

## **THE IMPACT OF OUTDOOR SIGNAGE ON THE STREETSCAPES OF OLD RIGA**

**ĀRTELPAS ZĪMJU IETEKME UZ VECRĪGAS IELU AINAVĀM**

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### **Abstract**

Visual pollution caused by insufficiently considered usage of outdoor signage in urban areas can negatively influence the visual quality of public outdoor space. Like other urban areas, Riga is exposed to the risk of this type of visual pollution. As Old Riga is included on the UNESCO World Heritage List, it is important to keep it clean from such contamination. So far, no in-depth research on visual pollution in Old Riga has been carried out. Therefore, the aim of our study was to explore and assess the occurrence and impact of outdoor signage in the main shopping streetscapes of Old Riga. The study was based on spatial preference and observation, street colour photomontages, on sociological investigation methods and on analysis of regulatory and planning documents.

The studies showed that the existing outdoor signage on the facades of the buildings of Old Riga causes visual pollution, which, in its turn, negatively affects the appearance of historical monuments and buildings and lowers the visual quality of public outdoor space. The development of appropriate design guidelines or a design code containing specifications for outdoor signage, windows, facades and their elements and design would promote the development of aesthetically consistent, expressive and high-quality urban space.

**Keywords:** Old Riga, visual pollution, outdoor signage, streetscapes

### **Introduction**

In recent decades, there has been growing interest in visual pollution and its occurrence in urban areas. This phenomenon has encouraged scholars to study the effect of visual pollution on human perception, psyche and quality of life (Portella 2014). One of the causes of visual pollution is insufficiently considered usage of outdoor signage (e.g. commercial and non-commercial adverts, signboards, LED screens, informative signs) on the facades of buildings in urban areas. Visual pollution can affect humans directly, causing psychological discomfort, and indirectly, leading to economic deterioration of the community or to distraction of attention, like, for instance, eye fatigue in car drivers, lack of productivity, reduction in diversity of views, nervousness, behavioural disorders, pessimism, nausea, loss of vitality and even changes of character (Enache et al. 2012; Yilmaz & Sagsoz 2011). Besides, a visually polluted and degraded environment has reduced economic value (Jana & De

2015). Outdoor signage is a kind of communication between the customer and the salesperson. Lack of outdoor signage may harm the economic and social vitality of the town because signage attracts visitors, customers and investors. Nevertheless, abundant usage of outdoor signage in the historical centres of towns may have negative consequences. Disorganised outdoor signage may annoy people and cause stress, and, in the end, reduce people's ability to understand the messages from businesses (Portella 2014).

Like other urban areas, Riga is exposed to the risk of visual pollution caused by outdoor signage. Elimination of visual pollution is a topical problem for Old Riga, the oldest part of the historical centre of Riga, which has been included on the UNESCO World Heritage List. Its streetscapes are made up of unique architectural monuments and other historical objects of national and local importance. The cultural historical heritage is a unique and non-renewable resource of priceless value. Its sites are an important part of the urban environment. Their occurrence increases spatial value and identity of place (Yilmaz & Sagsoz 2011). In order to preserve them it is necessary to assess the visual impact of outdoor signage upon them. So far, no in-depth studies have been carried out of visual pollution due to outdoor signage in Old Riga and their impact on humans.

The aim of our research was to study and assess the occurrence of commercial outdoor signage in Old Riga and its impact on streetscapes, and to find out visitors' views of them. The survey was carried out in Old Riga from 2018 to 2019, before the Covid-19 pandemic. The obtained results could be used in the development of a unified design code or design guidelines for formatting and distributing signboards, banners and adverts in Old Riga.

In many countries such guidelines successfully regulate the aesthetic quality of urban space. To regulate the aesthetic quality of shop windows, facades and adverts, design codes include many specifications, such as size, proportions, colours, material, details, silhouette, design, etc. Such an approach also requires the involvement and consent of the public (Portella 2014).

## **Data and methods**

### ***In-situ observations and analysis***

In-situ observations were made in order to explore the common aesthetics of street space in Old Riga, paying special attention to the occurrence of such outdoor signage as commercial and non-commercial signboards and adverts, their placement and interaction with facades of buildings and their prominence relating to eye level. We took photos of facades of buildings, signboards, adverts and streetscapes. These were processed by Adobe Lightroom CC2017 software and later used for the analysis

and assessment of visual quality of facades and street space and for interviewing visitors to Old Riga.

### *Colour photomontage of streetscape and analysis*

We made colour photomontages of the main shopping streets of Old Riga, namely, Kaļķu, Audēju, Grēcinieku Streets, and put them together in order to compare the facades of buildings (here and further street names are used in their original local spelling). Later they were used for assessment of the streetscapes, focusing on the differences in the height of buildings, roof line, facades and the adequacy of their elements in the common streetscape, and the occurrence of outdoor signage. While creating the photomontage we used a method which shows the facade of the street in one line (Stamps 1993; Stamps, Miller 1993). The photos were processed by Adobe Lightroom CC2017 and Adobe Photoshop CS6 software. Elevation montages were made of both sides of the streets.



Figure 1. **Location of the studied streets** (authors' figure based on Scribblemaps.com online mapping service and OpenStreetMap spatial data)

### *Analysis of regulatory and development planning documents*

In order to define the conditions of good visual quality in the historical centre of Riga, we analysed national laws and regulations, as well as regulations and development planning documents issued by Riga Municipality. They comprise requirements for the maintenance of a good-quality visual environment and

requirements for the distribution of outdoor signboards, direction indicators, building number signs and other signage in the historical centre of Riga.

### *Structured interview for an expert*

To obtain more detailed information about the visual quality of Old Riga and clarify the laws and regulations for the maintenance of the visual environment, a structured face-to-face interview was carried out with an expert on the urban development of Riga. The questions comprised several aspects, namely, the sources of visual pollution in the historical centre of Riga, their impact on the cityscape and the necessity for their prevention, the aesthetic impact of outdoor signage, people's complaints about visual pollution, studies about visual quality in the centre of Riga and the necessity to use standardised signage. Finally, an expert's view was used when composing the questionnaires for interviewing visitors to Riga about the visual quality of the streetscapes.

### *Survey of questionnaires*

We interviewed 135 visitors to Old Riga to find out their views about the occurrence of visual pollution and general assessment of visual quality in Old Riga. A survey was carried out by interviewing the respondents face-to-face and recording their replies in the questionnaire. The respondents were interviewed on the main shopping streets in daylight. The respondents chosen were people of different age groups and different places of residence: 52% were women and 48% men; 48% lived in Riga, 32% elsewhere in Latvia, and 20% were foreigners; 26% were younger than 19, 48.9% were in the age group between 20 and 59, and 24.5% were 60 or above 60.

The questionnaire consisted of four parts. The first part contained general information about the respondent, such as sex, age, place of residence and occupation. The second part contained three multiple choice questions with five possible answers. The respondents had to express their opinion about the appearance of Old Riga streets, the elements that made up their appearance and the amount of outdoor signage in Old Riga streets. In the third part the respondents were asked if they thought that the appearance of Old Riga streets should be improved. The respondents were also asked to assess the pictures of building facades included in the questionnaires with signboards and adverts in shop windows, Picture A showing the facade as it was in real life and Picture B showing an improved facade with a more harmonious advert better fitting into the overall picture (Figure 9). The fourth part of the questionnaire clarified the respondents' attitudes towards outdoor signage and its placement in the historical centre of Riga. The results of the survey were counted manually,

summarised in tables and processed by using MS Excel and SPSS15.1 for Windows software.

## Results

### *Characterisation of the main shopping streets in Old Riga*

The analysis of photo collages showed that the streetscapes of shopping streets in Old Riga contained many of historical buildings with signboards and adverts on them. Although most historical buildings are concentrated on Kaļķu Street, they are scattered all over the main shopping streets. They abound in a variety of architectural styles, starting with classicism, neoclassicism, “Bürger Classicism”, and perpendicular Art Nouveau and ending with neo-eclectic and functional styles (Krastiņš S.a). Despite the variety of styles, the buildings form a harmonious ensemble in subdued tones (Figure 2).

Placed among historical buildings, the new ones make a striking contrast with their glass facades. In the facades of the buildings on Audēju Street, due to their similar heights, the roofs form almost a smooth horizontal line, while in Facades A on Audēju Street and Facades B on Grēcinieku Street the roof line is “undulating”. The most impressive part in all the facades is the ground floor shop windows, where signboards and adverts dominate, creating a high risk of visual pollution.



Figure 2. Colour photomontages of the main shopping streetscapes of Old Riga (authors' figure)

Several studies show that people prefer facades consisting of historical buildings. They like streetscapes with well-kept historical buildings (clean and recently repainted). The replacement of old historical buildings by modern ones is mostly evaluated negatively. Radical changes in the height of buildings in old town are also perceived negatively. The physical qualities of outdoor places, such as shapes and colours, create a lasting image of the town in the visitor's mind and cause him/her to remember it as something special and unique (Portella 2014; Lynch 1960), while excessive usage of commercial signboards and adverts can spoil the visual quality of a town. The visual quality of outdoor space determines how people use it and how long they stay in it. Therefore, the commercial character of a city centre greatly influences its functionality from the human point of view (Gehl 2011). People feel better and would rather shop in places with a definite urban environment. They prefer city centres whose urban order differs from other city centres (Sherlock 1991; Mano 1999). The principles of urban design, in turn, can increase the visual quality of the environment and prevent visual pollution, or, by contrast, impair it. Therefore, in the case of Old Riga, it is highly important to consider the implementation of appropriate urban design principles, so that the city does not lose its values in the context of the UNESCO World Heritage List.

### *In-situ assessment of outdoor signage in the streetscapes of Old Riga*

In-situ observations showed that the streetscapes of Old Riga contained outdoor signage of both types - contrasting and not contrasting with the environment. The principal parameters of assessment of signage were their colours and size as compared to the facade on which they were placed, kinds of panels used for adverts and signboards and how much they covered facade design elements.

A



B







Figure 3. Signboards on Kaļķu (A-D), Audēju (E), Grēcinieku (F), Vaļņu (G, H) Streets (authors' figure)

Signboards and adverts mostly occurred on the principal shopping streets, namely, Kaļķu, Audēju and Grēcinieku Streets. Most of those placed on panels were obtrusively conspicuous (Figure 3. A-F.). They made a sharp contrast with the colour of the facades. Their size and the covered façade area drew attention to the signboards shading and even concealing elements of the facade. The situation was similar on other streets and squares of Old Riga, for instance, on Vaļņu Street (Figure 3. G, H) as well as on Šķūņu, Skārņu, Teātra, Kungu, Tirgoņu and Mārstaļu Streets, and on Līvu Square.

Adverts and signboards that were environmentally suitable and harmonious with the facades were in a minority. They often alternated with contrasting adverts. Nevertheless, they fitted well into the general composition of the surrounding facades and therefore they were less conspicuous. At the same time, they let the viewer pay greater attention to the facades on which they were placed (Figure 4. A, B).



Figure 4. Examples of the harmonious placements of signboards on Kaļķu (A), Šķūņu (B) and Audeju (C, D) streets (authors' figure)

Still, there were some good examples of harmonious placement of signboards on the facades of buildings in Audēju Street, where the artists had used colours and elements matching those of the buildings (Figure 4. C, D).

An expert in urban development in Riga (Interview 2019) is of the opinion that usage of outdoor signage not contrasting with the environment is highly desirable. It would positively influence the perception and maintenance of historical architecture. Still, much depends on the wishes and tastes of the owner. At the same time, usage of signage not contrasting with the environment may diminish commercial profits for signage installers. Nevertheless, studies prove that introduction of unified design guidelines for displacement of commercial and non-commercial signboards and adverts increase social vitality (Scenic America 1999).



The same can be said about signboards and adverts placed perpendicular to the facades of buildings. Mostly they have active and bright colours. In this context as an environmentally friendly example the building of the shopping centre Galerija Centrs on Vaļņu Street should be mentioned. Here brand signboards of shops are designed in a stylistically unified aesthetic style and placed under the overhang of the building. Thus, they do not disturb the perception of the general streetscape (Figure 5). Though it would be impossible to use this kind of signage placement in all buildings (due to the lack of an overhang), it provides a good example of form and colours for minimal-style design.



**Figure 5. Harmonious solution to the placement of commercial signboards at the shopping centre Galerija Centrs on Vaļņu Street (authors' figure)**

Analysis of existing laws and regulations in Latvia showed that the requirements regulating the placement and design of signage are written in poetic language using subjective terminology. Therefore, their execution is not as effective as desired. The requirements for regulating signage in Old Riga are not objective or exact enough to preserve and display its uniqueness. The development of a unified design code defining the physical properties of signage (proportions, size, colour, material, elements, outline, design and character) in the historical centre of Riga would promote the formation of an aesthetic cityscape and maintenance of historical buildings. It is highly advisable that in the development of the design code public opinion be taken into account. Such approach has been successfully used in several countries, such as, for instance, the USA, France, Germany and Japan (Portella 2014). In some post-socialist countries, due to the lack of laws regulating the disposition and design of signage, there is visual chaos that negatively influences the urban environment (Chmielewski 2020; Voronich 2013). The creation of an aesthetically unattractive

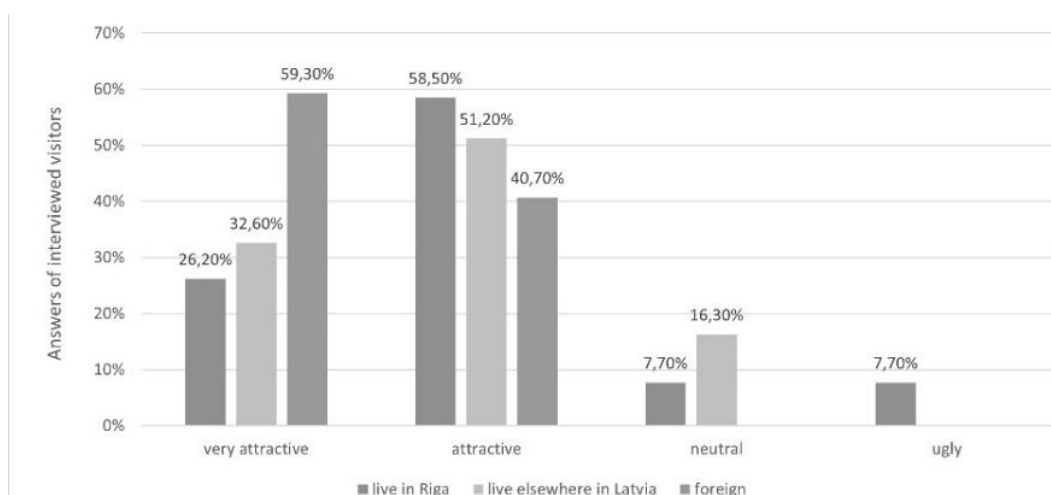
environment is often due to negligence, non-compliance with the law or lack of regulation, excessive advertising or vandalism (Enache et al. 2014).

### **Visitors' views on the streetscapes of shopping streets in Old Riga**

An analysis of interviews showed that most visitors to Old Riga evaluated the shopping streets as attractive or very attractive (Figure 6). Foreign visitors found them more attractive than local visitors. There were few visitors for whom the streetscape of Old Riga seemed neutral or even ugly.

The interviews also showed that for more than half of them the appearance of historical buildings in the cityscapes of Old Riga was a matter of importance. Almost half of respondents (45.2%) found the presence of signboards in the streetscapes of Old Riga annoying, but 54.8% of visitors did not mind them. A more detailed analysis of responses showed that the latter group were mostly foreign visitors who stayed there briefly (Figure 7).

For inhabitants of Latvia, signboards and adverts cause discomfort and dissatisfaction with public outdoor space. The negative impact of signboards and adverts on the historical monuments and buildings of Old Riga was also demonstrated by the answers of 79% of respondents. They considered that commercial signage spoils the general visual image of Old Riga. The most categorical were respondents in the age group between 20 and 69, who are the most regular active visitors to Old Riga (Figure 8).



**Figure 6.** Visitors' views on the shopping streetscapes according to the place of residence of the respondents (authors' figure)

Although most of the respondents found the shopping streetscapes of Old Riga attractive or very attractive, 84% thought that their appearance could be improved. The most frequently mentioned suggestions for the improvement of the visual quality of

the streets of Old Riga were the need of renovation of the old facades of buildings and maintenance of historical buildings and limiting of signboards and adverts on historical buildings, raising the quality standards for signboards and diminishing the brightness of shop windows. All in all, 99% of respondents believed that the placement and size of signage should be regulated. Answering the question as to which kind of signage on buildings they preferred (version A – as it is in real life; version B – an improved one matching with façade) (Figure 9), almost 90% of respondents gave preference to the improved variant because, to their mind, it improved the visual quality of the cityscape of Old Riga.

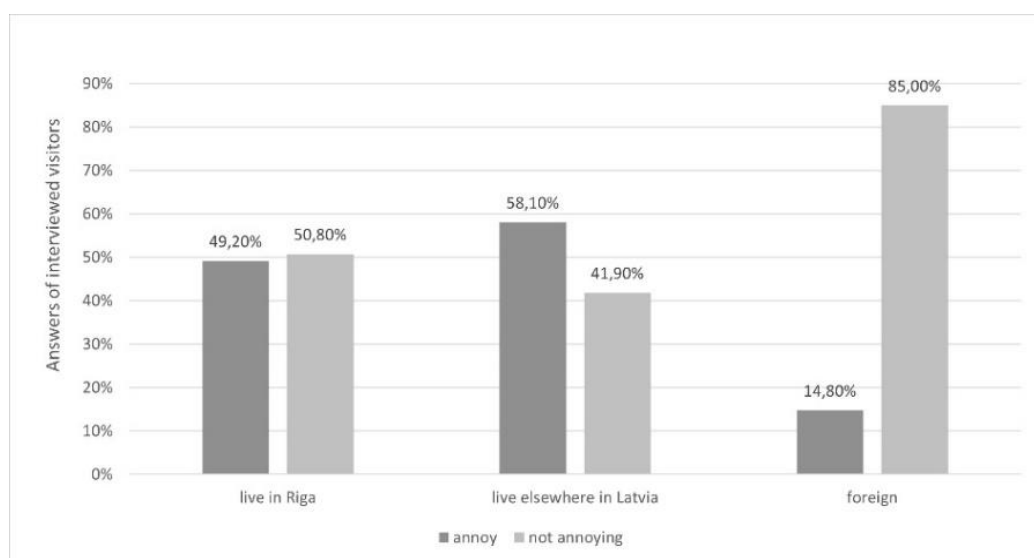


Figure 7. Visitors' views on the presence of signboards in the streetscapes of Old Riga according to the place of residence of the respondents (authors' figure)

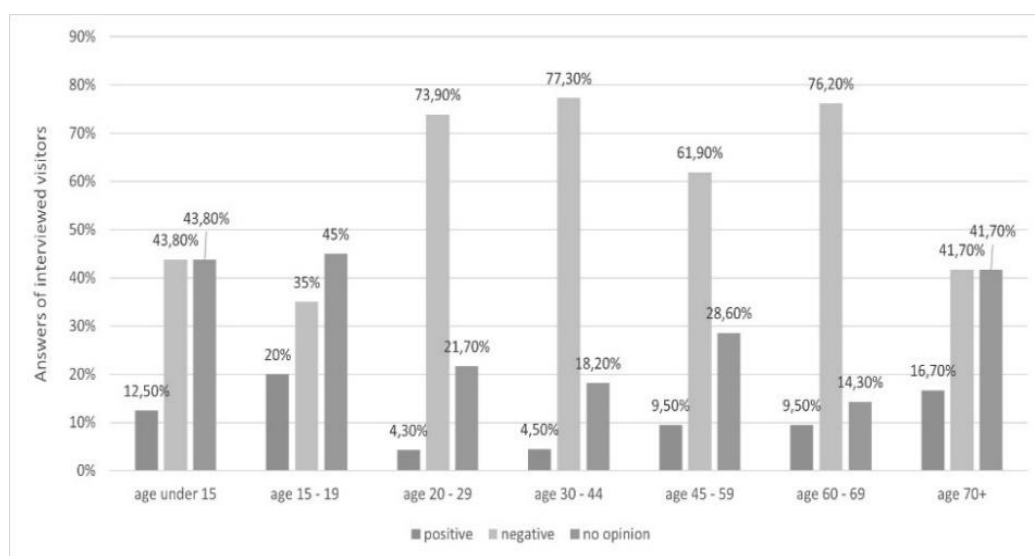


Figure 8. Visitors' views on influence of signboards on visual image of Old Riga according to age groups (authors' figure)

As has been pointed out by Lynch (1960) and Stamps (1999), similarity of assessment and opinions is often found within a particular group of respondents. The most pronounced similarity of opinions was found within specific groups of professionals (architects, town planners and civil engineers) and people without professional experience in the respective field.

**A**



**B**







**Figure 9. The pictures in Column A show the facades as they are in real life and the pictures in Column B show the facades improved by software with more harmonious signs better fitting into the overall scene (authors' figure)**

Yilmaz and Sagsoz (2011) emphasise that the historical centre of the town should be a place whose appearance and quality appeals to people from various urbanised environments. The visual quality of living space influences individuals' quality of life, which, in its turn, influences their behaviour. Such areas are popular places of sojourn, rest and recreation for both local people and tourists. Therefore, it is important to maintain their good visual quality, which could be highly appreciated by people of different ages and cultural backgrounds.

### **Conclusions**

Careless usage of outdoor signage may create visual chaos in urban space and result in visual pollution, thus reducing the quality of the urban landscape. Several pieces of research show that such kind of visual pollution may directly influence the functions of urban space and its users (Portella 2014; Enahce et al. 2012; Yilmaz & Sagsoz 2011). Nevertheless, outdoor signage is an integral part of the urban environment. It has essential functions which make the urban environment socially alive (Portella 2014; Gehl 2011). To reduce visual pollution and its impact on the urban environment and at the same time not to lose its identity and values, it is important for the state and local authorities to implement appropriate outdoor signage management (Portella 2014; Enache et al. 2014).

Our study showed that signboards and adverts on the facades of buildings in Old Riga cause visual pollution and spoil the appearance of historical monuments and buildings, thus diminishing the visual quality of public outdoor areas in Old Riga and making visitors to them feel uncomfortable. Although many visitors find the streetscapes of Old Riga attractive and even very attractive, they would prefer smaller-size adverts. Moreover, their design, proportions and colours should match with the facades on which they are placed. This kind of signage would improve the visual

quality of Old Riga, and visitors would perceive the image of Old Riga better and feel better in Old Riga public outdoor space.

Riga Municipality should raise its requirements on placement of signage and their physical qualities. The development of an objective design code or design guidelines would promote the creation of an aesthetically harmonious high-quality area and encourage maintenance of a historical building site.

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### Kopsavilkums

Vizuālais piesārņojums, ko rada nepārdomāta ārtelpas zīmju, piemēram, reklāmu un izkārtnu (komerciālo un nekomerciālo zīmju), izmantošana pilsētā, var negatīvi ietekmēt tās publiskās ārtelpas vizuālo kvalitāti. Rīga ir pakļauta šāda veida vizuālā piesārņojuma riskam. Tā kā Vecrīga ir iekļauta UNESCO Pasaules mantojuma sarakstā, tad ir svarīgi to pasargāt no šādas negatīvas ietekmes. Līdz šim vēl nav veikta padziļināta izpēte par šādu vizuālo piesārņojumu Vecrīgā. Šī pētījuma mērķis ir izpētīt un izvērtēt reklāmu un izkārtnu sastopamību un ietekmi Vecrīgas galvenajās iepirkšanās ielās.

Pētījuma pamatā ir aplūkojamās teritorijas klātienē apsekojums, foto uzņēmumu un ielu fotokolāžu analīze, socioloģisko pētījumu metožu lietojums, kā arī attiecīgu normatīvo un plānošanas dokumentu analīze.

Pētījuma rezultāti atklāja, ka uz Vecrīgas ēku fasādēm izvietotās reklāmas un izkārtnes rada vizuālo piesārņojumu, kas, savukārt, negatīvi ietekmē vēsturisko pieminekļu un ēku izskatu, pazemina publiskās ārtelpas un ielu ainavas vizuālo kvalitāti. Estētiski vienotas, izteismīgas un augstas kvalitātes pilsētas telpas veidošanos Vecrīgā veicinātu atbilstošu dizaina vadlīniju vai arī dizaina koda izstrāde, kas ietvertu ārtelpas zīmju, logu, fasāžu, to elementu un dizaina specifikācijas.

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