

INTERACTION BETWEEN LANDSCAPE SPACE AND INTERIOR SPACE IN THE ARCHITECTURE OF RECENT EDUCATIONAL BUILDINGS IN LATVIA

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Abstract. This study examines the interaction between landscape space and interior architecture in contemporary Latvian school buildings, highlighting its importance in achieving sustainable spatial integration. It builds on a 2019 study and aligns with current European and global sustainability initiatives. Despite demographic decline, Latvia continues to invest in new school construction and renovation, some of which have received national architectural awards. The research identifies both achievements and shortcomings, especially in interdisciplinary collaboration and the integration of timber architecture, offering recommendations to advance sustainable public architecture in Latvia. **Keywords:** landscape architecture, architecture, interior, harmony, sustainability

Introduction

The present study was developed as an extension to the comprehensive study completed in 2019 entitled "Interaction of landscape space and indoors in architecture of education and art buildings in Latvia" [5]. The relevance of the topic is based on the UN Resolution on Environmental Sustainability in Construction Urban Development [10], since 2022, on the European Commission's new project, "New European Bauhaus" [8], since 2021 and Davos Declaration, since 2018 [4; 11]. The primary aim of architecture is to generate a comprehensive and harmoniously balanced environment across all spatial, functional, and aesthetic dimensions. In contemporary practice, this equilibrium is increasingly challenged, necessitating the restoration of environmental integrity through spatial coherence.

One of the defining trends in current architectural discourse and practice is the dissolution of boundaries between interior and exterior environments, facilitated by the extensive use of transparent, glazed facades. This phenomenon accentuates the need to reconceptualize the relationship between landscape and interior space as an integrated whole [9].

In the past five years, several schools have been built or renovated in Latvia that have received high recognition in the field of architecture within the framework of the annual Latvian Architecture Award competition [2]. The Latvian Annual Architecture Award is one of the most significant professional events in the Latvian architectural environment, which not only highlights the most outstanding architectural achievements, but also promotes the sustainable development of the industry and public awareness of the quality of architecture. The award has been presented since 1995 and is organized by the Latvian Union of Architects in cooperation with the Ministry of Culture of the Republic of Latvia. It is recognized as an event of national significance, and the award itself serves as the highest professional assessment in Latvian architecture. The entries are evaluated by an international jury composed of industry experts based on multifaceted evaluation criteria, including: governance, functionality, economy, contextual relevance, diversity, sense of place and aesthetic quality. Every year, the range of works submitted to the competition offers a concentrated view of current developments in the Latvian architectural landscape – it outlines both the prevailing trends and the most significant challenges and quests [1; 6].

Aim of the research – to identify the contributing factors for harmonious interaction of landscape and indoor space in the art of environment formation in Latvia in the segment of education buildings.

Research tasks:

1. To uncover the economic, political, and other factors influencing school architecture and construction.

2. To evaluate the interaction of landscape space and indoors through large glazed transparent external surfaces in architecture in the context of typology of socially sensitive public education buildings in Latvian architecture created since 2017.
3. To formulate the factors of harmonious interaction of landscape space and indoors in the art of environment formation in Latvia in the segment of education buildings.

The theoretical and practical significance of the present work is to promote the development of harmonious high-quality spatial environments in Latvia through a better cooperation between architects, landscape architects and interior designers and environments sustainability.

Materials and Methods

A systematic study has been conducted in Latvia, examining the interaction of landscape and interior design in socially sensitive educational buildings, especially those that have received high recognition in the prestigious Latvian Architecture of the Year Award competition since 2019.

In stage 1 the main methods applied are the comparative analysis and graphoanalytical method. In stage 2 the main methods applied are the comparative analysis and the survey method. In stage 3 the qualitative analysis, graphoanalytical and inductive cognitive methods. Each object in nature is evaluated from multiple viewpoints and perspectives from March 2024 to October 2025 in two main directions:

- Viewing from the interior space to the landscape space.
- Viewing from the landscape space to the interior space through architecture.

The information gathered serves as the obtained data. Additionally, the use of materials and the sustainability of the object are evaluated.

The application of comparative method in summarizing information for the research [6].

- The criteria for evaluating psycho-emotional interaction of indoor space and landscape:
 - evaluation of spatial composition and proportions of glazed surfaces versus non-glazed parts;
 - evaluation of compositional application of colour, light and shadow impacted by sunlight;
 - evaluation of visual accents created by chiaroscuro;
 - evaluation of visual merging of indoor space and landscape.
- Evaluation of architectural forms in landscape.

Results and Discussion

The number of students in Latvia has noticeably changed over the past 100 years, depending on political and economic factors in the country. It peaked at around 300,000 students during the period from 1970 to 1990 when populations from

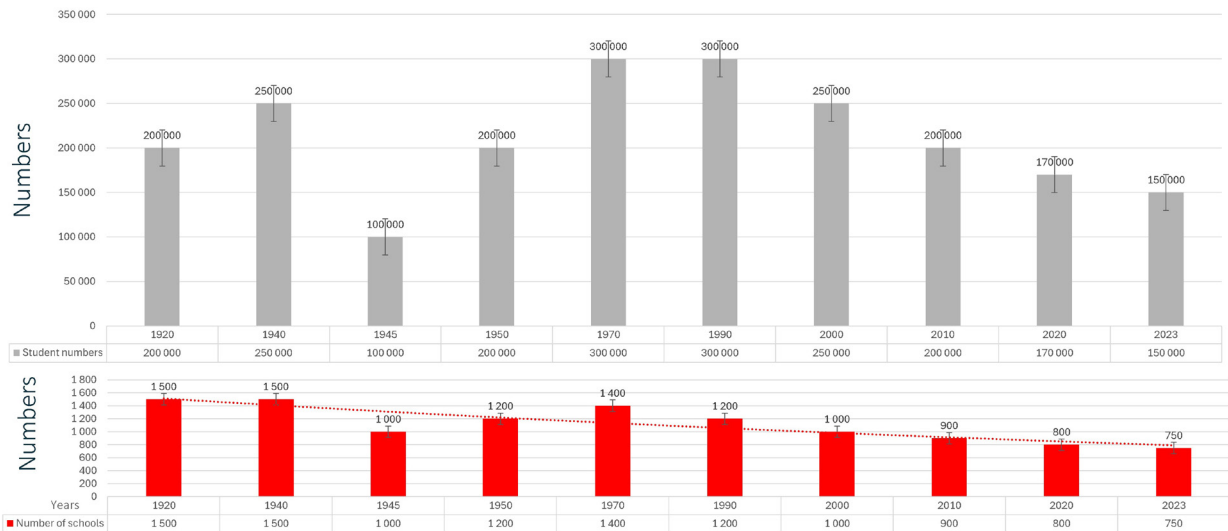


Fig.1. The dynamics of student numbers and number of schools in Latvia over the past 100 years [graphs developed by the author and AI, 2025, based on data from the Central Statistics Database]

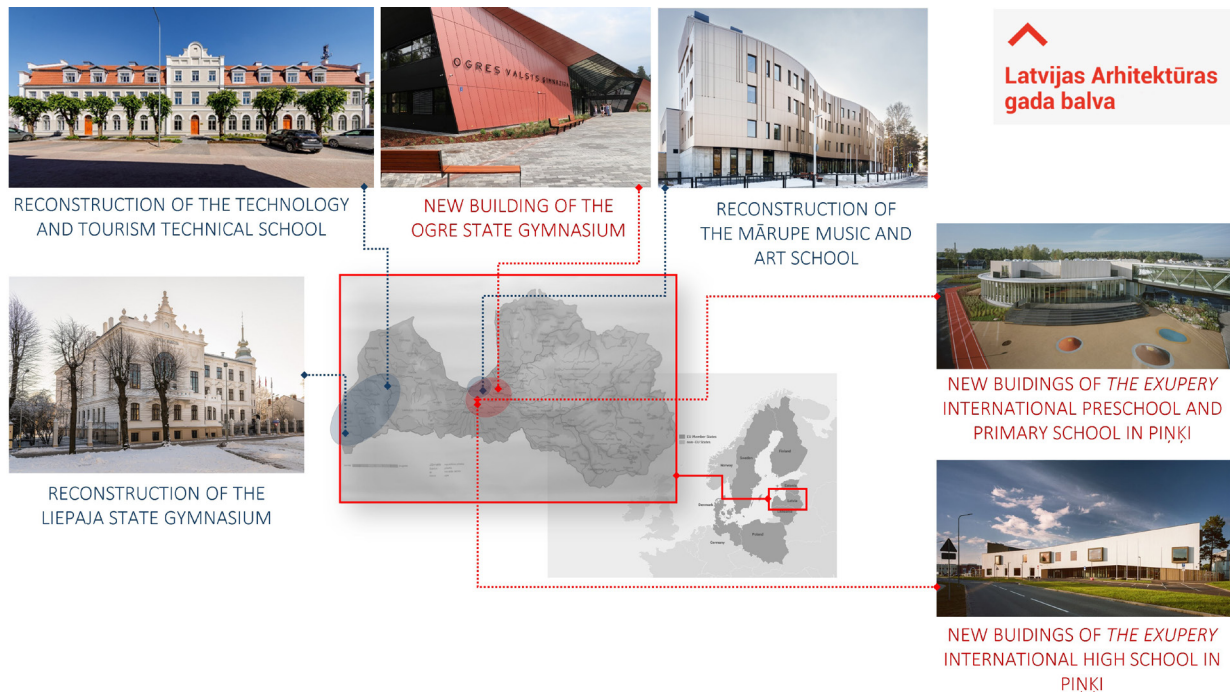


Fig. 2. Geographical location of examined objects in the map of Latvia [created by the author from electronic resources, 2025]

former Soviet territories were artificially introduced into Latvia, and dropped to 100,000 students during World War II. However, in the past 50 years, the number of students in Latvia has continued to decrease. With a steady student population of 200,000 in 1920, there were 1,500 schools, 1,200 schools in 1950, and only 900 schools by 2010. The number of schools in Latvia continues to decrease significantly, not only due to the decline in birth rates but also because of the education reform School 2030 and to the administrative territorial reform, which focuses on competency-based education and skills, as well as the closure of smaller schools and the concentration of students in larger schools. The number of schools is also clearly influenced by political and economic factors, and despite some fluctuations, the overall trend over the past 100 years has been a steady decline in the number of schools, decreasing by 50% from 1,500 schools in 1920 to 750 schools in 2023 [7] (Fig 1). Despite the declining number of students and schools, Latvia is not only renovating existing schools but also building new ones. In the past four years, 241 schools have been reformed in Latvia

[3]. Among them, several have received high recognition in architecture [2]. The geographical distribution of the studied objects on the map of Latvia shows the concentration of schools that have won the Latvian Architecture Award since 2017 – new buildings and one reconstruction around the capital city and reconstructions in the Kurzeme region (Fig 2). Schools that have been recognized in the last five years within the framework of the Latvian Architecture Award of the Year (Fig 2):

- Reconstruction of Kuldīga Technology and Tourism Technical School – Special Award of the International Jury (2024).
- Reconstruction of Liepāja State Gymnasium No. 1 – Grand Prize of the Year (2018).
- Mārupe Music and Art School – Semi-Finalist (2023).
- New building of Exuperi International Primary School – Finalists (2017).
- New building of Exuperi International Secondary School with Boarding School – Finalists (2024).
- New building of Ogre State Gymnasium – Semi – Finalist (2023).

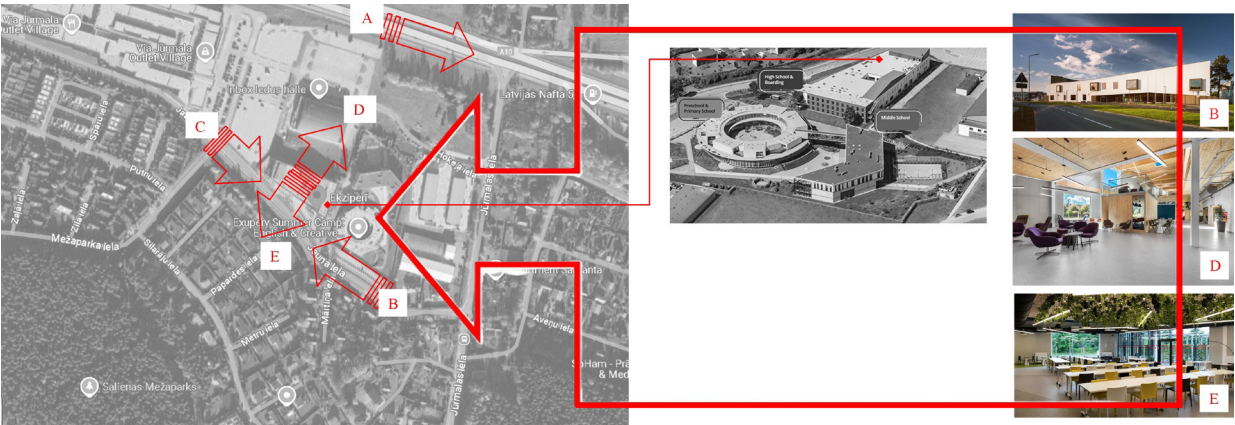


Fig. 3. Evaluation of views lines and points , example- new buildings of the Exupery International high school in Pīņķi
[created by the author, 2025 (photography – google.lv/ maps, photos created by the I. Stūrmanis, K. Loris]

TABLE 1

Comparative compilation of separate data matrices into a single matrix of percentages of psycho–emotional evaluation of researched buildings and average qualitative assessments by 6 architecture experts (on a scale from 1 to 100 %) [created by the author, 2025]





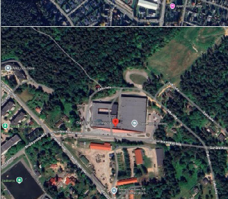
Serial No.	TYPOLOGICAL BREAKDOWN OF BUILDINGS	OBJECTS OF THE RESEARCH	CRITERIA						GOOGLE MAPS	
			THE CRITERIA FOR EVALUATION OF THE PSYCHO-EMOTIONAL INTERACTIVITY OF INDOORS AND LANDSCAPE SPACE							
			EVALUATION OF THE SPATIAL COMPOSITION AND PROPORTIONS OF THE GLAZED SUBFACES VERSUS THE NON-GLAZED PART	EVALUATION OF THE COMPOSITIONAL APPLICATION OF COLOUR, LIGHT AND SHADOW IMPACTED BY THE SUNLIGHT	EVALUATION OF THE USAGE OF VISUAL ACCENTS CREATED BY THE PLAY OF LIGHT AND SHADOW	EVALUATION OF THE VISUAL MERGE OF INDOORS AND LANDSCAPE SPACE	AVERAGE ASSESSMENT OF THE USE OF GLAZED AREAS IN ARCHITECTURE	EVALUATION OF THE ARCHITECTURAL SHAPE OF THE BUILDING IN LANDSCAPE SPACE	AVERAGE PSYCHOEMOTIONAL ASSESSMENT OF COMPOSITIONAL STRUCTURE	
1.	RECONSTRUCTIONS	 TECHNOLOGY AND TOURISM TECHNICAL SCHOOL	80	100	90	80	88	100	94	
2.		 THE LIEPAJA STATE GYMNASIUM	96	100	96	92	96	100	98	
3.		 THE MĀRUPE MUSIC AND ART SCHOOL	98	80	78	80	84	60	72	
4.	NEW BUILDINGS	 THE EXUPERY INTERNATIONAL PRESCHOOL AND PRIMERY SCHOOL IN PĪŅĶI	100	100	98	100	100	100	100	
5.		 THE EXUPERY INTERNATIONAL HIGH SCHOOL AND BOARDING IN PĪŅĶI	100	100	96	100	99	100	100	
6.		 THE OGRE STATE GYMNASIUM	96	98	82	100	94	76	85	
AVERAGE			95	96	90	92	93	89	91	

TABLE 2

Interaction of landscape and indoor space in visual perception. View points from indoors space towards landscape
 [created by the author, 2025]

Serial No.	TYPOLOGICAL BREAKDOWN OF	THE CRITERIA FOR EVALUATION OF THE PSYCHO-EMOTIONAL INTERACTIVITY OF INDOORS AND LANDSCAPE SPACE	
		EVALUATION OF THE SPATIAL COMPOSITION AND PROPORTIONS OF THE GLAZED SURFACES VERSUS THE NON-GLAZED PART	EVALUATION OF THE COMPOSITIONAL APPLICATION OF COLOUR, LIGHT AND SHADOW IMPACTED BY THE SUNLIGHT
1.	RECONSTRUCTIONS	The original rhythmic window proportions have been preserved in the historical building - different on each of the three floors. In the new extension, the window arrangement is strictly rhythmic and the window proportions are extended and the same on all floors.	The rhythmic window division creates a rhythmic play of light under the influence of the sun. At a narrow angle of the sun's rays, the rooms acquire warm tones. The widely glazed entrance motif on the 1st floor creates a wide view of sunlight at sunrise.
		The relationship preserves the historical (1912) division, which is psycho-emotionally customary and approved over generations.	The rhythmic division of windows creates rhythmic play of light and shadow in the rooms. The deep window openings and the ornate window moldings have a strong visual impact, softening the play of light and shadow.
		The four-story volume of the building is divided into a wide glazed strip on the first floor and a dynamically rhythmic window line on the upper floors. The division of windows, together with the facade, is designed like music (according to the author's idea). The glazed part, in proportion to the unglazed part, emphasizes the functions of the interior.	The long facades of the building's elongated volume are predominantly oriented in the north and south directions. The play of light and shadow is more expressive in the windows adjacent to the south facade, for example in the hall, where the windows are located on two levels. The rhythmic splay of the widely glazed north facade of the 1st floor creates rhythmic light and shadow.
4.	NEW BUILDINGS	In the cylindrical building volume, the glazing part on the 1st floor is maximally wide, on the 2nd floor the glazing is proportionally less than on the facade of the closed part. The air passage between the bodies is completely glazed, leaving only the floors and ceilings unglazed. In the rhomboid body, the glazing against the unglazed part is the smallest part. Large glazed areas from ground level to the roofs are in one corner of the building and in the central part, the rest of the glazing is formed by a rhythmic division of windows at the level of the third floor.	The play of light and shadow is created not only on the facade glazing, but also indoors by the eye-shaped cutouts in the wide overhang of the 2nd floor balcony and the rhythmic striation of the glazing.
		The proportion of glazing to non-glazed parts of the building is slightly smaller. The proportion varies on a balanced way on different facades.	The play of light and shadow created by the sun through the picture windows creates illuminated areas in the open space layout that emphasize specific functions and correspond to the furniture layout.
		The proportion of glazing in the non-glazed part of the facades is smaller. The main facade is decorated with two glazed, dynamic entrance motifs. But the other facades are mainly made up of sash windows, except for the vertical windows facing the courtyard.	The building entrance motifs are created in the original glazing composition. The central, compositional and functional block of the building plan is formed by an atrium with a skylight and an inner courtyard. The skylight creates a play of light and shade in the atrium under the influence of sunlight. The inner courtyard is visually partially connected to the interior through glazed vertical stripes, which create a play of light and shade in the interior. The glazing of the classrooms onto the hallway provides increased natural lighting.
6.			

TABLE 3

Interaction of landscape and indoor space in visual perception. View points from indoors space towards landscape
 [created by the author, 2025]








Serial No.	TYPOLOGICAL BREAKDOWN OF	THE CRITERIA FOR EVALUATION OF THE PSYCHO-EMOTIONAL INTERACTIVITY OF INDOORS AND LANDSCAPE SPACE	
		EVALUATION OF THE VISUAL MERGE OF INDOORS AND LANDSCAPE SPACE	MOST CHARACTERISTIC INDOOR VIEWS
1.	RECONSTRUCTIONS	The interior form a harmonious interaction in the east of the building with the landscape space of the baltic teachers' seminar park. The silhouette of large trees in winter and the foliage in summer create a psycho-emotionally balancing effect. The interior form a western interaction with the east facade of the kuldiga needle factory building, which adjacent to the line of kalpaka street. Due to the set-away of the technical school building from the street line, the row of large trees in front of the facade and the car parks, the density of the	
2.		Thanks to the planting of large trees along the outer perimeter of the building, despite the relatively dense construction, a harmonious interaction between the interior and landscape space is created. Even in the winter, the silhouettes of the tree branches soften the spatial fusion, respecting the privacy of all users of the environment in both directions.	 
3.		A valuable factor of harmonious interaction is the pine forest next to the building, which surrounds it on two sides. Nature merges with the interior through the wide glazed planes, creating a psycho-emotionally calming atmosphere, which is vital for sensitive learning of art and music. Two facades, which open through the glazed planes onto agricultural areas, buildings and some tree plantations, create a less valuable interaction.	
4.	NEW BUILDINGS	The interaction between the interior and the landscape space flows harmoniously in both directions, thanks to the appropriately arranged landscape space and greenery, which form a common synthesis with the interior and architecture of the interior. The layout and architecture of the interior are based on the specificity of the educational process, openness and cooperation. The specific example demonstrates the harmonious interaction of the new learning process and the environment.	
5.		The wider fusion of the landscape space and the interior through the wide glazed external universes is observed in the most active public transit zones and creates a harmonious spatial interaction. In turn, the individual windows serve as picture frames for works of art, in which the greenery of the landscape space serves as the object of art.	
6.		The school has three floors, and its layout is designed to provide a sense of spaciousness and a connection between the landscape space and the interior. The surrounding forest landscape with the interior spaces through wide glazed planes creates a psycho-emotional harmonious way. In the hallway of the second floor, open recreation areas have been arranged in the free areas along the courtyard facade with a view of the central courtyard. The closed courtyard is not intended for greenery.	

TABLE 4

Interaction of landscape and indoor space in visual perception. View points from indoors space towards landscape and vice versa
[created by the author, 2025]

Serial No.	TYPOLICAL BREAKDOWN OF BUILDINGS	EVALUATION OF THE USAGE OF VISUAL ACCENTS CREATED BY THE PLAY OF LIGHT AND SHADOW	EVALUATION OF THE ARCHITECTURAL SHAPE OF THE BUILDING IN LANDSCAPE SPACE
1.	RECONSTRUCTIONS	The widely glazed entrance motif on the eastern facade of the building accentuates the building entrance in the light of the morning sun, making the school hall at the entrance light and psycho-emotionally warm.	The historical body of the building with the new extensions fits perfectly into the low-rise buildings of the old town of Kuldīga, creating a harmonious interaction with it. The proportionate proportions of the windows do not create challenges in the interaction of the landscape space and the interior. Wider glazing is used only for the entrance motif of the building's courtyard, which harmoniously visually merges the school courtyard with the entrance hall.
2.		The principle of symmetry (windows in the great hall), the principle of the central axis (windows, glazed doors at the ends of the corridors) and the principle of rhythm (windows in the classrooms) in the arrangement of windows organize the interior spaces through accents created by light and shadow.	The richly decorated volume of the building, which adjoins Ausekļa Street, stands out from the neighboring Kūrmājas Street. The surrounding 4-5-story historical buildings densely surround the gymnasium building. However, individual trees in the lawn opposite the main facade across Ausekļa Street and around the building deeper into the territory create a balancing background. The building's inner courtyard is strictly marked by the building volumes. Thanks to the historical window division and projections, the interaction of the landscape space and the interior space creates a psycho-emotionally harmonious balance.
3.		The dynamically rhythmic arrangement of windows in the plastic facade creates unconventional light and shadow accents in the larger rooms.	The four-story building volume (before the reconstruction it was two-story) aggressively rises in a sparsely populated low-rise residential and industrial production areas. The main facade of the building adjoins Mazcenu Alley. Across the street is a pine forest. One end of the facade tends to taper unsuccessfully to the perpendicular street. In front of the main facade is a small curved forecourt with a lawn and low greenery. The first floor of the building is formed by a wide glazed, recessed strip, thanks to which the landscape space and the interior flow into each other. At a certain angle, the adjacent forest is reflected in the glazed facade panels.
4.	NEW BUILDINGS	Sunlight, thanks to the wide glazed external planes and open internal layouts, smoothly accentuates one zone after another throughout the day, creating a psycho-emotionally warm environment for younger children. The internal glazed atrium is ensured by the presence of sunlight throughout the sunny days.	The two-story cylindrical building volume of the school is inscribed in a low-rise mixed-use building, which is relatively sparse. The specific large glazed building volume is connected by a glazed tunnel on the 2nd floor level with the second building volume, which is formed by a two-diamond block. The interior spaces of the glazed building volumes create active communication with the public street space through thoughtful greenery and a landscaping strip. Similarly, a strong spatial synthesis is formed in the round courtyard, thanks to a specially manicured garden. Thanks to the close collaboration of architects, interior designers and landscape architects, a unified, harmoniously high-quality environment has been created, which flows from the landscape space to the interior spaces and vice versa.
5.		Solar accents highlight functional furniture groups in the rooms. For example, discussion and relaxation areas.	The linear building volume of the university is the 2nd phase of the Exuperio school. It is more restrained in glazing than the adjacent glazed cylindrical building volume from the 1st phase. Only the entrance area of the 1st floor is extensively glazed. The rest of the facade is playfully played with square window volumes, placed at different depths in relation to the street facade like paintings. The courtyard facades are decorated mainly with emphasized functional, rhythmic window areas. The facades that open onto the inner courtyard are extensively glazed. The landscaping of the inner courtyard garden is also kept in a restrained minimalist style. Psycho-emotionally, the interior spaces and the landscape space create a balanced interaction, thanks to the spacious territory and thoughtful greenery.
6.		Accents of lighting created by the sun can be read under the skylight in the hall, in rooms adjacent to the atrium, and in individual classrooms.	The expressive architecture of the school building volume contrasts strongly with the surrounding forest landscape and low-rise mixed-use development that surrounds the building. The main facade, which adjoins G. Asara Street, is visually separated from the building across the street by a row of trees, supplemented with new plantings. The wide glazed motifs of the two entrances on the southern facade of the building emphasize the spatial interaction in a dynamic way.

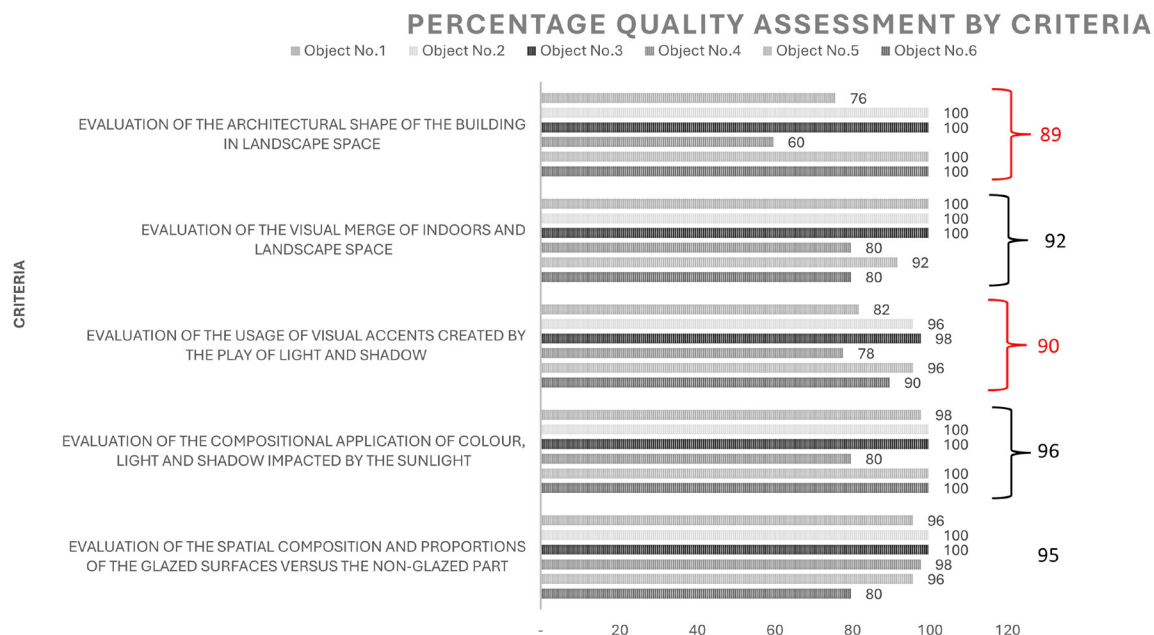


Fig. 4. Graphical representation of the data matrix – percentage quality assessment by criteria [created by the author, 2025]

Among the highly praised schools is the sustainably designed wooden school by Latvian architects Lauder Architects, which was not built in Latvia, but in Estonia – the Sillamae school – a finalist (2024) [2]. This particular school is unique because it is entirely built with wooden load-bearing structures. To date, no such sustainable school buildings have yet been constructed in Latvia.

Each object in nature is evaluated from multiple viewpoints and perspectives in two main directions: viewing from the interior space to the landscape space and viewing from the landscape space to the interior space through architecture (Fig. 3).

The information gathered serves as the obtained data (TABLE 1; 2; 3; 4). Additionally, the use of materials and the sustainability of the object are evaluated.

The percentage evaluation was conducted by summarizing the assessments of 6 architecture experts, and shows lower scores in two criteria (Fig. 4):

1. Evaluation of the usage of visual accents created by the play of light and shadow.
2. Evaluation of the architectural shape of the building in landscape space.

The only school with full wooden load-bearing structures designed by Latvian architects was built in Estonia. At the beginning of 2025, P. Grietēns and M. I. Valainis conducted a survey of Latvian experts as part of their research to find out what are the discouraging factors for the construction of wood in Latvia and how the situation could be improved in the future. Use of timber in Latvia is hindered by regulations and market conditions. Expert recommendations:

- Revise current fire safety regulations.
- Train highly qualified professionals.
- Promote local timber construction industry.
- Develop successful and expressive public pilot projects.
- Provide state support (tax relief, subsidies) to lower construction costs and enhance competitiveness of timber.

Conclusions

The findings of the research allow drawing several key conclusions regarding the interaction between architecture, landscape, and the learning environment in Latvia.

1. The development of the Latvian educational system is supported by an increasing orientation toward sustainable architectural stylistics, ensuring that the evolution of school architecture resonates with the principles of Bauhaus.
2. The architectural language of school buildings and their interaction with the surrounding landscape play a significant psycho-emotional role in the development of children and young people. The presence of green areas around schools fosters experiential learning about nature—not only through the planting of lindens, oaks, birches, and ornamental shrubs, but also by establishing apple orchards, berry gardens, and strawberry beds. Such practices encourage exploration of the environment beyond the interior school space.
3. The study highlights the artistic mastery of Latvian architects in the design of individual school buildings; however, the pursuit of coherence with principles of “green thinking” is often underrepresented. The spatial and compositional language of built volumes tends to be detached from adjacent green areas.
4. The findings suggest that a stronger spatial interaction between architectural form and the green environment directly contributes to a higher overall quality of landscape space.
5. Given Latvia’s northern geographic location and its long winter period extending from November until early May, light emerges as a critical factor in school architecture. Beyond fulfilling normative requirements for insolation, the integration of outdoor and indoor spaces through large glazed surfaces enhances both visual and spatial continuity.
6. The research demonstrates that spatial synthesis between landscape, architectural form, and interior space creates visual and psycho-emotional interactions that respect and reflect the mentality of northern societies.
7. School buildings located in cultural and historical structures also inherit the cultural landscape of their context (parks, gardens, ceremonial courtyards, alleys), thereby strengthening the perception of cultural identity.

References

1. *Arhitektūra un kultūrpolitika Latvijā* [tiešsaiste]. Latvijas arhitektūras politika 2020 [skatīts 7.02.2020]. https://www.latarh.lv/f/Latvijas%20arhitekturas%20politika%202020_pa%20lapam.pdf
2. *Arhivs. Latvijas Arhitektūras gada balva* [skatīts 11.10.2024]. <https://www.latarh.lv/konkursi/arhivs>
3. **Auzāns, A.** Četros gados reformēta 241 skola. Vai skolu tikls beidzot ir savests kārtībā? Delfi Plus [skatīts 20.11.2024]. <https://www.delfi.lv/video/56419816/projekts-43/120068374/cetros-gados-reformeta-241-skola-vai-skolu-tikls-beidzot-ir-savests-kartiba>
4. *Baukultūr un Davosas deklarācija* [tiešsaiste]. Latvijas arhitektūras politika 2020 [skatīts 7.02.2020]. https://www.latarh.lv/f/Latvijas%20arhitekturas%20politika%202020_pa%20lapam.pdf
5. **Grietenā, A.; Ziemeļniece, A.; Īle, U.** The interactivity of the landscape space and interiors in the architecture of the Latvian education and art buildings of the 20th/21st century. *Landscape Architecture and Art*. 2017, V 11, p. 15-22.
6. *Latvijas Arhitektūras gada balva. Par konkursu* [tiešsaiste]. Latvijas Arhitektu savienība [skatīts 11.10.2024]. <https://www.latarh.lv/gada-balva/par-konkursu>
7. *Latvijas oficiālā statistika* [tiešsaiste]. Oficiālais statistikas portāls [skatīts 10.11.2024]. <https://stat.gov.lv/lv>
8. *New European Bauhaus* [tiešsaiste]. European Union. [skatīts 09.09.2024] https://new-european-bauhaus.europa.eu/about/about-initiative_en
9. **Skinner, P.** *Reflections on Inside-Outside Space* [cited 11.09.2020.]. https://espace.library.uq.edu.au/data/UQ_3545/insideoutsidetext.pdf?Expires=1548959072&Signature=ZEASLcwwV389BveVI5DV5RxFiSqTzRu4-FTzJLr4ErwSSV1T0jcJgbrsQA~M8OpmPpvUyKaQVEgTldVYEHfyKwTcBHvO~1ogSyYf05S1lNjiW09If6EtCrtpYXHM7hDXr1PXhMRUXPZCPmqKK0YN739mQYS-0VDqM84oQfP5YnA3xpbirvNetBWF273ISZ5qWev~vXEmgGtRS1LodavRbNiPTjJfLG4s0mnxcJcpxvOCDI4rYcCbKoUuGs-6pWaEGbFkjtHDW70WuZi7~fOchhJYCB02Ma1KBiEBq3rVgDk-ZI7j3gPLwDPEC7bWXUtBq2PmYK0x7ws66walHWuvA__&Key-Pair-Id=APKAJKNBJ4MJBNC6NLQ
10. *UNEP -UN Environment Assembly 5 (UNEA 5.2) Resolutions*. UN environment programme [skatīts 01.09.2024]. <https://documents.un.org/doc/undoc/gen/n24/419/22/pdf/n2441922.pdf>
11. *UNESCO World Heritage Centre* [skatīts 12.-10.2024] <https://whc.unesco.org/en/news/1773>

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Kopsavilkums

Pētījums aplūko mūsdienu Latvijas skolu arhitektūrā novērojamo ainavas un iekštelpas mijiedarbību, uzsverot tās nozīmi ilgtspējīgas vides veidošanā. Tas balstīts 2019. gada pētījuma turpinājumā un saistīts ar globālām iniciatīvām, piemēram, Jauno Eiropas Bauhausu. Mūsdienu arhitektūrā novērojama tendence nojaukt robežas starp iekštelpu un ārtelpu, izmantojot plašus stiklojumus un caurredzamas fasādes. Latvijā, neskatoties uz skolēnu skaita samazināšanos, pēdējos gados uzbūvētas vai renovētas vairākas arhitektūras balvas saņēmušas skolas. Tās atrodas gan Rīgas apkārtnē, gan Kurzemes reģionā, kur ticis respektēts kultūrvēsturiskais mantojums. Jaunajos projektos novērojama telpiska integrācija un funkcionāli pielāgoti risinājumi, taču eksperti norāda uz nepieciešamību stiprināt gaismas un ēnu akcentu izmantojumu, kā arī uzlabot arhitektūras formu integrāciju ainavu telpā. Igaunijā uzbūvēta viena no ilgtspējīgākajām skolām ar koka nesošo konstrukciju, kuru projektējuši Latvijas arhitekti – šādi objekti Latvijā vēl nav uzbūvēti. Kā galvenie ierobežojošie faktori minēti normatīvie akti, kvalificēta darbaspēka trūkums un atkarība no importa. Tādēļ eksperti iesaka pārskatīt regulējumus, attīstīt vietējo ražošanu, veidot paraugprojektus un nodrošināt valsts atbalstu. Pētījums uzsver starpdisciplināras sadarbības nozīmi nākotnes arhitektūrā un nepieciešamību integrēt dabas klātbūtni pilsētvidē.