

# Interaction of landscape and indoor space in architecture of Roja open-air stage / summer concert hall

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**Abstract.** In the art of environmental design, architecture, landscape architecture and interiors need to be balanced through interdisciplinary collaborative planning to enhance the psycho-emotional quality of environment, and in this respect, the study of the interaction of landscapes and indoor space through comparative analysis and inductive reference continue. Enclosed by evergreen Vacciniosa type of forest, the impressive building of the new Roja Stage / Summer Concert Hall has been standing proudly on the shores of the Gulf of Riga since 2019. The building actively contrasts with the surrounding landscape. The language of architectural forms in glass and concrete is geometrically sharp, saturated with broken lines and planes in contrast to the adjacent natural landscape, pine forest. The specific detailed case study underlines the importance of balanced interdisciplinary collaboration in harmonious interaction between architecture, landscape and indoor space.

**Keywords:** landscape architecture, architecture, interaction of landscape and indoor space, concert hall

## Introduction

In Latvia, as well as globally, increasing attention is being paid to balance in every sense, as evidenced by one of the most important recent documents in the field of architectural policy [3]. The purpose of the Latvian Architecture Policy developed in line with the concept and principles of the built environment culture as defined in the Davos Declaration, is to create conditions for quality design and sustainability of individual and public living space based on high-quality architecture [1]. One of the principles of the Latvian Construction Law is sustainability needed for a quality living environment for present and future generations thus promoting efficient use of natural resources [5].

In today's complex construction processes, environmental makers are striving to stay positive in the face of the growing need for deeper interdisciplinary collaborative planning, and we all as environmental users need to strive for environmental integrity and harmony [1; 3; 6; 11; 14]. The need of harmonious interaction between landscapes and indoor space is underlined by the rapidly changing role of architecture, high involvement of the users of environment in the processes of creating public spaces and new technologies. This is not only facilitated by an increasing use of transparent extensive glazed surfaces in architectural exteriors, visually uniting landscape and interior space by means of illusionary and plastic architectural forms [6; 10], but also by direct extensive connection of landscape and interior space without using glass, through employing 21st-century technological achievements in designing. An extensively open space with and without glazed planes, partially covered visual links

between landscape and indoor space expands through sound, smell, and tactile effects. The present study of the interaction between landscape and indoor space is pursued in the search for balancing factors between architecture, landscape architecture and interiors, needed to improve planning based on interdisciplinary collaboration and to enhance the psycho-emotional quality of the environment. The pattern of the interaction of landscape and indoor space today consists of an endless combination of different factors. The most important visual factors are divided into five criteria that help assess composition and proportions, colours, lights and shadows drawn by sunlight, visual accents in chiaroscuro, visual merging of indoors and landscape and architectural forms in landscape [6]. Analysing the effects observed in both directions (looking from the landscape towards the interior space) and vice versa provides a more complete assessment of the interaction.

At the beginning of the 21st century, the Latvian landscape has been enriched with several expressive concert halls, important for the decentralization of cultural processes in the country.

Roja Concert Hall is one of the seven cultural sites to promote sustainable development of local cultural and natural heritage in Kurzeme, created within the project "Creation of new nature and cultural tourism services on the western coast of the Gulf of Riga". The project has been implemented by Jūrmala City Council in cooperation with the municipalities of Roja, Mērsrags and Engure [9].

**Aim of the research** – to identify the contributing factors for harmonious interaction of landscape and indoor space in the art of environment design in

Latvia (case study of the Roja open-air stage / summer concert hall).

#### Research tasks.

1. To evaluate the interaction of landscape and indoor space in the particular architecture of the object.
2. To define the factors of harmonious interaction of landscape and indoor space in the art of environment design.

**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.

#### Materials and Methods

The interaction of landscape and indoor space in architecture of Roja open-air stage / summer concert hall in Latvia. The visual inspection was conducted in August 2020–October 2021 when the author took photos of the research object. *Research methods: comparative analysis method* (photographic recording, analysis of interaction factors according to common criteria) and *inductive cognitive method*.

*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

*Interaction of landscape and indoor space under the influence of visual perception*

##### **Roja open-air stage / summer concert hall:**

- Address – Jūras Street 10, Roja, Latvia (Figure 1).
- Built in 2019.
- Architectural design – SIA Modus R, Dace Rampāne, Aiga Kurpniece. Contest entry – design (size: 2211, 40 m<sup>2</sup>), 2016–2017. Supervision, 2018–2019.
- Built by SIA “A Celtne”.

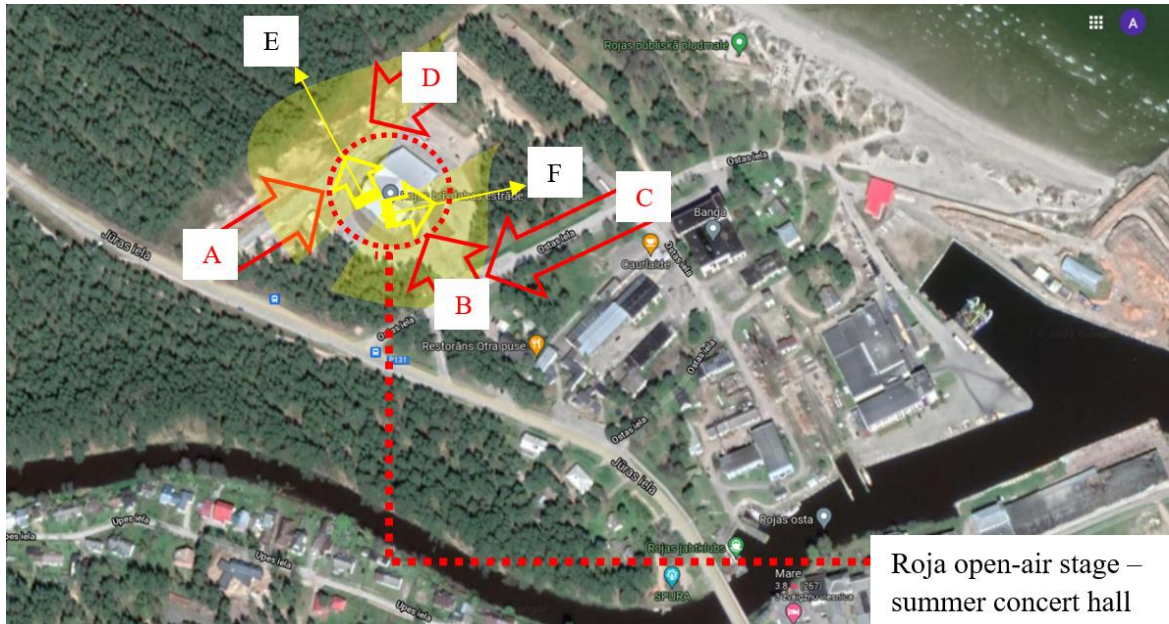
With the investment of European Union funds, a new and modern summer concert hall [2; 8] has been built in Roja, located 100 metres from the Baltic Sea and the beach of Roja. Roja Summer Concert Hall is the centre of summer events in Northern Kurzeme, located on the outskirts of Roja town on the North Kurzeme highway P131 Tukums-Kolka (Figure 1; TABLE 1; 2). The concert hall is

built as an open-plan structure with a roof in the shape of a stylised sea wave along its entire length. The building's interior is partly separated from landscape by glazed metal frame structures in the spectator area and visually opaque walls behind the stage. Latvia's changeable weather conditions, even in summer, often surprise with rain and wind, so to ensure smooth running of cultural events and the comfort of spectators and artists in our particular climate, serious investment in large-scale structures is needed [12]. The auditorium has a capacity of up to 1000 seats and 1000 parking spaces. At the moment, Roja open-air stage is the largest (27x16 m) in Latvia with very good acoustics. The concert hall's territory is spacious and well landscaped and is friendly for people with disabilities. The concert hall offers a wide range of events such as concerts by bands playing different musical styles, acoustic concerts, theatre performances, exhibitions, corporate events and sporting events, and many more. The open-air stage in Roja is a great place for creative expression.

Concert hall has a storage/utility room, two artist rooms, two toilets and an administration office. The total cost of the construction is EUR 3 328 610, with an EU contribution of EUR 600 000.

#### *Context of natural foundation and greenery in the interaction of landscape and indoor space*

The open-air stage is situated on the seaside of the Riga sea gulf, in a natural evergreen pine (*Pinus*) *Vacciniosa* forest with natural undergrowth, which is also partially preserved in the north west and south west parts of the territory of the concert hall. The main species in the tree stand is pine. Underwood is thin - *Juniperus communis* and *Sorbus aucuparia*. More than 80 species occur in ground vegetation [4; 7; 13]. The dominant plants in the ground stand are common cowslip (*Vaccinium vitis-idaea*), common bluebell (*Vaccinium myrtillus*), heather (*Calluna vulgaris*), sand cress (*Calamagrostis epigejos*), black chickweed (*Empetrum nigrum*). Characteristic mosses and lichens: Reber's rust (*Pleurozium schreberi*), glossy staghorn (*Hylocomium splendens*), dicranum (*Dicranum*), deer cladonia (*Cladonia rangiferina*). Heather stands take on a characteristic pink-purple colour in the second half of summer. The naturally formed landscape is a rich evergreen backdrop and the major value to be preserved that serves as a means of harmony in the interaction between the landscape and indoor space through architecture. The artificial earth mounds are covered with lawn. The spectator part of the building is surrounded by rhythmic evergreen planting of mountain pine (*Pinus mugo*) along the façade, following the topography of the mound, which makes the volume of the stage fit more harmoniously in the landscape. (Figure 1; TABLE 3; 4).



**A; B; C; D; E** - key viewpoints to the concert hall

Fig.1. Roja open-air stage / summer concert hall in landscape with view lines and points [graph by the author with googlemap, 2021, <https://www.google.lv/maps/@57.5081839,22.7978474,536m/data=!3m1!1e3?hl=lv>]



Fig. 2. Roja open-air stage / summer concert hall in landscape, viewed from Jūras Street (View line A) [photo by the author, 2020]



Fig. 5. Roja open-air stage / summer concert hall in landscape (View line C) [photo by the author, 2020]



Fig. 3. Roja open-air stage / summer concert hall in landscape (View line C) [photo by the author, 2020]



Fig.6. Roja open-air stage / summer concert hall in landscape (View line B) [https://www.facebook.com/rojasbrivdabasestrade/photos]



Fig.4. Roja open-air stage / summer concert hall in landscape (View line D) [photo by the author, 2020].

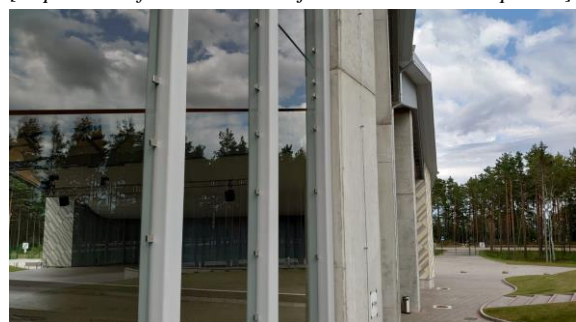


Fig.7. Roja open-air stage / summer concert hall in landscape (View line B) [photo by the author, 2020]



*Fig.8. Roja open-air stage / summer concert hall in landscape (View line E) [photo by the author, 2020]*



*Fig.9. Roja open-air stage / summer concert hall in landscape (View line F) [photo by the author, 2020]*



*Fig. 10. Roja open-air stage / summer concert hall in landscape (View line B) [photo by the author, 2020]*

*Psycho-emotional nature of spatial synthesis under the influence of natural and artificial light distribution*

Analysing the importance of natural and artificial lighting in the interaction of landscape and indoor space in the architecture of the summer concert hall in Roja, it is necessary to emphasize the wide variability of external conditions in the rhythms of the day and season in Latvia.

The long twilight hours, the two seasons with different lighting and the changing meteorological weather affect only one aspect. In addition, artificial lighting produces a complex set of influencing factors (Figure 1; TABLE 5; 6).

In line with the existing and prospective mobility habits of the users of this environment, key viewpoints to the concert hall (A; B; C; D; E) have been selected, which are further analysed in the study (Figure 1).



*Fig. 11. Roja open-air stage / summer concert hall in landscape (View line B) [photo by the author, 2020]*

TABLE 1

Interaction of landscape and indoor space under the influence of visual perception.  
View lines from landscape towards the architecture  
[created by author, 2021]

No.	View marking and direction	Visual distance to the object	Distance walked	Description of results
1.	<b>View line A</b> (Figure 2), moving from Jūras street gate towards the north-east (towards Roja open-air stage).	~300—0 m	~300 m	The view of a pine forest massif reveals a large building volume on an artificial earth mound, which actively contrasts with the surrounding landscape. The language of architectural forms in glass and concrete is geometrically sharp, saturated with broken lines and planes, in contrast to the natural landscape of the adjacent pine forest massif. The volume of the building optically increases upon approaching the stage. The architectural detailing becomes more visually active, thanks to the fragmentary cladding of the building's long-lasting fibre cement facade boards. Tonal flashes of sand and brown coloured facade boards, light grey metal facade structures, their connecting elements and planes of reflective glass create a quality of detail. The extensive glazed planes actively reflect the surrounding woodland, greenery adjacent to the building and the changing sky. A fragmentary view of the stage part of the interior space can be perceived from the landscape.
2.	<b>View line B</b> (Figure 6; 7; 10; 11), moving to the north-west (towards Roja open-air stage), starting from the main entrance to the territory through Ostas Street gate.	~150—0 m	~150 m	A large forecourt separates the concert hall from the entrance gate, which is flanked on either side by a thinned pine forest and artificial mounds covered with lawn. The contrasting forms of the open-air stage fit visually well in landscape thanks to the proportions of the mounds and the scale of the forecourt. The glazed planes of the building volume serve as a mirror of the landscape. The stage part of the interior space is also partly perceptible from the landscape. As the building's volume is approached, the architectural detailing becomes more visually active, thanks to the fragmentary exterior finish with twisted, tonal panels (Cedral Classic, colour: forest soft C02, manufactured by Eternit Baltic) in sand and brown natural pastels, grey metal and reflective glass elements. Through the unglazed facade part and the interior, the landscape on the opposite side of the building is visible. Through glazed planes, depending on the lighting, the indoor viewing area and the landscape on the other side of the building can be partially perceived. The architecture create a unique harmony between the indoor space and the landscape.
3.	<b>View line C</b> (Figure 3; 5), moving away from the sea along Ostas Street to the south-west past Roja open-air stage towards the entrance gate of the site.	~350—150 m	~300 m	At the beginning of the line, looking away from the sea, behind the conifer trees, the open-air stage volume is not perceptible. Moving along line C, the architecture of the stage behind the thinned conifers gradually reveals itself, presenting a strong contrast with the landscape. The volume of the building poses a lesser contrast in this particular angle. Upon approaching the main gate, an intriguing interplay between the landscape and indoor space becomes visually apparent.
4.	<b>View line D</b> (Figure 4), moving from the north of the site to the south-west past the stage.	~100—0 m	~100 m	Due to the pitch of the roof, which is oriented in the direction of movement, the volume of the building appears visually smaller than when entering through the gate from Jūras street. The artificial mounds with lawn help the building to blend more harmoniously into the landscape. From this particular angle, there is an intense communication between the landscape and indoor space through the unglazed part of the façade, creating a coherent, interpenetrating cultural living space.

TABLE 2

Interaction of landscape and indoor space in visual perception.  
View points from indoors space towards landscape [created by author, 2021]

No.	View marking and direction	Visual accessibility distance at ground level	Viewing angle	Description of results
1.	<b>View point E</b> (Figure 8), looking from the landscape to the north-west.	up to ~250 m	>90 °~180°	Through the glazed and unglazed parts of the façade, an intensely harmonious visual communication with the adjacent natural landscape is created. The close proximity of pine forest allows the presence of nature to be richly infused into the interior. The elevation of the spectator section's floor gives the interaction between the landscape and indoor space a variety of angles.
2.	<b>View point F</b> (Figure 9), looking from the landscape to the north-east.	up to ~200 m	>90 °~180°	Through the glazed and unglazed parts of the façade, an intensely harmonious visual communication is created with the adjacent artificial landscape in the foreground - plaza, man-made terrain with lawn and natural landscaped space in the background. The interaction between the landscape and indoor space is dynamically changing due to the elevation of the floor of the spectator section.

TABLE 3

Context of natural foundation and greenery in interaction of landscape and indoor space.  
View lines from landscape towards architecture [created by author, 2021]

No.	View marking and direction	Description of results
1.	<b>View line A</b> (Figure 2)	The open-air stage is situated in a natural evergreen pine ( <i>Pinus</i> ) <i>Vacciniosa</i> forest with natural undergrowth, which is also partially preserved in the territory of the concert hall. The main species in the tree stand is pine. Underwood is thin - <i>Juniperus communis</i> and <i>Sorbus aucuparia</i> . The dominant plants in the ground stand are common cowslip ( <i>Vaccinium vitis-idaea</i> ), common bluebell ( <i>Vaccinium myrtillus</i> ), heather ( <i>Calluna vulgaris</i> ), sand cress ( <i>Calamagrostis epigejos</i> ), black chickweed ( <i>Empetrum nigrum</i> ). Characteristic mosses and lichens: Reber's rust ( <i>Pleurozium schreberi</i> ), glossy staghorn ( <i>Hylocomium splendens</i> ), dicranum ( <i>Dicranum</i> ), deer cladonia ( <i>Cladonia rangiferina</i> ). Heather stands take on a characteristic pink-purple colour in the second half of summer. The naturally formed landscape is a rich evergreen backdrop that serves as a means of harmony in the interaction between the landscape and indoor space through architecture. The artificial earth mounds are covered with lawn. The spectator part of the building is surrounded by rhythmic evergreen planting of mountain pine ( <i>Pinus mugo</i> ) along the façade, following the topography of the mound, which makes the volume of the stage fit more harmoniously in the landscape.
2.	<b>View line B</b> (Figure 6; 7; 10; 11)	The open-air stage is surrounded by evergreen natural pine forest with natural undergrowth and no distinct topography. Heather stands are characteristic of <i>Vacciniosa</i> undergrowth, with a distinctive pink and purple colour in the second half of summer, while in autumn rowan trees bring yellow shades to the landscape against evergreen conifers. Pine trees are an evergreen backdrop that serves the harmony between landscape and indoor space through the architecture. The artificial earth mounds are covered by lawn and a retaining wall, against which floral and plant arrangements and spatial installations are temporarily displayed. The building's spectator area is surrounded by rhythmic evergreen plantings of mountain pine in a line along the facade, following the mound's topography and adding to spatial harmony.
3.	<b>View line C</b> (Figure 3; 5)	The view line is dominated by the presence of a naturally formed evergreen pine forest in close-up with a naturally formed, relatively flat undergrowth. In the diverse undergrowth of the forest, among various mosses, lichens and other plants, heather stands are best visible mainly due to their distinctive pink and purple colour in the second half of summer, followed yellow colours of deciduous trees in autumn. The <i>Vacciniosa</i> pine forest, in all its diversity of plants, is a luxurious evergreen foreground that partially covers the sharp contrast of the open-air stage to landscape, allowing it to be gradually revealed visually from the sea.
4.	<b>View line D</b> (Figure 4)	The open-air stage is surrounded by an evergreen natural pine forest with natural undergrowth, characterised by green moss and heather stands with a distinct pink-purple colouring in the second half of summer. The pines are an evergreen backdrop that serves the harmony of the landscape and indoor space through the architecture. Artificial earth mounds are covered with lawn. Along the front of the building, rhythmic plantings of mountain pine in a single line, following the topography of the mound, complements the harmony of the landscape and the architecture.

TABLE 4

Context of natural foundation and greenery in interaction of landscape and indoor space.  
View points from indoor to landscape space [created by author, 2021]

S. No.	View marking and direction	Description of results
1.	View point E (Figure 8)	Due to the distance, in the distant view line from indoors, one may mainly see evergreen silhouettes of pines in Vacciniosa forest. In the second half of summer, the undergrowth is visually coloured in shades of pink and purple by the flowering of heather, while in autumn the evergreen woodland is highlighted by the yellow leaves of the rowan. In the close-up behind the extensive glazed facade planes, the rhythmic planting of evergreen mountain pines can be seen, visually complementing the backdrop of extensive Vacciniosa pine forest. The grey paved area is enlivened by a separate mound of roundish forms covered with lawn..
2.	View point F (Fig. 9)	Vacciniosa pine forest is clearly visible in the distant view lines. The close plan is dominated by artificial mounds covered with lawn and rhythmic planting of mountain pines along the facade of the building, clearly visible through its extensive glazed planes. In the second half of summer, Vacciniosa undergrowth changes colour visually due to the flowering of heather.

TABLE 5

Psycho-emotional nature of spatial synthesis under the influence of natural and artificial light distribution.  
View lines from landscape towards architecture [created by author, 2021]

S. No.	View marking and direction	Description of results
1.	View line A (Figure 2)	<i>Evaluation of compositional application of colour, light and shadow impacted by sunlight:</i> the colours of extensive glazed facade planes reflect the changing shapes of the surrounding forest and clouds, depending on the angle of sun rays and the amount of clouds. If it is not cloudy, north-western facades obtain sunset colours at certain angles in summer evenings, when the open-air stage is most often in use. Glazed parts of the facades are particularly brightly coloured by natural processes. <i>Evaluation of the use of visual accents created by chiaroscuro:</i> thanks to the predominantly south-west orientation of the stage and the openings in façades, the decorative wall of the stage, made up of vertical, spatially curved semi-cylindrical projections, becomes a living base for chiaroscuro and solar accents. The concrete phenomena can be observed both from landscape and from indoors. The fewer the clouds and the brighter the sunlight, the more expressive the play of solar accents on a decorative wall. In the dark hours of the day: thanks to artificial lighting and stage lighting, the stage acts as a bright, colour-changing accent in the landscape.
2.	View line B (Figure 6; 7; 10; 11)	<i>Evaluation of compositional application of colour, light and shadow impacted by sunlight:</i> the mutually parallel position of the opposing glazed facades of the building allows the planes of the glazed facade to reflect the surrounding landscape, while at the same time allowing the indoor spacer and the landscape behind the building to be transparent. Chiaroscuro on glazed planes creates a surreal image of the landscape, which is reinforced by the distinct vertical division of glazing. <i>Evaluation of the use of visual accents created by chiaroscuro:</i> two large openings in the south-east facade near the stage, symmetrical to the openings in the south-west facade, open up to view the stage and its decorative wall, which is made up of vertical, spatially curved semi-cylindrical projections and, depending on the intensity of sunlight and the amount of clouds, becomes dynamically changing under chiaroscuro and solar accents. In the dark hours of the day: under the influence of artificial lighting consisting of coloured indoor spotlights, the extensive coating of the summer concert hall takes a colour-changing shape and adds shine to the landscape. During events, the indoor concert hall is highly readable in landscape, thanks to the special effects created by artificial lighting.
3.	View line C (Figure 3; 5)	<i>Evaluation of compositional application of colour, light and shadow impacted by sunlight:</i> in the first half of the day, the main façade of the stage with the forecourt becomes visually striking and active in landscape, visually increasing the volume of the building. <i>Evaluation of the usage of visual accents created by chiaroscuro:</i> glazed planes of facades create accents of sunray chiaroscuro in the first half of the day. <i>In the dark hours of the day:</i> thanks to the artificial lighting resulting from changing coloured spotlights from indoors, the volume of the concert hall is well visible from the Ostas Street, bringing a strong accent and festive glow to the landscape.
4.	View line D (Figure 4)	<i>Evaluation of compositional application of colour, light and shadow impacted by sunlight:</i> in the second half of the day, the voluminous facade of the Summer Concert Hall, with broken forms on the south-western side, becomes visually active thanks to the impact of sunlight, accentuating the volume of the building. As the angle of sunrays narrows, the façade reflects sunset hues more vividly, shading also the spectator area indoors perceptible from landscape. <i>Evaluation of the usage of visual accents created by chiaroscuro play:</i> glazed parts of the façade dynamically reflect the visual accents created by chiaroscuro in the second part of the day. <i>In the dark hours of the day:</i> artificial lighting visually engages the users of the landscape in what is happening inside the concert hall, bringing a sense of variously coloured celebration into the landscape.

TABLE 6

Psycho-emotional nature of spatial synthesis under the influence of natural and artificial light distribution.  
View points from indoor space towards landscape [created by author, 2021]

Serial No.	View marking and direction	Description of results
1.	View point E (Figure 8)	<i>Evaluation of compositional application of colour, light and shadow impacted by sunlight:</i> in the first half of the day, the sun illuminates the adjacent pine forest, enhancing the interaction between the landscape and indoor space. In the second half of the day, the sun is to the left of the audience and illuminates the stage from the west. <i>Evaluation of the usage of visual accents created by chiaroscuro:</i> as the angle of sun rays narrows and the intensity of light and the amount of clouds increase, the decorative wall of the stage, made of vertical, spatially curved semi-cylindrical protrusions, takes on pink, dynamically changing hues and becomes a screen for the play of accents drawn by light-coloured, dynamically changing chiaroscuro and solar accents. <i>In the dark hours of the day:</i> the sun setting, the interaction between landscape and indoor space gradually diminishes, as the artificial lighting of the stage gradually draws everyone's attention.
2.	View point F (Figure 9)	<i>Evaluation of compositional application of colour, light and shadow impacted by sunlight:</i> in the light of sunlight, the landscape area enters very actively visually into an indoor area under comparative shading. In the first half of the day, the sun illuminates the stage and its decorative wall on the right. In the second half of the day, as the angle of the sun rays narrows through extensively glazed planes and the opening in the façade, the landscape takes on the hues of a sunset from inside. The illuminated pine silhouettes interact from landscape with indoor space as a strong accent. Depending on the amount of clouds that directly influences the intensity of sunlight, and the orientation of planes, or openings, of the glazed facades, the intensity of the interaction between landscape and indoor space changes. <i>Evaluation of the usage of visual accents created by chiaroscuro play:</i> the decorative wall of the stage, in the first half of the day, depending on the intensity of the light and the amount of clouds, takes on shades and becomes a screen for a bright, dynamically changing play of light and sun accents. <i>katuves dekoratīvā siena, dienas pirmajā pusē, atkarībā no gaismas intensitātes un mākoņu daudzuma, iegūst nokrāsas un kļūst par ekrānu gaišām, dinamiski mainīgām gaismēnu un saules akcentu spēles rotaļām.</i> <i>In the dark hours of the day:</i> the sun setting, the interaction between landscape and indoor space gradually diminishes, because the intensive artificial lighting of the stage significantly outperforms the artificial lighting of the landscape.

### Conclusions

On the shore of the Gulf of Riga, surrounded by the evergreen Vacciniosa forest, the voluminous building of the new Roja open-air stage / summer concert hall is revealed to the eye. The building partly rests on an artificial earth mound and actively contrasts with the surrounding landscape. A large forecourt separates the concert hall from entrance gate, surrounded on both sides by a thin pine forest and artificial mounds covered with lawn. The contrasting forms of the open-air stage volume are in visual harmony with natural landscape thanks to the proportions of artificial mounds and the scale of the forecourt.

The language of architectural forms expressed in glass and concrete is geometrically sharp, saturated with broken lines and planes in contrast to the adjacent natural landscape, a pine forest. Upon approaching the stage, the architectural detail begins to visually emerge, thanks to the building's fragmented finish of stranded durable fibre cement facade panels in merging sandy and brown natural pastel hues. The light grey metal facade structures, their connecting elements and planes of reflective glass create a quality of detail. Extensive glazed planes of the building envelope serve as a mirror of the landscape, actively reflecting the surrounding forest, greenery adjacent to the building and the changing sky. The interior of the building is perceptible

in fragments when viewed from the landscape. At certain angles, there is intense communication between landscape and indoor space through glazed facade parts and openings in facades in the direction from the landscape to indoors and vice versa. The interaction between the landscape and indoor space acquires a variety of angles to be viewed from, thanks to the elevated floor of the spectator section. Architecture is the means of creating a unique, unified harmony between indoor cultural life and the landscape.

The existing natural Vacciniosa undergrowth without distinct topography has been partially preserved in the area of the concert hall. More than 80 species of plants can be found in the undergrowth. In autumn, rowan trees bring a yellow hue to the landscape against a background of evergreen conifers, while heather stands give the undergrowth its characteristic pinkish purple hue in the second half of summer. **The naturally formed landscape is a rich evergreen backdrop and the major value to be preserved serving as a means of harmony in the interaction between landscape and indoor space through th architecture.** The artificial earth mounds in the forecourt are covered by lawn. The spectator part of the building area is surrounded by rhythmic evergreen hill pine plantations in a line along the facade, following the topography of



the mound, which make the built part of the whole structure more harmoniously fit into the theme of the landscape.

*Evaluation of compositional application of colour, light and shadow impacted by sunlight:* the parallel positioning of two opposing extensively glazed facades of the building allows the colours of glazed facade planes to reflect the surrounding landscape and the changing cloud shapes in the sky in a variety of ways, while at the same time providing a view of the interior space and the landscape behind the building. Chiaroscuro on the glazed planes creates a surreal image of the landscape, reinforced by the distinct vertical division of the glazing. In summer evenings, when the open-air stage is most often in use, and in better weather conditions, the north-west facades and partly the interior spaces, are coloured in expressive sunset colours at certain angles. The glazed facade parts are particularly brightly coloured by natural processes. In the first half of the day, the sun illuminates the stage and its decorative wall on the right. In the second half of the day, as the angle of sunrays narrows through extensive glazed planes and the opening in the façade, the landscape, as perceived from the interior, takes on the sunset hues. Illuminated pine silhouettes in the

landscape interact with interior space as a strong accent. Depending on the amount of clouds, which directly influences the intensity of sunlight, and the orientation of planes or openings in the glazed facades, the intensity of the interaction between the landscape and indoor space changes. *Evaluation of the usage of visual accents created by chiaroscuro:* thanks to the predominantly south-west orientation of the stage and the openings in facades, decorative stage wall made of vertical, spatially curved semi-cylindrical projections, becomes a lively base for chiaroscuro and solar accents. The particular phenomena can be observed both from the landscape and from indoors. The fewer the clouds and the brighter the sunlight, the more expressive the play of solar accents on the decorative wall. *In the dark hours of the day:* as the sun sets, the interaction between the landscape and indoor space, as seen from indoors, gradually diminishes as the artificial lighting of the stage gradually draws everyone's attention. Thanks to stage lighting, the concert hall acts as a bright, colour-changing accent in the landscape during dark hours of the day; artificial lighting visually engages the users of the landscape in what is happening inside the concert hall, introducing a comprehensive sense of festivity in the space.

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**Kopsavilkums.** Koncertzāles teritorijā daļēji saglabāta esošā dabiskā mētrāju zemsedze bez izteikta reljefa. Mētrāju zemsedzē sastopamas vairāk nekā 80 sugas. Galvenā suga kokaudzē – priede. Rudenī lapu koki ienes ainavu telpā dzeltenās nokrāsas uz mūžzaļo skuju koku fona, bet viršu audzes vasaras otrā pusē piešķir raksturīgo rozā, violetu nokrāsu zemsedzei. **Dabiski veidotā ainavu telpa ir bagātīgi veidots mūžzaļš fons un lielāka saglabājamā vērtība, kas kalpo kā harmonijas līdzeklis ainavu telpas un iekštelpas mijiedarbē caur arhitektūru.** Mākslīgi veidotos zemes uzbērumus sedz zāliens. Būvobjekta skatītāju daļu rindā gar fasādi, sekojot uzbēruma reljefam, ieskauj ritmiski mūžzaļi kalna priežu stādījumi, pateicoties kuriem, estrādes būvobjekts harmoniskāk ierakstās ainavu telpas tematikā.