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INFORMATION AND MESSAGE IN ARCHITECTURE AS A FORM OF SOCIAL COMMUNICATION

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Purpose: To analyse the role of architecture and façade graphics in social communication. A few questions need to be answered. Can the message and form of the graphics on a glass façade be used in shaping social consciousness and creating social identification? One of the aims is to examine the marketing potential of the message in an image on glass, and the potential to use it in building a region's brand.

Design/methodology/approach: The study included 40 buildings in which façade graphics were used with the aim of conveying a social message. These were examined, and then useful aspects were selected for further analysis, divided into the following categories: demonstration of the city's pro-environmental policy, demonstration of the city's pro-innovation policy, historical references, emphasising the importance of local tradition and heritage, emphasising the multicultural nature of the building. The article presents two examples for each of these issues.

Findings: Thematic groups of façade graphics have been established, which may be used for social integration and regional marketing.

Research limitations/implications: This is a preliminary study that can subsequently be broadened to include other aspects, such as seeking means of expression or image composition, which are linked to the effectiveness of the message being created.

Practical implications: The article shows the opportunities offered by façade graphics in creating social messages; it could provide some direction for decision-makers, investors, architects, and artists. The expected result is a more frequent use of messages in façade graphics. **Social implications:** The article discusses the issues of the social role of façade graphics and art in architecture. It examines the effect of a message contained in an image on the questions of social identification and building connections.

Originality/value: The research points to a considerable reach of the impact that façade graphics can have, and the possibility of using them in regional marketing; it presents their form, scope, and means.

Keywords: contemporary architecture; façade; theory of architecture; communication in architecture.

Category of the paper: Research paper.

1. Introduction

The purpose of the study was to determine the importance and reach of messages included in façade graphics. This is a preliminary analysis. Based on examples of architectural projects, an analysis was conducted of the aspects that can be used to determine the significance of architecture-related art. Each of the buildings was analysed in terms of its usefulness in shaping awareness and social integration associated with creating a profile and building the brand of a region.

The study included 40 buildings with façades in which graphics were used to convey a message. These were examined, and then several aspects were selected for further analysis. These aspects were divided into the following categories: demonstration of the city's proenvironmental policy, demonstration of innovative solutions, historical references, emphasising the importance of local tradition and heritage, emphasising the multicultural nature of the building. The article presents two examples for each of these issues.

Selection criteria for the buildings analysed in the paper:

- The image discusses one of the six categories.
- In situ: the majority of the buildings were examined on site; the research material includes evidence in the form of photographs, drawings, sketches, measurements, analyses, charts.
- The façade is stylistically varied, and made using graphic techniques.
- Needs to be a public utility building.
- Built in the past three decades (1999-2021).
- The research was focused on buildings situated in Europe.

The investigated aspects are connected with creation of messages in architecture. It has been noticed that messages in facades covered with graphics are not made directly, but instead in a metaphorical way (Lipowicz-Budzyńska, 2022). A message is created using the relationship between the façade graphics and the form and function of the building. This relationship creates a message that is being conveyed within a municipal landscape, having as its background the city itself, or one of its districts, as well as the architecture. Façade graphics, apart from their aesthetic value, also serve social functions: they convey a message; they highlight the social status of the building; thematically refer to the latest innovative and sustainable trends; and emphasise the unique history or cultural heritage of the place.

In each of the referenced buildings, the dominant factors that participate in creating the information were analysed:

- Those referring to the building's form: shape, function, scale.
- Those referring to the graphics: form, size, composition, meaning, colour.

2. The façade in the social and environmental context

Any image on glass, owing to its scale and properties, is viewed in three different contexts: urban, against the background of the façade, and from the inside of the building (Lipowicz-Budzyńska, 2019). Because of the powerful visual effect of such graphics and their direct contact with the viewer, they are an excellent medium to convey messages. Directed at the users and surroundings of the building, the messages can be used to build or strengthen social identity. Ultimately, they can serve marketing purposes.

The message in façade graphics is created with the use of metaphors. These graphics require engagement from the viewer, and often communicate several parallel meanings, leaving a margin for interpretation (Lipowicz-Budzyńska, 2022).

The referenced buildings and the projects discussed below show the variety of styles and forms. The principles, links with the surroundings, ways for communicating the message, and artistic means used are different in each of the examples given; and they can be applied in marketing, e.g. to build the image and brand of an organisation, town, or region.

2.1. Demonstration of the city's pro-environmental policy

One of the methods used in regional marketing is to present progressive policy of the city with regard to strategic areas. Examples of such buildings are the town hall in Alphen aan den Rijn in the Netherlands and the Spine building in Liverpool, United Kingdom.

The town hall in the Dutch town of Alphen aan den Rijn (Erick van Egeraat; completed in 2002; graphics area: no data available; screen printing) has been decorated with façade graphics. The entire elevation is covered with floral motifs in the form of bits and pieces of overscaled deciduous trees. The image is composed of numerous frames linked together that have varying scales (Richards, 2006). Putting organic motifs on the town hall's elevation is a reference to the environmentally-friendly policies of the municipal authorities (Zabrocka, 2015). The modern body of the building as well as its innovative solutions are a marketing tool being used for creating an image for the authorities and also act as a showpiece for the town (Lipowicz-Budzyńska, 2017). The authorities stress in this way how seriously they approach the natural environment, sustainability, and building an environmentally-friendly society; with this message being conveyed through the shape of the authorities' main building and the graphics that are on it. The façade points to a key aspect of the town's and region's direction of development.

The Spine building (AHR; completed in 2021; graphics area: 9,400 m²; digital print) (Kucharek, 2022) is considered to be a landmark of Liverpool. This is due not only to its height, but also unique graphic design that separates it from other high-rise buildings in the Liverpool's Knowledge Quarter. The building follows the popular trend of wellness, focused on health and wellbeing of the users (Laube, Widrig, 2016, pp. 124). The graphics on the glazing are based

on the Voronoi diagrams (Lipowicz-Budzyńska, 2019). The majority of the 1,500 argon-filled, double-glazed 4.2x1.5m panels have been covered with a Voronoi pattern, composed of 23 million polygons. The glazing protects against sunlight and excessive heat in the rooms, thus positively affecting users' comfort. The assumed coating of the façade is 25% on the northern side, 32% to the east and west, and 39% on the building's southern wall. The reference in the graphics to nature is symbolic, and it points to the building's purpose that forms part of the town's and region's sustainable policy.



Figure 1. The façade contains quotes from nature and is a demonstration of the pro-environmental policy of the local authorities; A – Alphen aan den Rijn Town Hall (Erick van Egeraat, 2002), the Netherlands; B, C – The Spine building (AHR, 2021), Liverpool, UK.

Source: photos by author.

2.2. Demonstration of innovative solutions

The *Sensor City* building in Liverpool, UK (IBI Group; completed in 2017; graphics area: 825 m²; screen printing, laminated glass) is a technology hub supporting the innovation companies community. The significance of this building is emphasised by the glass façade in which geometric patterns are used that resemble electronic circuits – they represent advanced technologies and data transfer. The geometric façade uses three colours: white and black combined with yellow that is associated with gold, a metal commonly applied in electronics. The glass has been designed to enable viewing both during the day and night, resulting in the façade changing its appearance depending on the time of day and position of the viewer – whether they are inside or outside the building. The building is one of the most popular in the city of Liverpool (Sensor City, Liverpool, 2022). Its aesthetics are dominated by decorative graphics.



Figure 2. A building demonstrating the city's pro-innovation policy; A – The Sensor City building (IBI Group, 2017), Liverpool, UK; B – Glazing detail. Source: photos by author.

CityLabs 2.0 (Sheppard Robson Bruntwood in partnership with Manchester Science Partnerships, Central Manchester Foundation Trust; completed in 2021; graphics area: 3500 m²; digital print; laminated glass (CityLabs 2.0, Manchester, with digitally printed glass façade, 2022) is a new building in Manchester that is being used by Qiagen, a life sciences company. The building provides class A office space and modern lab facilities. It is an investment that helps biomedical companies develop and work with the academic community to create new health products. The facade glass units are made up of heat-treated and laminated glazing, an SN 70/35 HT solar protection layer and a digital print. The composition of the glass unit ensures thermal comfort, energy savings and high efficiency. The modern and repetitive motif is composed of 8 similar round elements that are digitally printed on glass, and is excellently suited to the scientific environment and the purpose of this building. The round shape is a reference to the structural features of a nearby chapel (CityLabs in Manchester, 2020). The design also works as a part of solar protection that helps prevent excessive heat. The CityLabs 2.0 is the second building in this complex. The previous building, CityLabs 1.0, was completed in 2015. The next stages will see CityLabs 3.0 and 4.0 being built. The CityLabs campus is going to be the world's leading centre for innovation in health and precision medicine.



Figure 3. A building demonstrating the city's pro-innovation policy; A – CityLabs 2.0 building (Sheppard Robson Bruntwood, Manchester Science Partnerships and Central Manchester Foundation Trust, 2021), Manchester, UK; B – Glazing detail.

Source: photos by author.

2.3. Historical references

Emphasising the sense of common history is important for creating identity and social identification. The article references two buildings: the first one is linked to recent history, and the other contains two contemporary features as well as historical information. One of the examples of a reference to recent history is the Netherlands Institute for Sound and Vision (Artist: Merkx + Girod, Neutelings Riedijk Architects; completed in 2006; graphics area: 4362 m²; relief glass, enamelled), which serves exhibiting, museum, and archival functions. The building is in the shape of cuboid with a 54x54 m base, and is 26 metres high (Netherlands Institute for Sound and Vision in Hilversum, 2016). The interior has been divided into two parts: the five-storey eastern part – where the museum is located; and the eight-storey western part – the administration area. Between them, an elegant multi-purpose area can be found that goes through all of the storeys. Already at the design stage, the exterior finish had been planned as a colourful layer that would cover the facade in its entirety (Figure 4a). The composition utilises archival photographs - 750 images (Murray, 2009) from the institute's archive are displayed on the façade. The imprinted images show scenes from Dutch movies and television programmes, and the system applied here is: one scene on two adjacent glass panels (Figure 4b). The project incorporates an innovative solution that combines enamel firing and glass forming. The glass mosaic of scenes taken from past Dutch television programmes has a symbolic meaning and is a reference to the building's purpose; the layer serves aesthetic, identification, and symbolic functions. It is linked to the recent history of the region and country. The history shown on the facade boosts the sense of belonging to the community, and at the same time acts as a marketing tool.

The Street Bridge Link (Artist: Martin Donlin; Stephenson Bell Architects, 1999; graphics area: 39.6 m²; enamelled tempered glass) is another example. The bridge links two sides of Tib Street, and is a landmark in northern Manchester, during the day as well as at night. The image displayed on glass is a reference to both the past and the present of the street; it is a decorative feature that this place can also be identified by.



Figure 4. A façade evoking scenes from the recent history and heritage of the Netherlands; the building of the Netherlands Institute for Sound and Image (Neutelings Riedijk Architects, 2006), Hilversum, the Netherlands: A - View of the building's body; B - Close-up view.

Source: photos by author.



Figure 5. Tib Street Bridge Link (Martin Donlin; Stephenson Bell Architects, 1999), Manchester, UK; A – View with the street background; B – Façade detail.

Source: photos by author.

2.4. Emphasising the importance of local tradition and heritage

The shopping centre building is located in the high street of Zakopane – Krupówki. The four-storey building is glazed with reflective glass. The façade is enriched with spatial shapes that refer to features visually linked to the region. In the corner of the building, decorative steel elements have been placed, inspired by local embroidery. The buildings has stirred up a lot of controversy – the body clashes with the excessive exposure of reflective glass. However, one has to appreciate the placement in the façade of features that evoke local traditions. The combination of traditional wooden architecture with modern detail solutions of the glass banister, decorated with the imagery of the *Podhale* region, has a different quality.



Figure 6. Reference to heritage and tradition; A – Shopping centre, Zakopane, Poland; B – Façade detail, Zakopane, Poland.

Source: photos by author.

2.5. Emphasising the multicultural nature of the building

The main function of façade graphics is to inform, which is linked to the building's purpose. The facade can, however, contain other types of content as well, such challenging or encouraging statements directed to a specific social group. One example is the facade of the university library in Cottbus (Herzog & de Meuron Architects; completed in 2004; graphics area: 5,800 m², screen printing). The building is glazed in its entirety. The facade is composed of two layers (Edwards, 2011) of glass, with a space between them, on which lettering graphics are placed. The shape of the graphics comes from the outline of overlapping alphabetic systems that belong to different language groups (Laube, Widrig, 2016). The letters, when put together, create abstract shapes arranged linearly. The graphics constitute a contemporary interpretation of lettering images. The shape of the imagery is linked to the shape of the building itself. The image is a distinctive graphic feature by which a building can be identified, and is linked to the function of the building and also expresses the openness of the scientific world to international connections. It informs about the international nature of the book collection inside the library, and extends an invitation to the global community. Emphasising the international nature of a building elevates the area and makes it an important spot on the map of the region and the whole of Europe.



Figure 7. The Cottbus Technical University Library, Germany (Herzog, de Meuron, 2004); A – building view from a distance; B – façade seen from 5 meters away.

Source: photos by author.

Table 1.

Features affecting how the message is created in the analysed works

item	building	building attributes			facade graphics				
		form	function	scale	form	size	compos.	meaning	colour
1	Town Hall, Alphen aan den Rijn, the Netherlands	Х	х		х	х		Х	
2	The Spine, Liverpool, UK		Х	Х	х		Х	Х	
3	Sensor City, Liverpool, UK		Х		х		Х	Х	Х
4	CityLabs 2.0, Manchester, UK		Х		х		Х		
5	Netherlands Institute for Sound and Image, Hilversum, the Netherlands	X	Х		X	х		Х	Х
6	Pedestrian link, Manchester, UK	х	Х	х	х	х	Х	Х	Х
7	Shopping Centre, Zakopane, Poland	Х			Х	х	х	х	
8	Cottbus Technical University Library, Germany	Х	х	х	X	х	Х	х	

Note. Here you should explain the abbreviations used in the table and provide additional information that is important to the reader, e.g. data source, symbols, marks.

Source: own study.

3. Summary

The collected research material confirms the usefulness of façade graphics for regional marketing purposes.

The analysis shows that important factors in creating an image include the form, composition, and the metaphors used in the image with regard to the function and form of a given building.

Due to high visual impact and direct contact of the viewer with the graphics, a glass façade is an excellent medium to convey messages, and can be used in creating and strengthening social identity.

In large cities, whole districts are developed that become that city's and its surrounding area's showpiece, and can then be utilised in developing the brand of the region. These areas are boosted by the visual factor, such as incorporation of façade graphics and using state-of-the-art technology.

In the research material referenced in the article, various strategies can be seen for using façade graphics to create regional marketing. It has been noted that the façade can be used as a medium to communicate content that supports achieving or improving social integration. Information contained in a façade or an indirect message conveyed with the use of a metaphor discuss the following groups of topics:

- Emphasising the pro-environmental policies of the town or region in the façade is of very high significance as far as marketing is concerned. It creates an image for the region that references the latest trends related to caring for the natural environment and openness to environmentally-friendly solutions and technologies.
- Demonstrating innovative solutions has a great potential with regard to integration and marketing.
- Historical references build and boost social integration, as well as support social awareness; they may be used in creating a brand for the region.
- Emphasising the significance of regional traditions and heritage is very important for region's policies and creating social identification.
- Emphasising the multicultural nature of the building indicates the openness of the place and the whole region to international connections, and may encourage people to build new relations in different sectors of economy, as well as to be open to global markets.

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