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QUALITY OF DESIGNED LANDSCAPES AND THE POSSIBILITIES FOR THEIR ASSESSMENT

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Abstract. This paper explores the concept of quality and the possibilities of assessing the quality of designed landscapes in an urbanised environment. Quality is examined in the context of urban green space issues. The quality of urban green spaces is an important factor for human health, well-being and the effectiveness of urban green infrastructure. However, its assessment remains a challenge due to different terms, quality data and assessment methods. Drawing on international and national sources, the tangible and intangible dimensions of quality, objective and subjective methods of assessment, and key quality criteria are discussed. Examples from Lithuanian cities (Vilnius, Lazdijai, Naujoji Akmenė) are given, revealing discrepancies between planning decisions and user experience. The paper proposes the integration of evaluation models based on both quantitative and qualitative data, including innovative methods such as the analysis of geographic information provided by social media or smartphone apps.

Keywords: landscape architecture, urban green space, quality, evaluation methods, visitor experience.

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1. Introduction

The quality of urban public green spaces is becoming an increasingly important issue when it comes to the adaptation of cities to a changing climate and the well-being and health of urban populations. Modern cities are striving not only to increase the quantity of green spaces, but also to ensure that they are functional, attractive, inclusive and provide ecosystem services to different groups of people. Designed landscapes – squares, parks, green links and other urban open green spaces – play an important role in shaping the everyday experience of people in the City. However, even newly created or reconstructed spaces are not always welcomed by the public or used to their full potential.

Lithuanian cities are increasingly investing in public green spaces: in Vilnius alone, 15 new spaces are planned to open in 2025 (Vilniaus miesto savivaldybė, 2025). These projects are complex, time-consuming and require professional skills from variety of professions (designers, project managers, contractors, etc.), which makes it necessary to assess not only quantity of various space elements, but also their quality – how public green spaces are perceived, used and contribute to the well-being of citizens. Despite the growing trend of renovation of green spaces, the

concept of quality of green spaces and other designed landscapes and the methods of its assessment are still fragmented in Lithuania, and the national legal regulation is limited to quantifying of green areas, without defining the quality criteria.

This article analyses the concept and quality of the landscape architectural object of public green space in the urban environment, and methods of qualitative assessment. The example of public urban green space is chosen as the most clearly perceived and familiar embodiment of landscape architecture in the city. This article discusses tangible and intangible categories of quality, objective and subjective methods of assessment, and analyses relevant international studies and Lithuanian cases. The aim of the paper is to formulate a theoretical framework and to identify key principles that can be used as a basis for a broader assessment of the quality of not only public green spaces, but also of various other designed landscapes in urban environments.

Urban green spaces can be extremely variable in quality they offer to the user. Some spaces people want to spend time in, feel safe in, and come back to often, while other spaces inspire little more than to pass quickly through or even avoid, leaving them empty. What causes

these differences? Is it possible to objectively assess and measure this? What does the quality of an urban green space mean in general – is it just about a comfortable surface, working lighting and a well-kept lawn, or is it also about the feelings and experiences the place evokes in people?

The process of renewing public urban green spaces is well underway. In Vilnius alone, as many as 15 new or renovated public spaces are planned to open in 2025. The renovation of a space usually takes several years and is resource-intensive – design, administration, management and subsequent maintenance require the involvement of professionals with different competences.

Modern urban green spaces have to fulfil multiple functions – ecological, social, recreational, health-promoting – to provide comprehensive benefits to different visitor groups and to address the various problems of the urban environment. As a result, the public, policy makers and city administrations alike, are increasingly looking for evidence that projects are working as intended and that investments in these spaces are paying off in terms of the quality of life and nature in the city.

2. Concept of quality and theoretical tools for assessing it

2.1. Methodology

The theoretical framework of this paper is based on a literature review and comparative case analysis. Sources were gathered through Scopus, Google Scholar, academic journals, and publicly accessible databases. Keywords included "landscape architecture," "quality," "performance," "user satisfaction," and related terms. The search identified diverse approaches to defining and assessing quality. Additionally, three recently reconstructed urban squares in Lithuania (Vilnius, Lazdijai, Naujoji Akmenė) were analysed using objective and subjective criteria to highlight gaps between design intent and user experience. This mixed approach enabled identification of key quality indicators relevant for evaluating designed landscapes in urban contexts.

The three designed landscape schemes in different Lithuanian cities were selected to illustrate the theoretical ideas discussed below through analysis (Table 1). They were selected on the basis of the following criteria: (1) recent reconstruction, (2) publicly discussed or criticized quality, (3) different city sizes and socio-geographical context. This allows a comparison of how design decisions taken in different contexts meet users' needs.

2.2. Understanding designed landscapes and literature search approach

For the purposes of this article, urban public green space is defined as a professionally designed and constructed open space in an urbanised environment, the main function of which is to provide environmental, social, recreational and aesthetic benefits to people, nature and the city.

Urban public green space can be seen as an object of landscape architecture, a designed landscape. In literature, such objects are often referred to by a variety of terms, including public open space, urban green space, pocket park, square, as well as urban blue space. Because of this diversity of terminology, particularly when comparing different linguistic and disciplinary traditions, it is necessary to agree on the clarity of the concepts used. The lack of a common terminology and the lack of standardised methods for measuring quality make it very difficult to analyse and compare designed landscapes (Knobel et al., 2019).

For the theoretical analysis of this paper, literature was collected using the Scopus database of scientific publications, as well as academic books, scientific journals and other publicly available sources such as Google Scholar. The initial phase of the search was based on the keywords "landscape architecture" and "quality", but Scopus identified only three articles directly dealing with the topic.

In order to broaden the field of analysis, additional terms were used: "performance", "effectiveness", "value", "user satisfaction", "perception", "experience", "comfort", "functionality" and "amenity value". This analysis has shown that in the scientific literature, the concept of quality is often disaggregated into different domains or understood through specific functional or emotional aspects. Therefore, when we talk about quality, we need to define exactly which aspect of quality we are referring to.

The International Federation of Landscape Architects Europe (2019) professional practice proposes a broad classification of designed landscapes and classifies them into several main groups: (1) parks and squares, (2) urban open spaces, (3) cultural landscapes, and (4) infrastructure landscapes such as embankments, piers, dams, streetscapes, and other integrated engineering elements. This classification allows for a broader definition of the range of landscape features, but this paper focuses on urban public green spaces as an important research field in the context of urban adaptation to climate change in Lithuania.

Meanwhile, the Law on Green Spaces of the Republic of Lithuania defines designed landscapes more narrowly as plots of land with green vegetation and intended for recreation, ecological functions and aesthetics (Lietuvos Respublikos Seimas, 2007). Although this definition covers the essential functions of green areas, it does not cover all spatial typologies that landscape architects develop in practice, especially those related to engineering or transport infrastructure or cultural heritage.

This discrepancy between national and international definitions is problematic – there is no clear term that covers the full range of relevant designed landscapes, and the issue of the landscape object can only be legally addressed by limiting the consideration of designed landscapes to those ones that meet the legal definition of a green space. Infrastructural or cultural landscape schemes remain outside this definition, although their importance for the urban fabric and the quality of life of people is

obvious. Moreover, the different definitions make it difficult to compare the context of a landscape feature in an international context and limit the scope for the application of good practices.

The diversity of designed landscapes – in terms of their function, spatial scale, context, legal or professional definition – also leads to different requirements for their quality. This raises a fundamental question: what constitutes quality in a designed landscape scheme? Is it engineering functionality, aesthetic expression, visitor satisfaction, ecological function, or a combination of these factors? In some sites, quality may be based on visitor enjoyment and a sense of security, while in others it may be based on cultural significance, visual and compositional integrity. The concept of quality is therefore not homogeneous or universal, but varies according to the type of site, the context, the position of the evaluator and the methods used. The following section analyses how the quality of designed landscapes is understood in the scientific literature and what are the main aspects that make up its multidimensional content.

2.3. Objective and subjective aspects of landscape quality

Quality assessment of designed landscapes includes both objective and subjective aspects. Objective assessment criteria usually relate to the morphological or ecological characteristics of the space, such as topography, soil types, structure and diversity of planting, intensity of maintenance and other tangible physical parameters, such as geometry, structure, context, etc. This is illustrated in three case analysis in second column (Table 1). This approach considers the object itself to be valuable, to be seen, experienced and enjoyed.

Subjective evaluation, as an alternative or complementary approach, perceives quality as a human construct based on individual or collective interpretation, emotion, imagination, memories, symbolism or aesthetic experience. As Lothian (1999) points out, drawing on the classical aes-

thetic tradition (Locke, Hume, Burke, Kant), it is not in the object itself, but in the eye of the beholder that beauty and value lie.

Empirical studies show that certain physical features are more widely recognised as positive indicators of quality: the presence of water features, a high proportion of trees or woodland, a sense of tranquillity, a reduction in daytime noise levels, and high quality environmental maintenance (Kajosaari et al., 2024). Meanwhile, noise, visual pollution, inadequate maintenance or an excessive proportion of urbanised surfaces are seen as negative factors. All three chosen cases confirm this statement (third column, Table 1).

The quality of a designed landscape can be analysed through two main dimensions – tangible and intangible quality. These two dimensions are complementary and together determine the value, attractiveness and user impact of the object. Tangible quality comprises the physical, clearly visible and technically assessable characteristics of the site: materiality, state of vegetation, functional solutions, structure, accessibility, technical condition, etc. These criteria are usually assessed in terms of quantitative indicators or design standards. For example, it is easy to calculate and compare hard-paved areas and areas of vegetation of three discussed cases before and after development and this alone could help to conclude success of new design addressing urban heat island problem for example.

Intangible quality covers the symbolic, emotional, cultural and social aspects of the environment: aesthetic appeal, atmosphere, sense of identity, historical significance, users' relationship with the place and emotional satisfaction. These aspects of quality are assessed through psychological, sociological or cultural research methods, including surveys, observations or psychophysical assessments. Before and after social survey for recently developed Naujoji Akmenės L. Petravičiaus square could provide information on intangible quality aspects. Both dimensions of quality are important in order to fully assess the impact that designed landscape has on people, and its significance in an urban context.

Table 1. Initial thoughts for a tabulated comparison of objective and subjective quality aspects and possible improvement of three discussed schemes (evidently for further development)

Example	Objective aspects (implemented/formally compliant)	Subjective aspects (problems/doubts)	Possible ways to improve the quality
Lazdijai Town Square	Neat pavement, central position, precise architectural structure, historical context	Uncomfortable to be in, unattractive microclimate, lack of planting	Redesign recreation areas, provide suitable tree planting, increase planting to create shade
Naujosios Akmenės Square	New pavement, clear geometry, renewed stylistics	Unjustified choice of scale, unclear functional purpose, excessive area of hard surfaces, removal of former mature trees	Form cosy community areas with benches, create shade with more planting, replace part of the hard surfaces with planting
Vilnius Town Hall Square	Architectural quality, representativeness, historical context	Microclimatic discomfort, Interrupted function of urban greenery, unattractive measures to compensate for seasonal microclimatic quality	Provide natural, larger planting areas, planting large trees to improve microclimatic and ecosystem functions, stricter control of the aesthetics of the temporary structures allowed for cafés

2.4. Criteria, indicators, methods, and data sources

Quality assessment uses a variety of criteria, depending on the assessment paradigm chosen and the purpose of the facility. The objectivist paradigm can be described as the perception of beauty and value in the physical scene in front of the eyes, while the subjectivist paradigm emphasises that beauty emerges through the human interpretation behind the eyes (Lothian, 1999).

Knobel et al. (2019) propose a systematic list of quality parameters for green spaces, including: setting, accessibility, facilities and objects, recreational opportunities, aesthetics and points of attraction, incidents, safety, intensity of use, surfaces, rules of use, and animal and plant diversity. Stessens et al. (2020) divide quality indicators into two groups: intrinsic qualities of the facility (e.g. biodiversity, tranquillity, cultural significance, spaciousness) and user-perceived qualities (e.g. cleanliness, facilities, sense of safety). These two dimensions can be assessed by different methods – GIS data, surveys, behavioural observations. This differentiation allows for the development of complex evaluation models that reflect both physical and experiential dimensions.

Stauskis (2020) relates the quality of landscape architecture projects to their sustainable function and proposes that it should be assessed in terms of environmental, socio-economic and aesthetic quality criteria and relevant indicators. The author stresses that these criteria should be applied flexibly and adapted on a case-by-case basis, prioritised according to the nature and objectives of the project, and that the assessment should include not only objective characteristics but also the perception of visitors.

Comprehensive methodology for evaluating quality of a built environment inclusive of designed landscape is set out in Architecture Quality Evaluation Methodology (Lietuvos Respublikos aplinkos ministerija, 2024) following the Architecture law (Lietuvos Respublikos Seimas, 2017) and is based on 8 criteria that local governments then detail at local level. The evaluation of criteria needs to be adjusted to local level specific and is based on subjective evaluation, based on observation of designed landscape. Methodology gives a good start to further detail evaluation, but since it is aimed at all forms of built environment (urban, architecture and landscape) it is only able to provide a broad understanding of a quality.

Use of measurable data for such criteria evaluation could add an objective weight and is subject to further detailing. These criteria form the basis for moving towards evaluation methods and practical tools to underpin the quality analysis process but must be further refined for landscape-specific application. Assessment of the quality of landscapes ranges from quantitative to qualitative and mixed methods. One of the most commonly used methods is psychophysical assessments, which use visual material (photographs, videos) to determine how people respond to different environmental characteristics (Gifford, 2007). Questionnaires, structured interviews and on-site observa-

tions are also used to assess both physical parameters and user behaviour.

Nowadays, mobile applications (Hoffman et al., 2018) are already in use, which allow for real-time data collection on users' experiences in space – they assess comfort, devices, security, and operational capabilities. Another example is the Place Standard tool (placestandard.scot), which is designed for dialogue between professionals and communities about the quality of place, assessing 14 aspects from mobility to natural elements.

GIS-based assessment models (Stessens et al., 2020) allow to combine spatial data on the structure of a site with survey results, while social network analysis and Volunteered Geographic Information (VGI) offer new ways to explore real-time user behaviour, emotions and perceptions (Cui et al., 2021).

In the UK, the LVIA format is the accepted method for evaluating townscape and landscape value. The criteria which involves everything from physical factors such as topography, hydrology and soils, biological factors, such as biodiversity, ecology, habitat value, ecosystems services criteria, including carbon sequestration and climate change resilience as well as human factors that include use, perception, health and wellbeing. In recent years, quality assessment has increasingly used non-standard data sources to complement traditional quantitative and qualitative research. VGI and social media data allow real-time analysis of users' emotional responses, behaviours and evaluations. While such data pose challenges in terms of representativeness and data quality, they become a valuable tool when combined with surveys, GIS or field observations. This type of assessment, if carried out with Lithuanian case studies users, would help to confirm the subjective aspects (third column, Table 1).

While being critical of these methods, it is important to bear in mind that some groups (e.g. the elderly, less technologically literate population) may be under-represented. However, purposeful triangulation of data – combining different sources and methods – can increase the reliability of the assessment and ensure that the experiences of a wider range of users are reflected.

2.5. Aesthetic (artistic) quality and sustainability

Urban aesthetics is becoming an increasingly relevant aspect in the analysis of the importance of artistic quality in landscape architecture (Qin et al., 2019). Aesthetic perception is not only related to the visual appeal but also to the psychological comfort that urban dwellers experience when they are in a space. This study highlights that artistic quality should be considered inseparably from ecological and social factors, as only their interaction creates a harmonious, human-friendly environment. The Veinberga and Zigmunde (2019) study also shows that artistic quality is closely linked to ecological quality, both of which should be integrated when assessing the quality of green spaces. The study identifies aesthetic criteria such as

compositional and architectural integrity, decorativeness, maintenance and plant quality. It showed that aesthetic aspects of the assessment are interpreted differently by experts in different fields, but their importance for the quality of the user experience is emphasised. This shows that artistic quality is inseparable from ecological quality, and their interaction contributes to a sustainable and attractive urban environment (Wang et al., 2019). Aesthetic satisfaction increases with more trees, flowers and water features in green spaces, and these visual components are closely linked to feelings of physical and psychological recovery (Qin et al., 2019). Aesthetic perception is not only related to visual attractiveness, but also to the psychological comfort that urban residents experience when they are in the space. This study highlights that artistic quality should be considered inseparably from ecological and social factors, as only their interaction creates a harmonious, human-friendly environment. In addition, a study conducted in Lithuania, which examines the importance of aesthetics in the context of sustainable architecture and proposes a set of aesthetic criteria for assessing the quality of the environment (Daugėlaitė, 2024), is worth highlighting. The significance of this work lies in its locality – the study reveals the aesthetic tendencies inherent in Lithuanian society and substantiates them empirically, using both quantitative and qualitative assessment methods. This methodological consistency allows for a more detailed understanding of the expression of artistic quality in the country's urban environment and is a good starting point for a further research of assessing designed landscape quality.

3. Examples of quality analysis of Lithuanian designed landscapes

3.1. Independence Square in Lazdijai

One of the examples revealing possible challenges to the quality of the landscape is the Lazdijai Town Square. This main square in this small historic town historically functioned as a marketplace. It was, reconstructed in 2005–2006 (arch. V. Domanskis, A. Zaniauskas). The spatial

composition is oriented towards representation and mass events, but in the context of everyday urban life this space remains little used. It lacks comfortable areas for visitors – resting benches are located next to a heavily trafficked street and car parks, where increased air pollution, noise and psychological discomfort prevail (Dringelis, 2011).

Although the square's historic function was a marketplace the change in its function (representation and community space) raises the question of whether modern solutions are in line with these changes (Figure 1). Planting solutions – small trees in pots, with enough space for them to grow naturally – are seen as inappropriate both functionally and aesthetically. Planting small trees in pots with sufficient space for natural growth is not an appropriate planting method, both functionally and aesthetically (Dringelis, 2011). The lack of planting makes the square a heat island in summer and does not serve any ecosystem function.

3.2. Vilnius Town Hall Square

Vilnius Town Hall Square, one of the most important civic spaces in the capital, is characterised by a strong architectural idea, a clear geometric composition and a predominantly hard-surfaced design (arch. A. Gvildys, A. Gvildys, A. Gvildienė, UAB "Archinova", 2007). Historical sources show that Vilnius Town Hall Square has been an important centre of the city since the 14th century, where administrative and commercial activities took place. The square has undergone various transformations over time, including the creation of a square with trees and flowerbeds in the 19th century, and subsequent redevelopments that have changed its aesthetic and functional character (Allconstructions, 2024). However, from a contemporary point of view, its functional and microclimatic quality is questionable. Trees planted in raised concrete pots do not provide sufficient shade in summer, are struggling to survive and need to be replaced. On hot days, this urban open space becomes a zone of discomfort – the stone pavement heats up and there is no shade. In response, Vilnius City Municipality has installed a water mist system in summer to reduce heat stress for visitors (Vilniaus miesto savivaldybė, 2021).

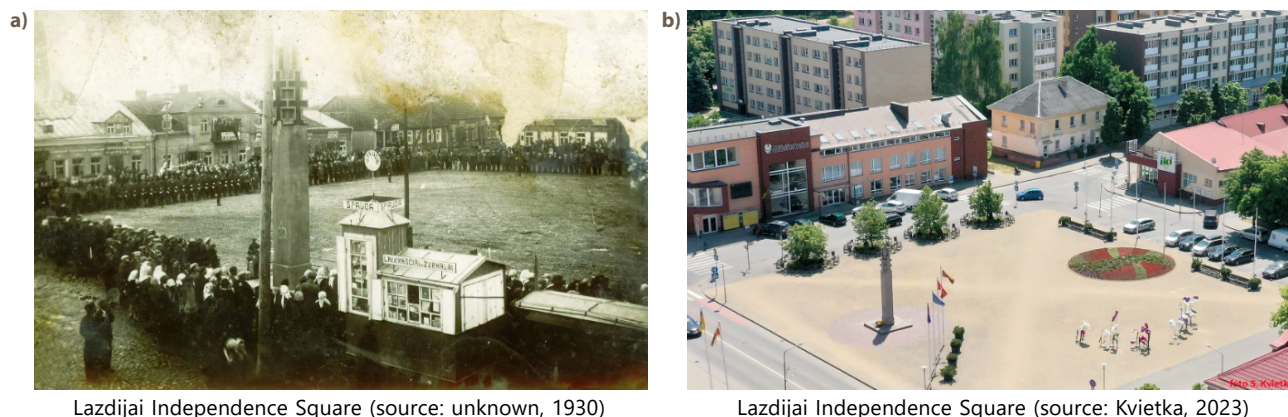


Figure 1. Historic and present appearance of Lazdijai Independence Square

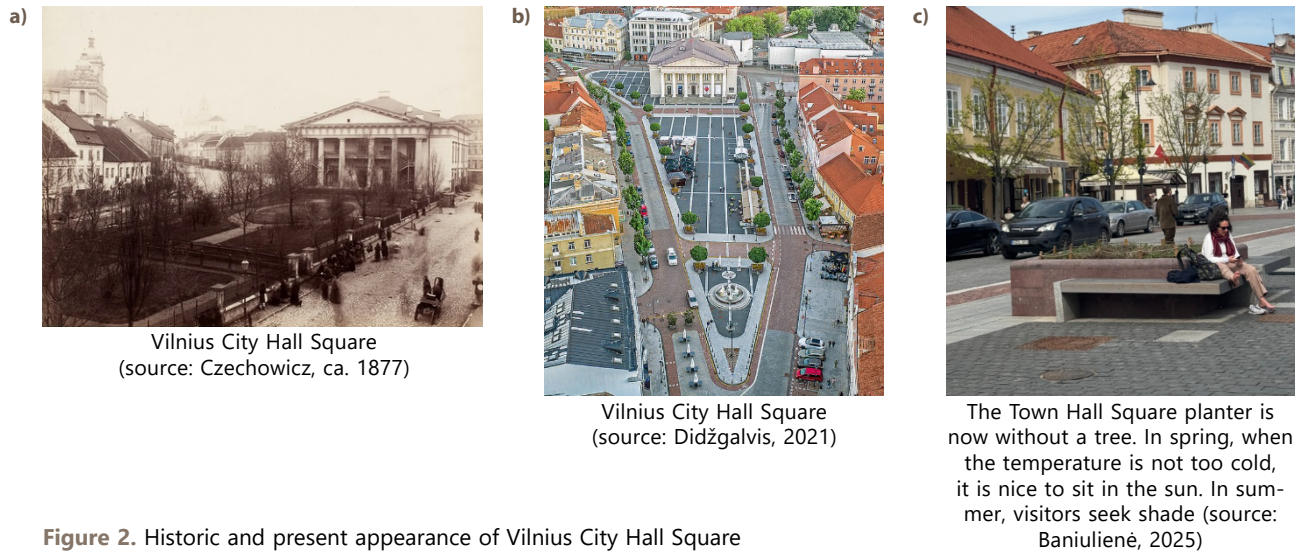


Figure 2. Historic and present appearance of Vilnius City Hall Square

The owners of the surrounding cafés use the edges of the square for outdoor tables, adding umbrellas and potted plants to create a more comfortable microclimatic environment for visitors, often adding to a visual clutter and thus reducing intended aesthetic quality of the space.

When looking at the change of the square in a longer perspective, it should be noted that a historical photograph from 1877 (Figure 2a) testifies to the presence of plantations in this space. The current composition opens up a really clear visual axis to the Town Hall building (Figure 2b), especially from the perspective of Castle Street, but the question arises as to why it was chosen to integrate the trees not as full elements of the spatial structure and to form full-fledged nurseries for the growth of the city's large trees, but as episodic accents, planted in small, limited-size concrete cubes (Figure 2c). Such solutions not only limit the potential for plant growth but also eliminate the function of the square as a space capable of providing ecosystem services.

In addition, the monumental character of the square changes radically during the warm season: the various individual decorative solutions, roofs, plants, advertising hoardings, which appear on the initiative of outdoor cafés, do not fit in with each other, sometimes teetering on the brink of kitsch (plastic plant compositions – author's note). This abundance of elements fragments the visual integrity of the space and undermines its representational character. This illustrates that the value of the designed space cannot be judged solely on architectural intent but must be sustainable in the context of everyday use, taking into account the real behavioural forms and needs of the city's inhabitants.

3.3. Naujoji Akmenė L. Petravičiaus Square

Another example of quality deficiencies in a designed landscape is L. Petravičiaus Square in Naujoji Akmenė. The square was originally laid out in the 1950s as the civic

centre of the newly established industrial town, developed around the cement industry. In 1998, it was renamed in honour of Leopoldas Petravičius, a long-serving director of "Akmenės cementas" and a key figure in the town's economic development (Akmenės rajono savivaldybė, n.d.). To revitalise the ageing Soviet-era square (Figure 3a), the municipality launched an open ideas competition in 2012. The winning proposal was submitted by DNA Studio architects Antanas Dominas, Vitalij Avreicevič, and Rūta Petraitytė, who grounded their design in the town's industrial identity. This was expressed through the use of exposed concrete paving and an orthogonal layout that referenced the mid-20th-century street grid (DNA Studio, 2015).

Despite its central location and generous size—covering approximately 0.2% of the city's total area or 4.7 acres—the planning decisions raise concerns about proportionality and functionality. The reconstruction (Figure 3b) significantly expanded the hard-surfaced area, removed all mature trees, and replaced traditional planting with artificially shaped hills (Figure 3c). Although a public space of this scale could serve as a major gathering point, in this case, the square lacks elements that would support regular use or social vitality. It provides minimal ecological, recreational, or community value, functioning primarily as a visual feature rather than a lived urban space, and remains largely detached from the everyday life of the local population.

4. Defining quality

The assessment of the quality of designed landscapes includes both objective and subjective aspects. Objective assessment criteria are usually related to the morphological or ecological characteristics of the space, such as topography, soil types, structure and diversity of planting, intensity of maintenance and other tangible physical parameters. In this way, the object itself is considered valuable in its own right – as a desirable, attractive form to be seen, experienced and enjoyed.

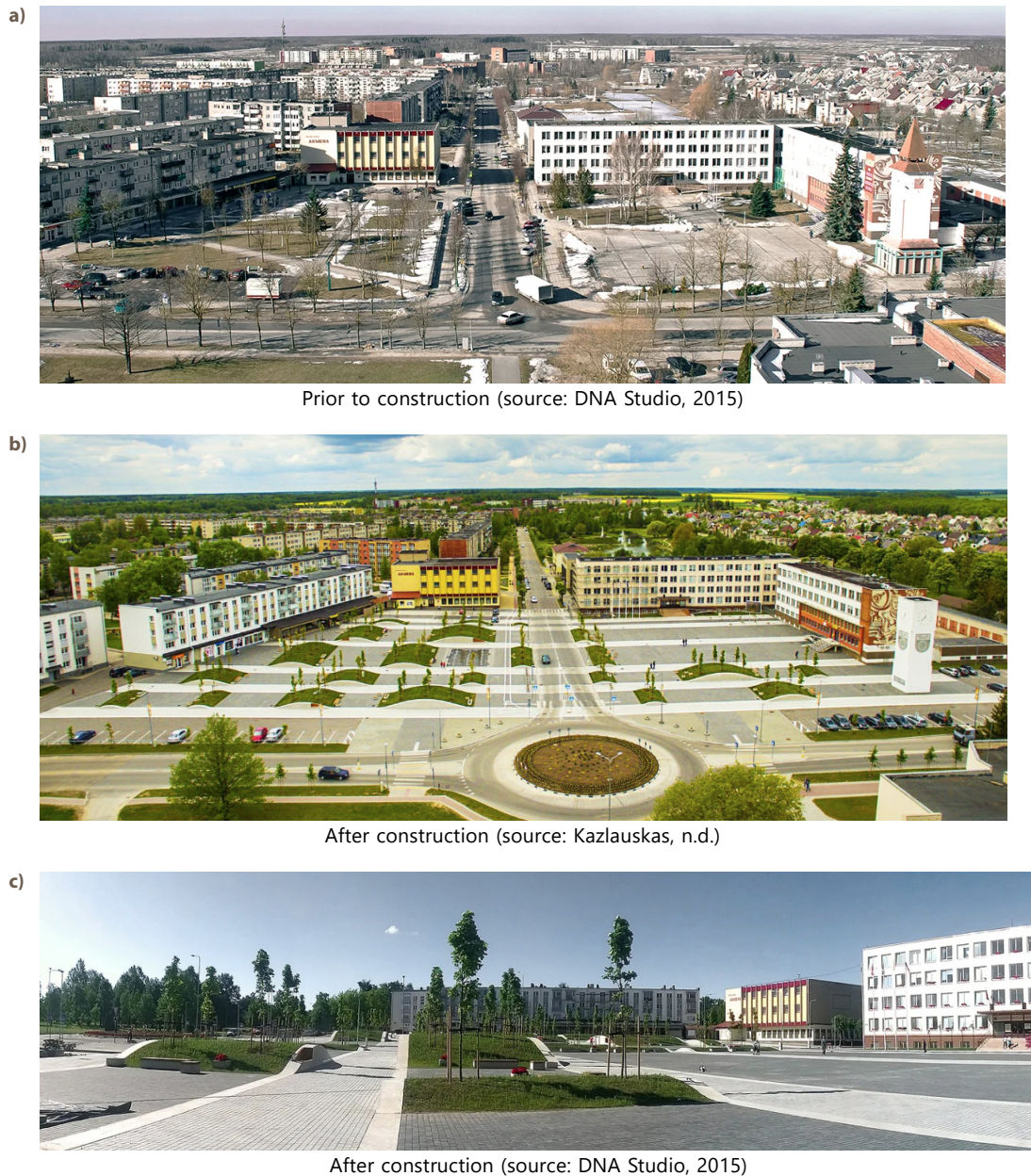


Figure 3. Naujoji Akmenė L. Petravičiaus square prior and after construction

Subjective valuation, as an alternative or complementary approach, perceives quality as a human construct based on individual or collective interpretation, emotion, imagination, memory, symbolism or aesthetic experience. As Lothian (1999) points out, drawing on the classical aesthetic tradition (Locke, Hume, Burke, Kant), it is not in the object itself, but in the eye of the beholder that beauty and value lie.

Empirical studies show that certain physical features are more widely recognised as positive indicators of quality: the presence of water features, a high proportion of stands or woodland, a sense of tranquillity, a reduction in daytime noise levels, and high-quality environmental maintenance (Kajosaari et al., 2024). Meanwhile, noise, visual pollution, inadequate maintenance or an excessive proportion of urbanised surfaces are seen as negative factors.

The Lithuanian examples discussed – Vilnius Town Hall Square, the central square of Naujoji Akmenė and the town square of Lazdijai – show that formally implemented landscape architecture solutions of high quality do not always ensure an attractive user experience. The objective and subjective aspects summarised in the table below (Table 1) help to show where the discrepancies between the design intent and the actual everyday use of space lie. This comparison provides a clearer picture of what aspects need to be considered in an integral way in the planning and design process and what solutions could contribute to improving quality.

Observations from the three analysed Lithuanian case studies – Vilnius Town Hall Square, Lazdijai Independence Square, and Naujoji Akmenė Central Square – highlight recurring shortcomings in artistic quality that align with

these theoretical insights. In all three cases, the dominance of hardscape elements over soft greenery, fragmented spatial composition, and superficial decorative planting (such as seasonal flowers or trees in pots) reflect a limited integration of ecological and aesthetic considerations. These interventions formally satisfy certain visual or representational expectations but fail to deliver psychological comfort, sensory richness, or a lasting sense of place. The imbalance between paved and vegetated surfaces, the absence of natural shade, and minimal biodiversity diminish the user's emotional connection with the space. These deficiencies confirm that the lack of artistic quality—understood as a synthesis of ecological functionality, visual harmony, and contextual expression—results in spaces that are underused and fail to contribute to a resilient and human-oriented urban environment.

The analysis of the three Lithuanian town squares demonstrates how theoretical models of landscape quality assessment can be applied in practice. Each case illustrates different degrees of alignment between objective and subjective quality dimensions. While Vilnius Town Hall Square shows high formal coherence but limited ecological or recreational diversity, Naujoji Akmenė's reconstructed square reflects a symbolic materiality with little opportunity for social engagement of locals. Lazdijai, despite its historical centrality, suffers from spatial and visual discomfort and ecological underperformance. Applying multidimensional assessment tools—such as the tangible/intangible quality framework, user perception studies, and spatial mapping—could help quantify and visualise these discrepancies.

In future research, structured methods such as the Place Standard tool, GIS-integrated ecological analysis, and before/after social surveys (as proposed for Naujoji Akmenė) could be applied to assess landscape performance more systematically. These tools offer a way to bridge the gap between design intent and actual use, allowing for more adaptive and user-oriented public spaces. The case studies confirm that without integrating environmental, aesthetic, and social quality aspects, designed landscapes risk becoming visually appealing but experientially ineffective. A more consistent application of evaluation frameworks is essential for improving the long-term value and sustainability of public green spaces in Lithuania.

5. Summary of landscape quality assessment approaches

The materials presented in this section highlight that the quality of designed landscapes must be understood through both physical and experiential lenses. Authors propose diverse criteria—from ecological integrity and accessibility to symbolic value and user perception—but all agree that quality emerges from the interaction between objective features and subjective experience.

Stessens et al. (2020), Knobel et al. (2019), and Stauskis (2020) offer structured approaches combining intrinsic

characteristics (like biodiversity and tranquillity) with user-evaluated qualities (like safety, cleanliness, or identity). These are assessed through a mix of spatial data, behavioural observations, and community surveys.

The Lithuanian methodology based on the Architecture Law (2017) also reflects this duality, yet its focus on subjective visual assessments underscores the need for better integration of measurable indicators specific to landscape architecture. Emerging digital tools and social data sources offer promising ways to improve this.

Overall, the reviewed sources and case studies suggest that a robust quality evaluation model must be comprehensive, flexible, and suited to both technical assessment and lived experience. The integration of both perspectives ensures that urban green spaces are not only formally correct but also meaningful and engaging to users.

6. Discussion

Understanding the links between a landscape feature and human health and well-being requires considering not only the reach and number (quantity) of such features, but also their quality (Kajosaari et al., 2024). Knowledge of the quality of landscape assets is essential for enhancing urban green infrastructure planning (Kajosaari et al., 2024). While we have learned how to calculate the number and size of green spaces for urban planning (World Health Organization [WHO], 2016) and have embedded this in legislation through green space standards, challenges remain in accurately modelling the distribution of designed landscapes within GIS environments for spatial planning. However, integrating quality into planning continues to be difficult (Kajosaari et al., 2024). A practical starting point at the city scale could be the auditing of all existing green spaces based on common criteria reflecting the aspects discussed above, such as provision for future use and multifunctional benefits. Such an audit would reveal areas of over- and under-provision and highlight success and failure in meeting quality goals. These insights could directly inform the design of future spaces, supported by thorough consultation, which should form an essential part of any landscape design brief.

In support of quality-based design, the Space Syntax approach offers a science-based method to predict human behaviour in public spaces and enables designers to make informed decisions in planning, designing, and operating places (Space Syntax, n.d.). The quality of urban green spaces significantly influences their potential to promote health and well-being (Knobel et al., 2019). Thus, it is critical for planners and policymakers to improve their understanding of how users experience landscape features and which aspects of quality matter most to them. This knowledge helps guide the design and maintenance of landscapes that respond effectively to user needs (Stessens et al., 2020).

7. Conclusions

Understanding the link between landscape features and human health and well-being requires more than ensuring accessibility or achieving quantitative targets. It is essential to explore what constitutes the quality of a landscape asset and how this quality influences user experience and behaviour (Kajosaari et al., 2024).

Research shows that knowledge of landscape quality is crucial for effective green infrastructure planning in urban environments and for creating spaces that support physical and mental health (Kajosaari et al., 2024; Knobel et al., 2019). Urban planning is often guided by quantitative indicators—such as the WHO's recommendation for green space per capita (WHO, 2016)—which are also reflected in national regulations like the Standards for Separate Green Spaces for Recreational Purposes (Lietuvos Respublikos aplinkos ministerija, 2007). However, these metrics do not reflect how such spaces are used, valued, or experienced. To capture this, qualitative dimensions of landscape quality must also be integrated.

The three case studies analysed in this paper—Vilnius Town Hall Square, Lazdijai Independence Square, and the Central Square of Naujoji Akmenė—were selected to demonstrate how urban public spaces may formally meet infrastructural or architectural criteria but still fail to deliver on user comfort, ecological integration, or visual appeal. These cases illustrate several of the artistic and ecological quality aspects discussed in the theoretical sections: all three squares show a lack of shade, low biodiversity, minimal climatic adaptation, and limited psychological comfort. These observations align with findings by Wang et al. (2019), Veinberga and Zigmunde (2019), and Daugėlaitė (2024), who emphasize the importance of integrating artistic, ecological, and social dimensions into sustainable landscape quality.

The case analysis applied a qualitative methodology: observational and visual assessment, supported by document analysis and publicly available media. While not aiming for statistical generalisation, these cases reveal concrete dimensions—such as compositional integrity, vegetation cover, microclimate, and user engagement—that are crucial for assessing quality, as argued in the literature.

Based on these findings, the paper suggests integrating a multidimensional landscape quality assessment model that combines quantitative and qualitative data, expert judgement, user experience, and innovative tools such as smartphone-based data or social media analytics (Stessens et al., 2020).

In summary, landscape quality research is essential to: make informed judgments about existing public spaces, compare different typologies and their impact on users, and guide public space development using both data and lived experience.

Quality analysis should go beyond technical compliance and encompass social relevance, ecological function, and aesthetic experience—all of which shape the long-term value of urban public spaces.

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KRAŠTOVAIZDŽIO ARCHITEKTŪROS OBJEKTŲ KOKYBĖ IR JOS VERTINIMO GALIMYBĖS

R. Baniulienė

Santrauka

Šiame straipsnyje nagrinėjama kraštovaizdžio architektūros objektų kokybės samprata ir vertinimo galimybės urbanizuotoje aplinkoje. Kokybė nagrinėjama analizuojant miesto žaliosios erdvės problematiką. Miesto žaliųjų erdvių kokybė yra svarbus veiksnys žmonių sveikatai, gerovei bei žaliosios miesto infrastruktūros efektyvumui. Tačiau jos vertinimas išlieka iššūkiu dėl skirtingų terminų, kokybės sričių ir vertinimo metodų. Remiantis tarptautiniais ir nacionaliniais šaltiniais, aptariamos pamatuojamos ir nepamatuojamos kokybės dimensijos, objektyvūs ir subjektyvūs vertinimo būdai bei pagrindiniai kokybės kriterijai. Pateikiami pavyzdžiai iš Lietuvos miestų (Vilniaus, Lazdijų, Naujosios Akmenės), atskleidžiantys planavimo sprendimų ir naudotojų patirties neatitikimus. Straipsnyje siūloma integruoti kompleksinius vertinimo modelius, pagrįstus tiek kiekybiniais, tiek kokybiniais duomenimis, įtraukiant ir inovatyvius metodus, tokius kaip socialinių medijų ar išmaniųjų telefonų programėlėmis teikiamos geografinės informacijos analizė. Šis tyrimas rodo, kad kraštovaizdžio objektų kokybė yra daugialypė ir reikalauja aiškiai įsivardintų vertinimo priemonių, siekiant užtikrinti ekosistemos paslaugas teikiančią, socialiai teisingą ir naudotojų poreikius atitinkančią miestų aplinką.

Reikšminiai žodžiai: kraštovaizdžio architektūra, miesto žalioji erdvė, kokybė, vertinimo metodai, lankytojų patirtis.