this aim were collected from many sources to build up the ideal, but this aim may have changed the criteria for landscape beauty in the 18th century, but not its central importance as a standard by which the designer's art should be judged' [11]. The German philosopher Imanuel Kant (1724-1804) drew a distinction between two kinds of beauty: The free and unhampered, and the conditional, which assumes the understanding of objects, and make various points of view possible; for example, the functionalist view that 'the form follows the function', or the moralist view that 'beauty lies in goodness' [32]. If landscape design could be seen only as a form of art-making, then the common wisdom held that any work of landscape architecture succeeded or failed according to how beautiful it was to look at' [20]. In our nature, there is a need to be a very radical and wide-spread tendency to observe beauty and to value it [25]. 'Today, man provokes Nature with overconfidence in his power and ability to control and alter the environment' [33]. One of the designer's roles as a professional is to ensure that all reasonable steps are taken during the design process of landscape elements to protect the health, safety, and welfare of the public users of any space [13].

### Qualities of Method

Among appropriate aesthetic assessment indication methods for the researched landscapes, one of characteristic markers is to find landscape indicators, which tend to have universality, and it is possible to search for these indicators; for example, landscape elements, which are connected with particular landscapes in the researched territories. These indicators are extremely sensitive to the value attributed to certain landscapes by the population [3]. In literature, the classification of landscape attributes is possible and could be divided in three groups:

The landscape planning process is developed in a more complex way, as the 'sense' of landscape can be found in the intersection of different dimensions, and for this reason, assessments, concerning the various aspects and their relations are required [3]. In various situations, aesthetics planning is a process that occurs at every stage of design, construction, and maintenance [20]. One of the goals of the landscape architect is to fit the functionally-built environment or other facility into the adjacent landscape in a way that is complementary to, and enhances, the existing landscape. Achieving this goal requires consideration of natural, ecological, aesthetic, economic, social, cultural, and historical influences related to that landscape [20]. Details in landscape take a significant role in the functions of aesthetic. 'Landscape should please the eye. Every truly great landscape has great details, details that contribute to the aesthetic themes of the site that complement one another, and create beauty out of the ordinary materials and necessities of construction.

A landscape with a splendid thematic idea can fail landscape architecture if it has poor details: Details that are badly matched to its primary aesthetic that do not relate strongly to one another, or that fail to lift their materials above the ordinary' [24]. Professor Kirkwood outlines landscape detail as a primary design activity. 'Aesthetic and environmental changes are alterations to the original design and artistic intentions of the project through its detail forms. Transformations to the larger design context are further instances of such change. These include detail forms that are associated with inappropriate or outdated design strategies or have been altered because of new insights into our understanding of environmental and natural systems' [13].

With respect to the hydropower buildings technical requirements, aesthetics in these territories may be defined as dealing with the visual integration of built environment into the fabric of a landscape in a way that blends with or complements that setting [20].

- 1) the existence of landscape elements, type and classification;
- 2) the properties of landscape elements;
- 3) the result of interrelationship between landscape elements [36].

'Experts or professionals rather than the general public often make decisions involving visual impacts' [12], and 'some also believe that the public lacks the experience and knowledge that is needed to be fully sensitive to aesthetic quality' [2].

Another important question, concerning the selection of aesthetic assessment method, is the

quantitative or qualitative nature of the measurement. In the method of a morphological matrix, a list of characteristic markers and expressions is chosen, which will show the results of qualitative and quantitative data. In such research, it is important to consider the issues of data reliability and validity [22]. A high degree of stability of a measurement over time indicates a high degree of reliability, which means the results are repeatable (the same can be determined through the test-retest method at two different times) [4, 7]. There are several types of validities that contribute to the overall validity of a study, but the two main dimensions are internal and external validity [29]. This research study could show data by internal validity. 'Internal validity is concerned with the degree

of certainty that observed effects in an experiment are actually the result of the experimental treatment or condition, rather than intervening, extraneous or confounding variables' [29].

According to the landscape scale – the aesthetic view – in which the landscape is something that can be comprehended and organised into a meaningful whole by the human eye, much of understanding and use of landscapes is based on an intuitive visual grasp of their nature and extent [26]. The scale may be absolute, or relative, and often denoted as a ratio [4]. For better understanding of the local situation in particular landscapes, this research has to be based on local landscape scale (open space structure planning level) [9].

### Materials and Methods

In the framework of this research study, the selected territories were visited during the period of time between May 2010 and August 2012. This study included 42 territories from Latgale, Kurzeme and Vidzeme uplands distribution ranges – 14 territories from each (Fig. 1). These landscapes were selected from more than 450 old watermills (marked in maps [8]) and 150 small-scale HPP territories (marked in the map of MHEA) [17]. Territories were chosen randomly by several criteria: The location of the researched territory in one of three densely build-up upland areas in Latvia, the existence of the architectural design in territory, the diversity by functions (private or public), by location (rural, suburb or urban), by landscape construction (only those territories were chosen where the hydropower producing was only by water accumulation in reservoirs). Two territory groups, divided by definition of small-scale HPP or

watermill cannot be used because the functions of small-scale HPP mainly are situated in old buildings of watermills or in territories where the old watermills were located, and the dam constructions are reused. The total number of newly constructed small-scale HPP (developed at the end of the 19<sup>th</sup> century) for electricity production only in new section of river, for now by resources of public data, is impossible to account [18].

For landscapes in these culturally-historic territories where these hydropower objects were built, and for territories which have similarities in construction based on water resources, more suitable options to choose and use in this research, are individually constructed landscape indicators based on the criterion of interaction between landscape elements (Fig. 2). It was necessary to consider the landscape both as a visible part of a territory and as

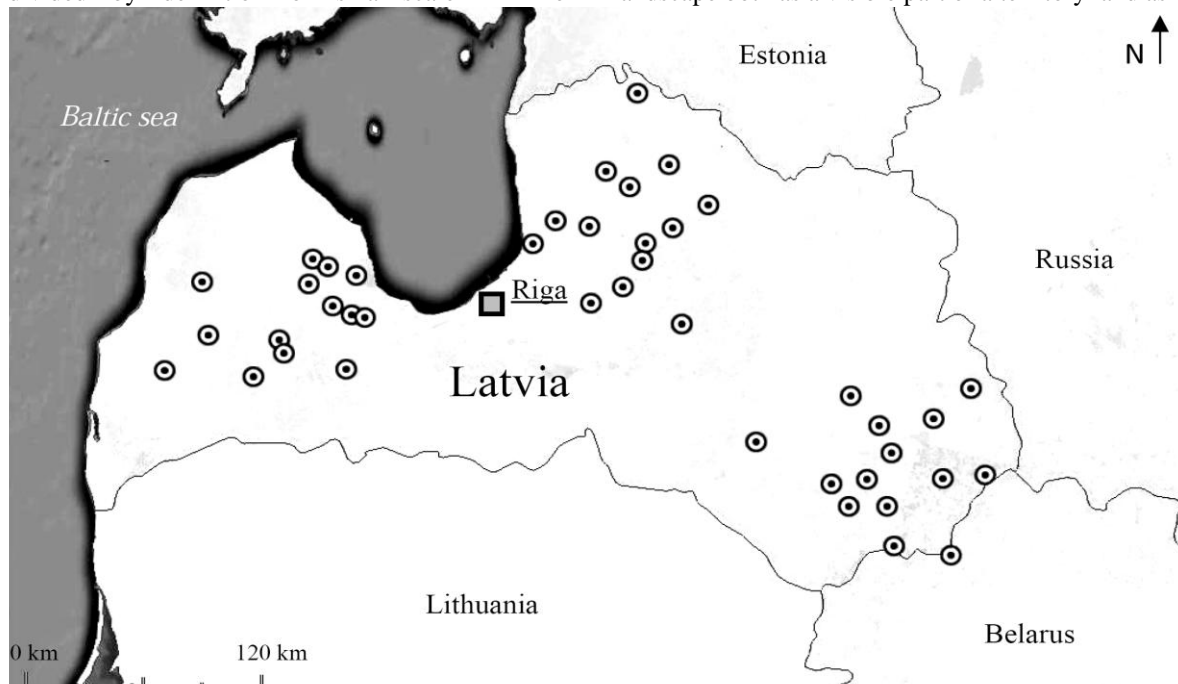


Fig. 1. Researched territories location in map of Latvia [Source: construction by the author, used maps by Google Earth]

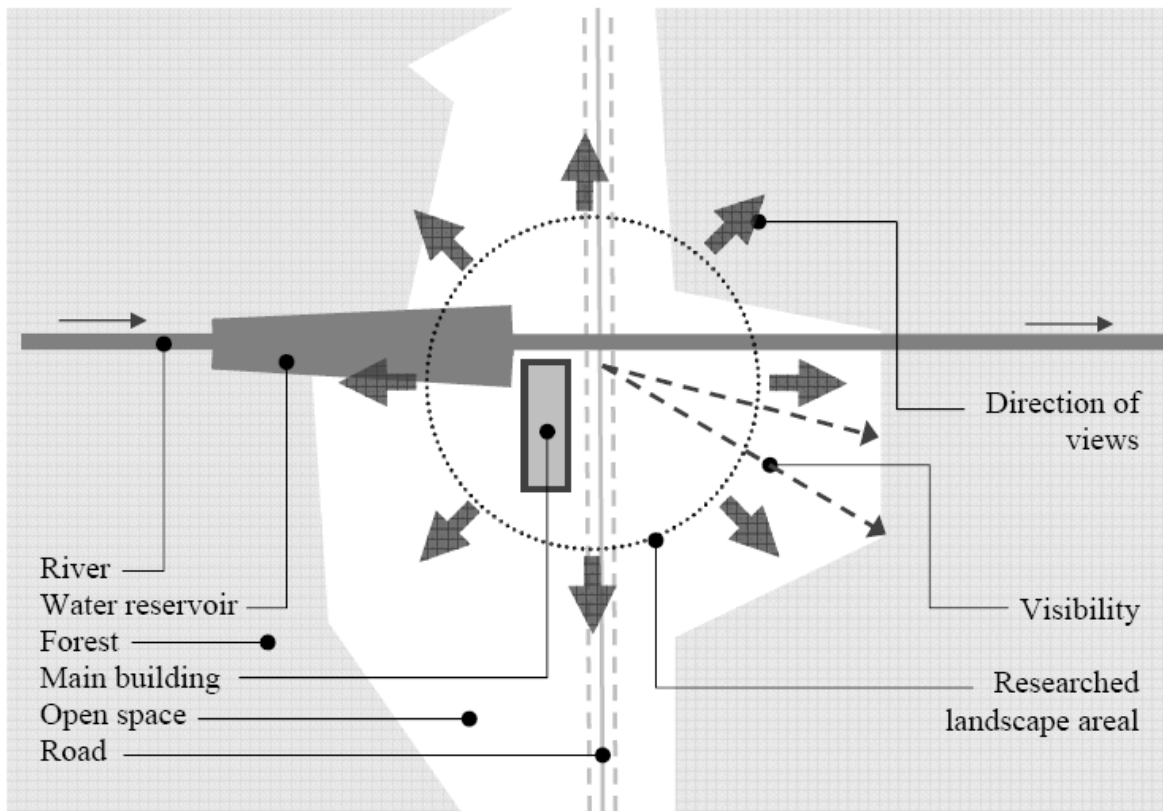


Fig. 2. Conceptual model of researched landscape areal [Source: construction by the author]

an interpretation of perception signals through a memory process [21], which leads to the building up of the morphological matrix on perception-based method by emphasising the human view aspect. This assessment was done by the expert (the author) according to her professional practice and knowledge. The elements used to evaluate landscapes in this research were the scale, contrast, variety, convergence, codominance, axis, enframement, motion, season, etc., perceived by these senses: **Visual, auditory, kinetic, and olfactory.**

In the practical development of the method for this research, after several random visits to territories without selection by any criterion, the matrix with identifying features (prepared before

theoretically by literature reviews) of landscape was developed by a set definition of markers and expressions. The matrix was then updated with each new visit, and after having been used in this research, 20 identifying features were expressed (Table 1). The existence of each expression by defined criteria was marked in the matrix, and according to the results, values could be calculated. After the inventory matrix was fully filled for each territory by the expert, the common data was calculated, as shown in this paper. The percentage display for all 42 territories was 100%, and the places where the percentages are recorded have had defined expressions of identifying features. After the total amount of data was collected and collated, the conclusions could then be made.

## Results and Discussion

The landscapes in the researched territories have been visited, and the results from the landscape inventory matrix are shown in Table 1. The results show that the landscapes in the researched territories, in general, are mainly harmonious (45 % (A.03) and 24 % (A.04) respectively), have far away (Fig. 3) and close distance views, most in pleasant designs (50 % (A.8.3) and 26 % (A.8.4) respectively), most territories have harmonious shape of plants and composition in nature environment (67 % (A.4.4)). For those territories, which were constructed with the aim of industrial function, the results of this research for visual harmony values are positive. However, the impact of

landscape changes over a period of time has to be taken into account because, due to landscape management, the views from and to the respective territory may exist over a period of two or five years, and they will have a pleasant design, or at least visible. However, without any management, the landscapes could lose the scenic value.

In the researched landscapes by dominance of a negative aspect, the following results can be highlighted: The lack of qualitative recreational equipment design (65 % (A.6.1) and 7 % (A.6.2) respectively), in only 31 % (A.5.4), the constructions are designed according to an architectural design, and in only 29 % (A.2.4), the character of all built

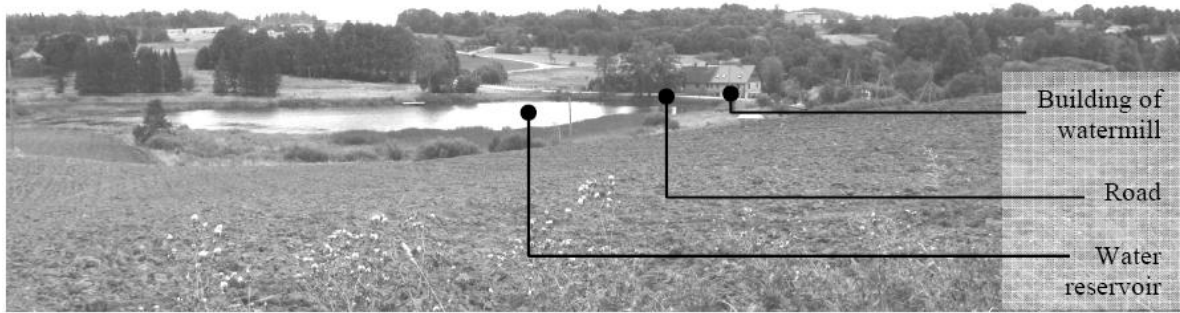


Fig. 3. Landscape of watermill, Jaunmokas [Source: construction by the author, 2012]

environments is in unity. The lack of qualitative recreational equipment not always impacts the visual landscape value in general, but results in showing the weak positions by public access management possibilities. The landscapes, which are in use by people, need to contain the principle of unity in architectural and constructional designs, and, of course, this criterion is not easy to observe because of specific constructional needs of these territories and the economic considerations.

The historical architecture does not exist in only 14 % of the researched territories. In territories, where the historical architecture or part of it still exists, the 31 % (A.15.2) are unsuccessfully organised with newly built architecture, and in only 19 % (A.15.3), the historical architecture is successfully integrated in the newly built architecture. By this criterion – the newly built

architecture – we mean the architectural elements, which have apparently changed the old structure of all visible landscape, after the construction of the first built-up watermill complex, in this matrix are called as historical architecture. In the criterion, where the historical architecture remains mainly unchanged by the newly built architecture (36 % (A.15.4)), the main buildings without the present-day functional use (abandoned or ruined) was taken in account, but by dominance, only in 9 % (A.7.2), the degraded landscape elements dominate in the landscape, the nature in 43 % (A.7.4), and architectural elements in 36 % (A.7.3) mainly dominate in the researched landscapes. These results show that in the territories, where the landscapes are abandoned or ruined, natural processes come into force which take an effect in landscape aesthetics as changes in the predominance of landscape elements.

TABLE 1

Landscape inventory matrix by aspect of aesthetic [Source: construction by author]

Identifying features	Expressions			
Visual harmony of landscape in territory	All territory is disharmonious	Most parts of territory are disharmonious	Most parts of territory are harmonious	Landscapes in all parts of territory are harmonious
A.0	A.0.1 / 7 %	A.0.2 / 24 %	A.0.3 / 45 %	A.0.4 / 24 %
Visual harmony of surrounded environment (natural and man-made) with idea of landscape design in territory	Surrounding environment is not as well designed as landscape in territory	Surrounding environment has own design, but the landscape in territory is not designed	Landscape in territory is designed, but the idea by some design solutions is disharmonious with environment	Most of the surrounding environment is in harmony with idea of design in territory
A.1	A.1.1 / 38 %	A.1.2 / 17 %	A.1.3 / 26 %	A.1.4 / 19 %
Landscape built environment character by unity	The character of built environment is lacking in uniformity	The character of some built environment is lacking in uniformity	The character of built environment is mainly in unity	The character of all built environment is in unity
A.2	A.2.1 / 21 %	A.2.2 / 17 %	A.2.3 / 33 %	A.2.4 / 29 %
Visual harmony between building materials in architecture and surrounding environment	Building materials are disharmonious with architecture and environment	Building materials are disharmonious with architecture, but compatible with environment	Building materials are harmonious with architecture, but incompatible with environment	Mainly building materials in architecture and environment are harmonious
A.3	A.3.1 / 7 %	A.3.2 / 7 %	A.3.3 / 12 %	A.3.4 / 74 %

CONTINUATION OF TABLE 1

Identifying features	Expressions			
	Shape and composition of plants in nature environment are disharmonious	Shape of plants species in nature environment are disharmonious	Composition of plants in nature environment are disharmonious	Shape of plants and composition in nature environment are harmonious
Visual harmony between shape and composition of plants and nature of environment	A.4.1 / 0 %	A.4.2 / 0 %	A.4.3 / 33 %	A.4.4 / 67 %
Visual harmony between architecture design and technologically required constructions	Construction and architecture are not designed and is disharmonious	Construction is not designed according architecture design and is disharmonious	Some elements of constructions are designed according architectural design and is harmonious	Constructions is designed according to architectural design and is harmonious
A.5	A.5.1 / 10 %	A.5.2 / 38 %	A.5.3 / 21 %	A.5.4 / 31 %
Visual harmony between recreational equipment design and landscape design	Mainly, recreational equipment is not designed	Recreational equipment is designed, but the result is disharmonious with landscape design	Recreational equipment is designed in most territory, and the result is in visual harmony with landscape design	Recreational equipment is designed and is in visual harmony with landscape design
A.6	A.6.1 / 65 %	A.6.2 / 7 %	A.6.3 / 14 %	A.6.4 / 14 %
Dominance of landscape elements	In landscape, there is no dominance	Degraded landscape elements are dominated in landscape	Architectural elements are dominated in landscape	Elements of nature are dominated in landscape
A.7	A.7.1 / 12 %	A.7.2 / 9 %	A.7.3 / 36 %	A.7.4 / 43 %
Distance and design of views form territory	Are only close distance views, not in pleasant design	Are far away and close distance views, not in pleasant design	Are far away and close distance views, some are in pleasant design	Are far away and close distance views, all views are in pleasant design
A.8	A.8.1 / 7 %	A.8.2 / 17 %	A.8.3 / 50 %	A.8.4 / 26 %
Visual dynamic in seasonal color by plants (trees and shrubs)	In territory there are mainly evergreen trees or shrubs	In territory there are mainly deciduous trees or shrubs	In territory there are up to 14 species of trees or shrubs - evergreen, deciduous and decorative plants	In territory there are more than 15 species of trees or shrubs - evergreen, deciduous and decorative plants
A.9	A.9.1 / 0 %	A.9.2 / 48 %	A.9.3 / 38 %	A.9.4 14 %
Visual dynamic by relief	Landscape is gently sloping, not dynamic	Landscape is gently sloping with some wavy relief elements, not dynamic	Landscape is wavy with some hilly elements, in some parts landscape is dynamic	Landscape is hilly with some slopes or bluffs, landscape is dynamic
A.10	A.10.1 / 26 %	A.10.2 / 41 %	A.10.3 / 26 %	A.10.4 / 7 %
Visual dynamic in water movement in river	Dynamic in water movement is almost invisible for slow movement	Water movement is medium fast, water movement is not dynamic	Water movement in some parts is very fast and full of rapids, water movement is dynamic	Water movement in all visible parts is very fast and full of rapids, water movement is dynamic
A.11	A.11.1 / 43 %	A.11.2 / 55 %	A.11.3 / 2 %	A.11.4 0 %
Intimacy and landscape scale in territory	There is no intimacy	Landscape is creating intimacy, in large scale	Landscape is creating intimacy, in small scale	Landscape is creating intimacy, in small and large scale
A.12	A.12.1 / 29 %	A.12.2 / 19 %	A.12.3 / 26 %	A.12.4 / 26 %

CONTINUATION OF TABLE 1

Identifying features	Expressions			
Symmetry in landscape composition structure	Landscape is not symmetrical	Some elements are designed by principles of symmetric composition	Some elements and some parts of landscape are designed by principles of symmetric composition	Landscape is designed in symmetrical composition
A.13	A.13.1 / 88 %	A.13.2 / 10 %	A.13.3 / 2 %	A.13.4 / 0 %
Visually perceived compositional axis in landscape	In landscape, there is no compositional axis	In landscape, there is one compositional axis	In landscape, there is one main, and several subordinated compositional axis	In landscape, there are several, main compositional axis
A.14	A.14.1 / 90 %	A.14.2 / 10 %	A.14.3 / 0 %	A.14.4 / 0 %
Convergence of historical and newly build architecture (buildings or elements) in landscape	There is no historical architecture	Historical architecture is unsuccessfully organised with newly built architecture	Historical architecture is successfully integrated in newly built architecture	Historical architecture mainly has not changed with newly built architecture
A.15	A.15.1 / 14 %	A.15.2 / 31 %	A.15.3 / 19 %	A.15.4 / 36 %
Landscape enframement from access roads	Landscape doesn't have enframement from main access roads	Landscape is invisible from access roads	Landscape has enframement only from one access road	Landscape has enframement from all access roads
A.16	A.16.1 / 29 %	A.16.2 / 5 %	A.16.3 / 21 %	A.16.4 / 45 %
Emotional experience in landscape territory	Landscape is homogeneous, tedious by access and in the landscape territory	Emotional experience by access to landscape territory is possible	Emotional experience only in several parts of landscape territory is possible	Emotional experience by access to landscape and in the territory are possible
A.17	A.17.1 / 33 %	A.17.2 / 33 %	A.17.3 / 17 %	A.17.4 / 17 %
Audibility harmony in landscape	Landscape territory is in noise, territory is disharmonious	Close to landscape territory is noise, territory is disharmonious	In landscape territory, there are few noises and sounds, landscape is in harmony	In landscape territory, there are sounds, which are in harmony with landscape
A.18	A.18.1 / 12 %	A.18.2 / 12 %	A.18.3 / 31 %	A.18.4 / 45 %
Pleasant smell harmony in landscape	All territory is smelly; it is disharmonious	Some part of territory is smelly, or too much aromatised; it is disharmonious	In territory, there are no special smells which to mark out; it is in harmony with landscape	In some parts of territory, there is individual, pleasant smell; it is in harmony with landscape
A.19	A.19.1 / 0 %	A.19.2 / 7 %	A.19.3 / 88 %	A.19.4 / 5 %

In 12 % of the territories, the landscape territory suffers from noise, and the territory is disharmonious (A.18.1). Under all circumstances, any unwanted, unpleasant, loud, or harsh sound is referred to as noise. Although the acceptability of the type and level of noise is highly subjective,

noise can also cause physical discomfort and, if intense enough, can cause damage to hearing. Any frequent or continuous exposure to noise can lead to a deterioration of human efficiency by a deterioration of physical and emotional well-being [10].

### Conclusion

In the assessment of interrelationship between landscape elements, the aesthetic value can be valued on the basis of landscape inventory matrix by the aspect of aesthetic according to the subjective observer's opinions. The landscapes in the researched territories show diversity in their aesthetical constructions. The percentage data show

the main tendencies in particular landscapes, which have to be taken into account for future landscape development planning and research studies in these landscapes. From the experience of unsuccessfully organised newly-built architecture in the researched territories, we need to learn and should not permit that kind of landscape expressions in future

development. The main conclusions of this research is that landscapes in the researched territories are mainly harmonious, but are not well designed, and are with dominance of such natural landscape elements as deciduous trees or shrubs and slow movement water surfaces that lead to landscape homogeneity and tediousness in some parts of the researched landscapes. The potentials for future

development are also discovered in most territories: The historical architectural design, its historical heritage by building materials and visual compositions of architectural elements, components of views from and to territories, landscape intimacy in different scales, and harmony in audible and aromatic surroundings.

### Acknowledgement

This research work was supported by European Social Fund project, "Realization assistance of LLU doctoral studies", contract No. 2009/0180/1DP/1.1.2.1.2/09/IPIA/VIAA/017.

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**Kopsavilkums.** Pētījums tika veikts Latvijas ūdensdzirnavu un mazo hidroelektrostaciju (HES) teritorijās. Rakstā ir atspoguļota pētījuma gaita, autore izstrādātā un pielietotā ainavas vērtējuma matricā, iegūtie rezultāti un secinājumi. Rakstā atspoguļotā informācija ir daļa no kopējā pētījumu kompleksa par ainavu kvalitātes tendencēm šajās teritorijās. Pētījuma mērķis bija, analizējot ainavas ūdensdzirnavu un mazo HES teritorijās, vadoties pēc estētiskā aspekta, noteikt kopējās tendences ainavu pārveides procesos. Šis pētījums tika veikts 42 ūdensdzirnavu un mazo HES teritorijās Latvijā, trijos visblīvāk apbūvētajos areālos – Latgales, Kurzemes un Vidzemes augstienes areālā. Dati iegūti izvirzot ainavas vērtējuma kritērijus (balstoties uz literatūras studijām un iepriekšējām vairāku teritoriju vizītēm) sastādot ainavas inventarizācijas matricu, vērtētājam (autorei) apmeklējot teritorijas klātienē un izvērtējot katru no kritērijiem, atzīmējot katra kritērija izpausmes raksturojumu. Pēc visu teritoriju izvērtēšanas, rezultāti par katru kritērija izpausmes raksturojumu atspoguļoti procentuālā sadalījumā. Rezultāti liecina, ka pētītajās teritorijās ne vienmēr ir veidots vai kvalitatīvi izstrādāts ainavas un rekreācijas aprīkojuma dizains, bet ainavās pārsvarā dominē dabas un arhitektūras elementi, tikai retās ainavās dominē ainavu degradējoši elementi vai nav novērojama dominānce. Lielākajā daļā teritoriju ainavas ir vizuāli harmoniskas visā vai kādā no pētītās teritorijas daļām, bet mazāk kā pusē pētīto teritoriju, ainavas kļuvušas vienvēidīgas gan pētītajās teritorijās, gan piekļuves ceļu ainavā. Esošajā situācijā, plānojot turpmāko attīstību, jāņem vērā, ka lielākajā daļā no pētāmajām teritorijām, atrodas vēsturiskā apbūve vai vēsturiskās apbūves elementi, kuri visticamāk ietekmē arī ainavas un arhitektoniskās vides harmonijas izpausmes vērtējumu lielākajā daļā teritoriju, un varētu būt par vērtīgu pamatu turpmākai ainavu attīstīšanai. Galvenie rezultāti liecina, ka pētītās ainavas, estētiskā aspekta vērtējumā, ir daudzveidīgas un dabas un cilvēka mijiedarbības rezultātā var tikt neapdomīgi izpostītas, neizvērtējot katra ainavas elementa nozīmi un līdzsvara lomu konkrētā teritorijā.