

REVITALIZATION OF URBAN SPACES IN WARSAW'S KAMIONEK HOUSING ESTATE THROUGH THE ART OF MURALS – AN EXAMPLE OF A PARTICIPATORY DESIGN PROCESS

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ABSTRACT

Motives: The recovery of urban areas from crisis is a multi-stage process consisting of coordinated activities in the economic, spatial, and socio-cultural spheres, which has no chance of success without the contribution of shareholders. Therefore, revitalization processes are very strongly linked to participation and other inclusive activities. Art in urban space can be an example of an activity based on social capital, whose aesthetic function is often extended to include an educational aspect and a meaning-symbolic aspect, and which can become a semiotic code, a form of demonstrating values and taming space.

Aim: The aim of this study was to show the power of the message of mural art applied to activate degraded parts of the city and revive the inhabitants' bond with the place.

Results: The mural project carried out in the Kamionek housing estate in Praga was preceded by a process of spatial and landscape analysis and social research, which confirmed the effectiveness of the use of mural art in the revitalization of this particular urban space. The presentation of the process of creating the project with the participation of the local community can serve as an example for other cities.

Keywords: revitalization, mural, participatory processes, urban environment, street art, place identity

INTRODUCTION TO THE REVITALISATION OF SPACE BY ART

Among the phenomena and trends of change in the spatial structure of highly urbanised cities, alongside exurbanisation, gentrification, globalisation, depopulation, there is revitalisation – as a corrective direction (Węclawowicz-Bilska, 2011). Revitalisation is a process involving the coordination of activities, primarily in the economic, spatial and social spheres, aimed at leading a degraded area out of crisis. It is

carried out by local authorities in cooperation with stakeholders, which we can consider to be the inhabitants of a given municipality, entrepreneurs, State Treasury entities or people associated with a given area (Act of 9 October 2015 on Revitalisation).

The divergence in the understanding of this concept in Poland and in Western European countries or the USA, sometimes leads to equating revitalisation with renovation, modernisation or regeneration activities, while the concept is overarching and includes a set of activities leading to

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the improvement of not only buildings and functional space, but also socio-cultural aspects or the economic sphere (Boryczka, 2016). The improvement of the surroundings of close urban investments and the realisation of service facilities with cultural and specialised services surrounded by soothing and climate-creating greenery are examples of measures. These treatments improve the visual and economic attractiveness of the city. The erection of landmark buildings with high functional and aesthetic appeal together with the creation of high-standard spaces can improve the quality of the surroundings. The most popular examples are those located in Paris: the Eiffel Tower or the debatable Montparnasse Tower (Czyńska, 2018). Other directions of transformation in the space of contemporary cities include grassroots processes, artistic activities, and street art as ways of addressing the need to domesticate, create, and aestheticize space (Palicki & Stachowska, 2016).

Alongside temporary urban street art events, graffiti, stickers and stencils, an emerging form of artistic activity in urban spaces are murals, or so-called monumental painting (Moch, 2016). These are large-scale graphics placed on the walls of buildings. They are usually created legally, commissioned by city authorities, private individuals or as part of competitions (Duchowski et al., 2016). Mural art is one of the most common and expressive visual forms embedded in urban public space. A medium that preserves the form of a place, but also narrative spaces that interpret and represent historical heritage (Stangel, 2008). Works of art are created in the most prominent places, and their form and execution techniques are awe-inspiring. The popularity of murals in Poland and around the world is constantly growing, they are created as individual works but also as whole series of artists' projects. They are rich in forms of communication, utilized tools, messages, and ideologies (Borghini et al., 2010; Marschall, 2008).

Cities host specially prepared festivals, during which these less and more well-known artists of the muralist community contribute to the aesthetics of public space (Gralińska-Toborek & Kazimierska-Jerzyk, 2014). The function played by the mural

is increasingly recognised as one of the revitalisation activities in degraded areas (Riggle, 2010). Walls of buildings in poor technical condition, perceived by the public as ugly, disrupting the aesthetics of a given place are masked by large-format paintings – their purposefulness is sometimes controversial (IBPP, 2016), which is why it is important to ensure that art is part of a coherent revitalisation strategy, so that it is not deprived of its functionality and its values. Local governments, artists and designers should work together to plan revitalisation activities using art in public spaces. Appreciating the local community as a stakeholder is a challenge in urban management (Scheffler, 2022).

In the context of the above considerations, a special area on a city scale is Warsaw's Praga, formerly treated as the 'functional vestibule' of Warsaw, after a period of flourishing (18th-19th centuries), affected by many negligences during the political transformation. The end of the 20th century saw a process of marginalisation and progressive decapitalisation of the urban fabric (Długozima, 2019), unemployment, poverty and social pathology. Today, it is being revived thanks to the recognition of a strong cultural and spatial identity. The identity is hidden in its genesis and history, post-industrial character, canons of spatial values, authentic urban structure and architectural detail (plant, animal and facial motifs) and symbols (Burdzik, 2012). In the context of social identity, a group of indigenous Praga residents who feel their 'otherness', who used to work as tradesmen and face problems of: unemployment, conflict with the law, poverty and social pathologies, living in unrenovated premises, in poor technical condition, mix with artistic circles that assimilate with the local community and do not pose a threat to the historical cultural heritage of Praga. They represent the new potential of the district and create creative spaces, which are an additional attractor for tourism. The development towards culture brings about the right changes: the image of the area and the social changes brought about by the impact of artist-led projects such as: Night of Praga, Musical Walk around Praga, Zabkowska Festival (Jarecka-Bidzińska, 2017).

The art of the mural in the revitalisation process can therefore be a tool to improve the appearance and functioning of degraded space. An action whose only interference with the landscape and the stagnant environment is its execution – aesthetics and semantics (Lachowska & Pielużek, 2020). To this end, a design for a mural was created, preceded by spatial and landscape analyses and taking into account the opinions of residents and users of the space. Authors of the article also seek answers to the questions: what is the value of mural art in the revitalisation process? How do murals in the space of Kamionek build local identity? How does revitalisation through artistic activities develop and activate social capital? How to design activities involving the local community?

MATERIALS AND METHODS

Research methods

The available source materials were queried to highlight the values that large-format art can bring to urban space and to show its impact on the activation of space, both on a spatial-functional and socio-cultural level. Reference was also made to existing known solutions, and a case study showed the important spatial aspect and the power of the mural's impact on the users of space. The entire work allowed for understanding the principles of conducting revitalization activities through mural art and answering the question of its value in the revitalization process.

The next step of the research was to determine how the murals build Kamionek's local identity and develop social capital. Necessary were observations and experiences in the space, documented in the form of photographic material, casual interviews with local residents, analyses of ortho-topographical maps from the Google Maps platform and Geoportal. Local spatial development plans and the Study of Land Use Conditions and Directions were analysed in terms of limitations to the implementation of the design concept.

The guidelines and design were preceded by a process of spatial-landscape analyses, which

were deepened by phenomenological methods (Dominiczak, 2016; Królikowski, 2011, Norberg Schultz, 1980), focusing also on the analysis of human perception of the landscape (Skalski, 2007).

An important research tool was a Community Interview. An anonymous form was distributed on the Internet on the profiles and Facebook pages of the Kamionek Neighbourhood Council, the 22nd Scout Szczęp 'Watra' named after Hm. Kazimierz Skorupka operating in Kamionek and the private profile of the authors. The form (which contained 7 questions) was single-choice and one multiple-choice question. The time for collecting responses was one month, from 14 October to 14 November, during which a total of 180 people declaring themselves to be residents and users of the Kamionek Estate completed the form (Table 2). The interview was intended to approximate opinions on the direction and theme of the mural. On this basis, 2 proposals made in digital programmes were created, which were then subjected to voting as to which of the prepared designs was more suitable for the local community. With the help of a Google Form made available online on the Facebook profile of the Kamionek Neighbourhood Council and the authors' profile, 114 votes were cast between 1 and 31 December. The methods of visual interpretation (Rose, 2010) of the mural and semantic reception for the layer of meaning became important here.

The analytical stage, together with an identity sketch of Warsaw's Kamionek district and social research, made it possible to identify opportunities for revitalisation activities and confirmed the effectiveness of using mural art in the revitalisation of this particular urban space.

Case study area

The object under study is located in an area with specific spatial values strongly rooted in local history, characters and tradition, which is Praga's Kamionek (Fig. 1). An area on the map of the capital identified with street art, whose artists, places and events popularise and attract tourists. Through murals and other artistic activities, a way has been found to promote and embellish the spatial and economic sphere



Fig. 1. View of the tenement house at 43 Zamoyskiego Street and the left side wall on which the mural is designed. A multi-family residential building with services on the ground floor

Source: own elaboration (2021).

of the district and its infrastructure. Investors and new residents, on the other hand, are beginning to identify more strongly with places, feel a bond with the space, care for it and identify with it, which influences its aesthetics and development.

RESULTS

Mural art and its value in the revitalisation process

The entry into practice of the Revitalisation Act in 2015 allowed for a broader process of restoring and strengthening the identity of local structures. As Miles notes in relation to revitalisation through the arts: the impact of cultural investment in iconic projects is eminently place-based, there is no magic formula for success (Miles, 2005). Conditions must be met, the most important of which is to build a bond with the local community, then the investments made will be a source of pride for the community. Such activities most often lie in the supra-material sphere. As Jeremi T. Królikowski emphasises in his research, specific spiritual values are encoded in the urban landscape, the correct reading and understanding of which can lead to positive transformations in space (Królikowski et al., 2017). Identifying the spirit and values of a place is a key stage in the revitalisation process. Thanks to

it we are able to get to know the character of a place, understand which values should be preserved, changed or strengthened. The variety of forms and content that can be shown through murals make them an ideal means of mass communication. The most important values mentioned by author that are most often reflected in mural art and form the basis for their division by content include aesthetic, historical, social and artistic values (Królikowski, 2019). A mural is an encoded message and it is worth drawing on Charles Sanders Peirce's (1997) theory of semiotics. Properly, the most recognisable mural in the Hong Kong area on the building at 180 Tai Nan Street, which was created as part of the HK Walls festival in 2016. Artist Okuda's work (Fig. 2), consisting of colourful polygons forming a fox and the yellow-painted façade of the neighbouring building, stands out against the bleak backdrop of the building, stimulating its surroundings and drawing the attention of not only residents but also tourists who come specifically to view the piece.

The historical values of murals are transferred primarily through symbols, figures and events to which a particular space is linked. Murals are their visual manifestation, allowing them to be fixed in people's memory, linking them to a particular object. An interesting example of reinforcing the historical values of a place is the mural 'Chopin – Forever Young' created by the Good Looking Studio group in Warsaw, on the wall of a building at 45a Tamka Street on the side of Ordynacka Street (Fig. 2). The work was created in a location which for Warsaw residents associate with the eminent composer. In its immediate vicinity is the Fryderyk Chopin University of Music and the Chopin Museum. The mural depicting an artistic portrait of the virtuoso therefore reinforces the historical values inscribed in this part of Warsaw's landscape, referring to his figure and indicating how important he was for the development of Polish and world music.

Social values can manifest themselves in many ways. Increasing the attractiveness of a crisis area by acting through the arts involves increasing the sense of identity and security of its inhabitants and users. The community feels a greater sense of responsibility for the state and becomes more involved in matters



Fig. 2. Left: “Rainbow Thief”, design: Okuda, 180 Tai Nan Street, Hong Kong. An artistic mural that stimulates the immediate neighborhood to life with its color (Source: Hong Kong Tourism Board... (n.d.)); right: Mural “Chopin – Forever Young”, design: Beata Śliwińska, execution: Good Looking Studio, Tamka 45a Warsaw (Source: Nowy mural chopinowski... (n.d.))

concerning a space that they find attractive and welcoming. The artwork becomes an attachment factor for local communities, creating their shared identity and bond with the place. The content and execution of the mural itself can also have an impact on public

awareness and morality. In Warsaw, a mural ‘Create together for tomorrow’ was created on a building at 33 Jaworzyńska Street as part of the City Forests campaign by the Converse brand (Fig. 3). The design was made entirely of titanium dioxide photocatalytic



Fig. 3. Left: Mural “Create together for tomorrow”, design: Polak M., Ryski D., execution: Good Looking Studio, 33 Jaworzyńska Street, Warsaw. The mural was made with photocatalytic paints that absorb some of the air pollution (Source: Create Together For Tomorrow (n.d.)); right: PEET’s work created as part of the Stadt Wand Kunst Street Art Festival 2019 (Source: Złudzenie optyczne... (n.d.))

paint, which purifies the air by converting pollutants into harmless nitrates when exposed to sunlight. The painting depicted smiling flowers entwining skyscrapers. The whole project was intended to draw public attention to the problem of air pollution and climate changes.

“Artistic values based on the concept of form arise where the creator of the work is the artist” (Królikowski, 2019, p. 12). Artistic values although very similar to aesthetic values, due to the influence on the perception of the place, differ in terms of the presentation of content, the technique of execution. Artistic murals are characterized by a disinterested message, a thought that the artist, at his or her discretion, can embed in the urban space. According to the muralist community, such a mural should be a reflection of the artist's technical-manual skills. Most often such works are created during numerous art festivals. An example of such a work is the surrealist vision placed on one of the buildings in Mannheim, Germany, as part of the Stadt Wand Kunst Street Art Festival by Manuel Di Rita, with the artistic pseudonym PEETA (Fig. 3). The work depicts a play of shadows, colors and contrasts creating an optical illusion.

Murals in Kamionek as a manifestation of local identity

Large-format painting has become a permanent feature of Kamionek's landscape. New works of art are constantly being created with content touching on all possible themes: historical-patriotic, socio-political, artistic and commercial. In the history of murals in Kamionek, an undoubtedly important event was the Street Art Doping 2015 festival, which aim was to spread street art, but also murals in the urban space. Raise the aesthetics of the places where the works were created. Three art murals were created on buildings numbered 23 and 26 in Frycza Modrzewskiego Street and on a nearby block of flats at 23 Bliska Street. Two of them, 'Ptaszysko' (23 Bliska Street) and an untitled work by 108 (26 Modrzewskiego Street) are still visible on the walls of the buildings today. The mural by Italian artist CT was replaced in 2018 by a work by David Celek depicting Pope John Paul II.

Murals commemorating important historical figures and events also include the 'Henryk Walezy' mural recalling the history of the first free election, which took place in the fields of Kamionek, or the work by Marcin Malicki created together with children from Poland, Germany and Israel dedicated to the figure of Jan Karski.

Also characteristic is the activity of the Loesje group, which addresses socio-political themes by creating works of short texts, keynotes on human life, society and the situation in the world. Due to the partly industrial nature of the estate and the presence of the Wedel Chocolate Factory and PepsiCo plants, there are commercial murals on the walls of the plants, advertising the products of both companies (Fig. 4). There are also works on the marginal between graffiti and mural, which also casts a shadow on street art (Kaczmarek, 2017).

These few examples demonstrate the power of the message this type of art presents in the perception of the cityscape. According to researchers, Praga's murals are representatives of spatial and ideological codes in which the message is placed against the background of the values and ideologies operating in the community in which it was produced, and in relation to the ideology of the audience/users. (Lisowska-Magdziarz, 2019).

Developing social capital in the context of art regeneration in the Kamionek Estates

The need to feel beauty is one of the basic human needs, a factor that imagine the world. Beauty is most often manifested in the preservation of order, harmony between elements in space, creating a coherent whole and arousing our admiration (Porębska, 2010). The natural combination of the need for beauty with art, which is characterised by the preservation of a specific composition, an established order in order to bring out the entire range of emotions in a person. In order to fulfil this purpose, art has to exist, the work that is its expression has to be made public so that it can establish a relationship with its audience, be able to make an impression on them, move their emotions



Fig. 4. On the top left: mural by the Loesje group, 2013, “First Step”, 292 Grochowska Street. On the top right: mural by the Loesje group, 2015, “From the point of view”, Eastern Railway Station from Lubelska Street. Bottom left: Lotte Wedel’s advertising mural, 2019. Bottom right: Good Looking Studio, 2020, PepsiCo advertising mural

Source: own elaboration.

or fulfil their need to feel beauty. This relationship can be established in an intentional way, when the viewer consciously interacts with the work, as well as in an unintentional way, when we accidentally become its recipients (Dziadzia, 2015). In urban spaces, the experience of art tends to be very spontaneous.

Art allows the establishment of multifaceted and constructive social relationships, through shared views, decisions or actions between members, it is

nothing less than human capital. Connecting the potential of large-scale art to create social capital as part of revitalisation requires the correct definition and designation of the public space in which it is to operate. In order for public space to be a place for the development of art and social capital, it must be subject to conscious and responsible planning, based on mutual trust and understanding of needs on the part of the local government and the inhabitants and

users (Cudny, 2012). It is important, therefore, that arts activities with cultural and social-creative values are based on the principles of communication theory (Schmidt, 2006) and respond to specific development goals and are an integral part of the spatial policy strategy of local governments.

In the case of artistic activities, local communities are most influenced by bottom-up initiatives initiated by the residents or activists themselves or by activities carried out by local governments in direct cooperation with them. The aim of such activities is usually to stimulate the community, attempting to integrate it in order to strengthen its identity and motivation to take an active part in the life of the city, neighbourhood or estate (Filip, 2015). At the border of the Kamionek housing estate on the Old Praga side, on a tenement at 15 Targowa Street, there used to be commercial murals advertising the Foton and Jubiler companies.

The murals were and are a distinctive part of the landscape of Targowa Street, which have become permanently etched in the hearts of its residents. In July 2019, due to renovation work being carried out on the tenement, the murals were painted over. This action was met with disappointment by the residents of Old Praga and a sudden reaction from the artists from Good Looking Studio. As the artists said by themselves “These murals were the best preserved, sentimental postcard of large-format painting of the previous era in Warsaw”. The studio created a collage based on the old works as a way of commemorating

them and opposing the destruction of large-format painting. They painted it on the wall of a tenement at 29 Zamoyskiego Street, which was seen with enthusiasm by Praga residents and users. The mural was displayed on the tenement wall until autumn 2019 (Pressland Editors, 2019). Now ‘Foton’ has returned to its original location and is once again pleasing the eye of the capital’s residents and tourists (Fig. 5).

The participatory process of creating the mural project

Work on the project began with the definition of formal and legal conditions (Table 1), which determined the further action plan.

The next step of the researches was historical sketch to get more information to the specificity and character of the site. The results have been carried out urban planning analyses: location in the city structure, place in the interior composition, accessibility, parameters and visibility of the façade, determined the perception of the mural from the perspective of the pedestrian, cyclist, vehicle driver and the colour potential of the site as a kind of spatial code (Fig. 6).

As a result of the community interview and according to the registered sex, assigned at birth, the form was filled in by 99 women, 81 men, mostly residents of the housing estate – 97. The dominant group were people between 18 and 45 years of age, constituting the mobile manufacturing age group, according to the Central Statistical Office (Table 2). The respondents unanimously considered the murals to be an element of the city’s landscape that suits them and which they would like to see more often in Kamionek. The currently existing murals are associated mainly with artistic content by people who know the works in the space of the estate (165 respondents) (Fig. 7) and this is the content that the new mural should carry. In open statements, it was suggested that the mural should be aesthetic, colourful, evoking positive emotions, without political topics.



Fig. 5. Reconstructed mural “Foton” at 15 Targowa Street
Source: own elaboration.

Table 1. Provisions of binding planning documents limiting project activities

Act of 9 October 2015 on revitalization	Ordinance No. 2998/2012 of the Mayor of the Capital City of Warsaw of 24 July 2012	Integrated Revitalization Program of mst. Warsaw by 2022	Local Spatial Development Plan for the area of the Eastern Railway Station, introduced by Resolution No. XCIII/2737/2010 of the Council of the Capital City of Warsaw of 21 October 2010
<p>The most important findings influencing the use of mural art as a tool in the revitalization process are the provisions of Chapter 2 Social Participation. The preparation, conduct and evaluation of revitalization activities are to ensure the active participation of stakeholders through public consultations or work in the Revitalization Committee. Stakeholders are understood by the Act as, m.in, for example, residents of the revitalisation area, users, property owners, entities conducting business activity or local government units with their organisational units or public authorities. The Act also defines the basic forms of public consultations, including meetings, debates, workshops and surveys. The creation of the mural project which is the subject of this diploma thesis assumes the inclusion of the residents of the Kamionek Estate, its users and other stakeholders in the design process by means of online forms concerning the development of mural art in Kamionek and the evaluation of mural projects.</p>	<p>By virtue of the ordinance, the tenement house at 43 Zamoyskiego Street was entered into the municipal register of monuments, which requires arrangements with the conservator of monuments in the future.</p>	<p>For the Kamionek Housing Estate, a crisis sub-area of the Praga-Południe District has been designated, where the most intensive revitalization activities are planned. The area of the estate is made up of pre-war buildings, formerly serving mainly residential and industrial functions. Its poor technical condition, unrenovated facades, progressive degradation of urban space and the intensification of negative social phenomena were the main reasons for the designation of the sub-area.</p>	<p>In the analysed area, the provisions and drawings of the local plan are in force, where the tenement house at 43 Zamoyskiego Street, which is a design object, is located in the area of c7.6MW/U, which is an area of multi-family residential development and services. Detailed provisions for this area concerning development conditions and rules for the protection of spatial order do not refer to aesthetic issues of development, there are no provisions about permitted façade colours, materials and planning solutions. The rules of development and development have been established for the front façades forming service frontages in the entire area covered by the local plan, but they are not binding in relation to the side facades. The tenement house is protected in the plan. The provisions of the building protection concern the rules for locating advertisements, signboards and advertising columns.</p>

Source: own elaboration.

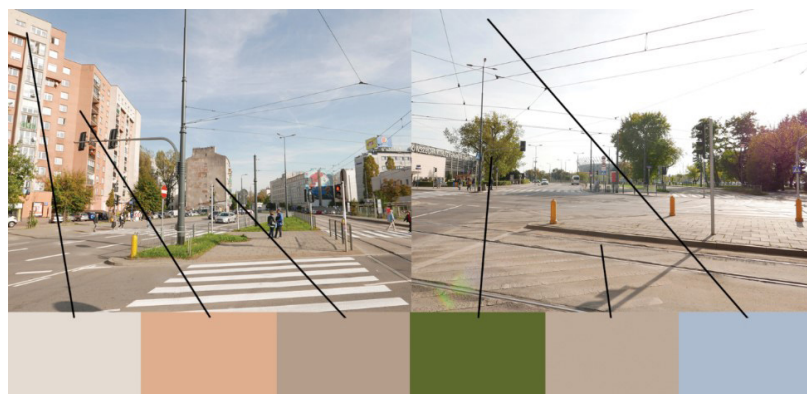


Fig. 6. Colour analysis of the neighbourhood, intersection of Targowa, Zamoyskiego and Aleja Zieleniecka streets

Source: own elaboration.

Table 2. Answers to single-choice questions in the Art of the Mural in Kamionek form. Symbols: K – women, M – men

Age Sex	Below 18		18–45		45–60		Above 60	
	K	M	K	M	K	M	K	M
Question 1: How are you connected with the Kamionek Estate?								
I’m a resident	3	3	42	34	7	4	2	2
I’m a user	4	3	40	35	1	0	0	0
Question 2: Do you think painting damaged walls is vandalism or a manifestation of art?								
Vandalism	0	0	2	2	0	0	0	0
Art	7	6	80	67	8	4	2	2
Question 3: Do you know any murals in Kamionek?								
I don’t know	1	0	6	8	0	0	0	0
Yes, but only a few	3	3	42	41	4	3	1	1
Yes, I know a lot	3	3	34	20	4	1	1	1
Question 4: Do you like murals as elements of the city’s landscape?								
Yes	7	6	82	68	8	4	2	2
No	0	0	0	1	0	0	0	0
Question 5: Do you think that a mural could be created on this damaged wall (43 Zamoyskiego Street)?								
Yes	7	6	82	67	7	4	2	2
No	0	0	0	2	1	0	0	0
Question 6: What subject would you most like to touch upon with such a mural?								
Historical and patriotic	0	1	4	6	3	0	0	0
Socio-political	1	0	28	12	1	1	0	0
Artistic – I give the artist a free hand	6	5	50	51	4	3	2	2
Question 7: Would you like more murals to appear in Kamionek?								
Yes	7	6	81	66	8	4	2	2
No	0	0	1	3	0	0	0	0

Source: own elaboration.

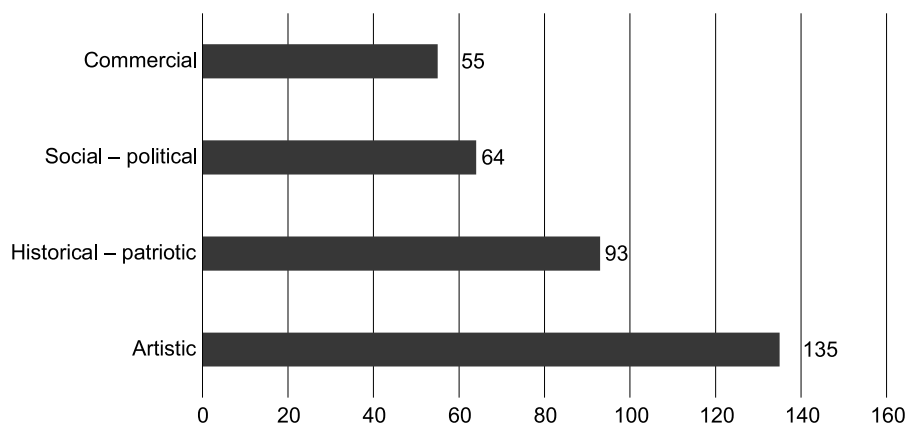


Fig. 7. Answers influencing the direction of the mural theme

Source: own elaboration.

Idea and implementation as results of the analyses

Project ‘Mermaid in Kamionek’

Kamionek is an integral part of Warsaw with a rich historical and cultural heritage. The Warsaw Mermaid, who we usually associate with the left Vistula’s bank, this time visited the right bank, from where she admires the panorama of Kamionek.

We can infer from the characteristic architectural buildings of the estate reflected in the surface of the water (Fig. 8).

Project ‘Birds in a cage’

The project depicting two blackbirds flying out of a cage is inspired by Ignacy Krasicki’s fable of the same title. Like the fairy tale, the mural refers to freedom as a value, the cognition and understanding



Fig. 8. Visualization of the “Mermaid in Kamionek” project, view from the courtyard, from the front and from the street
Source: own elaboration.

Table 3. Colour palette used for the “Mermaid in Kamionek” project

Color code		Preview	Color code		Preview
Hex	#5dbae9		Hex	#f9bbc4	
RGB	93/186/233		RGB	249/187/196	
CMYK	57/9/0/0		CMYK	0/33/10/0	
Hex	#5e98d1		Hex	#f0657a	
RGB	94/152/209		RGB	240/101/122	
CMYK	63/31/0/0		CMYK	1/76/36/0	
Hex	#218bb0		Hex	#ea3347	
RGB	33/139/176		RGB	234/51/71	
CMYK	80/31/19/2		CMYK	2/94/71/0	
Hex	#576db3		Hex	#cb3a50	
RGB	87/109/109		RGB	203/58/80	
CMYK	73/60/0/0		CMYK	15/92/64/3	
Hex	#3a3a72		Hex	#7c1c20	
RGB	58/58/114	RGB	124/28/32		
CMYK	88/85/21/20	CMYK	30/96/88/38		
Hex	#f8bc72	Hex	#000000		
RGB	248/188/114	RGB	0/0/0		
CMYK	1/29/63/0	CMYK	0/0/0/100		
Hex	#d79f59	Hex	#ffffff		
RGB	215/159/89	RGB	255/255/255		
CMYK	15/39/75/1	CMYK	0/0/0/0		
Hex	#bc8035				
RGB	188/128/53				
CMYK	24/51/93/6				

Source: own elaboration.

of which can vary depending on our life experiences. Depending on whether we once lived outside the ‘cage’ or were born in it (Fig. 9).

The works presented were evaluated by the housing estate community. With the help of a Google Form made available online on the Facebook profile of the Kamionek Housing Estate Council and the

profile of the author of the thesis, a vote was held on which of the prepared projects was more suitable for the local community. Between 1 and 31 December 2021, 114 votes were cast. The result of the vote was 58 votes for the project ‘Birds in a cage’ and 56 votes for the project ‘Mermaid on Kamionek’.



Fig. 9. Visualization of the “Birds in a Cage” project, view from the courtyard, from the front and from the street
 Source: own elaboration.

Table 4. Colour palette used for the “Birds in a Cage” project

Color code	Preview	Color code	Preview
Hex #fff595		Hex #d0c58c	
RGB 255/245/149		RGB 208/197/150	
CMYK 2/0/52/0		CMYK 20/1/52/0	
Hex #d0c58c		Hex #c8b3a1	
RGB 245/235/0		RGB 200/179/161	
CMYK 7/0/99/0		CMYK 22/27/35/0	
Hex #f8de03		Hex #9d937d	
RGB 248/222/3		RGB 157/147/125	
CMYK 4/7/99/0		CMYK 39/36/51/4	
Hex #81742e		Hex #7e6e57	
RGB 129/116/46		RGB 126/110/87	
CMYK 47/43/100/18		CMYK 47/49/66/20	
Hex #884a24		Hex #4b3d34	
RGB 136/74/36		RGB 75/61/52	
CMYK 32/72/97/29		CMYK 56/62/69/51	
Hex #9aafc6		Hex #000000	
RGB 154/175/198		RGB 0/0/0	
CMYK 40/23/13/0		CMYK 0/0/0/100	
Hex #6f7b79		Hex #ffffff	
RGB 111/123/121		RGB 255/255/255	
CMYK 47/31/37/27		CMYK 0/0/0/0	

Source: own elaboration.

DISCUSSION

The above mural project and the process preceding its creation have demonstrated the significant role of mural art in the revitalization process, highlighting non-material values as key, which was the aim of the study. Murals in the contemporary Kamionek district of Praga are elements of the cityscape that local residents identify with, as indicated by the social research conducted. By engaging in the project's development process, residents felt co-responsible for it, which will undoubtedly promote its sustainability, as supported by claims found in the literature. An online survey revealed a strong interest among residents in influencing the mural's location, themes, colors, and aesthetics. The project, initiated by a resident of Kamionek, confirms the activation of social capital. Murals are accepted by local communities and represent an appropriate action, provided there is mutual cooperation among the interested parties. Spatial and landscape analyses that precede the design process serve as a basis for identifying the value of a place, emphasizing its character, enhancing aesthetics, and acting as an important communication tool or educational resource. However, discussions regarding the costs of such actions and their sustainability remain contentious. These concerns are always raised prior to decisions made by city authorities. A mural, as a form of landscape intervention, must undergo a process of assessing its impact on the surrounding area. It is difficult to agree with the statement that the goal of large flagship projects is rarely to improve the living conditions of existing residents but rather to attract new visitors and buyers to the city (Jagodzińska, 2017).

The outlined design process confirms scientific research on the role of art in the revitalization process. It is worth emulating this study when creating mural art. In this particular case, after following the formal and legal pathway, it can be implemented.

CONCLUSION

The use of mural art as a tool to activate space is an ideal solution to support the process of revitalising space is also an ideal means of activating society and generating social capital. The mural art used in the process of revitalising urban spaces should be aligned with the urban regeneration programme and be an integral part of it. It must be a response to and a means of achieving the objectives set out therein. This means of artistic expression can become a semantic code, a carrier of history, social, cultural or moral values, and should be adapted to the spatial context. The mural, by its large format inscribed in its definition, significantly influences the perception, aesthetics, perception of the character and function of the space in which it is embedded. Involving the public in the design process makes it possible to find out their opinions, expectations and needs with regard to the directions of the space. It also makes it possible to appropriately adjust the content and visual side of the mural in order to effectively satisfy the human need to experience beauty and positively influence the socio-cultural sphere of the revitalised area.

Author contributions: The author/authors has/ have approved the final version of the article. The authors have contributed to this work as follows: E.K.B. & R.C. developed the concept and designed the study, R.C. collected the data, R.C. analysed and interpreted the data, E.K.B. drafted the article, E.K.B. revised the article critically for important intellectual content (style: Supplementary information)

Funding: No funded

Supplementary information: No information

Note: The results of this study have been previously presented as Engineering Diploma Thesis in the field of Spatial Economy at Warsaw University of Life Science.

REFERENCES

- Borghini, S., Visconti, L. M., Anderson, L., & Sherry, J. F. Jr. (2010). Symbiotic attitudes of commercial advertising: advertising and street art. Rhetoric for creativity. *Journal of Advertising*, 39(3), 113–126.
- Boryczka, E. (2016). Rewitalizacja miast [Urban revitalization]. In Z. Przygodzki (Ed.), *EkoMiasto# Zarządzanie. Zrównoważony, inteligentny i partycypacyjny rozwój miasta [EcoCity# Governance. Sustainable, smart and participatory city development]* (pp. 167–193). Wydawnictwo Uniwersytetu Łódzkiego.
- Burdzik, T. (2012). Przestrzeń jako składnik tożsamości w świecie globalizacji [Space as a component of identity in a globalizing world]. *Kultura – Historia – Globalizacja [Culture – History – Globalization]*, 11, 13–27. <https://doi.org/10.6084/m9.figshare.903720>
- Cudny, A. (2012). Żonglerka pojęciem, czyli refleksją nad przestrzenią publiczną w świetle rozwoju kapitału społecznego [Juggling with the concept, or reflection on public space in the light of the development of social capital]. In W. Godzic (Ed.), *Kultura popularna [Popular Culture]* (pp. 38–42). SWPS.
- Create Together For Tomorrow (n.d.). Good Looking. Retrieved January 8, 2022, from <https://goodlooking.pl/portfolio/create-together-for-tomorrow>
- Czyńska, K. (2018). Tall buildings in historical urban context – analysis of selected examples. *Przestrzeń i Forma [Space and Form]*, 36, 159–176. <https://doi.org/10.21005/pif.2018.36.C-04>
- Długozima, A. (2019). Rewaloryzacja w polityce przestrzennej małych miast województwa warmińsko-mazurskiego [Revitalisation in the spatial policy of small towns in the Warmińsko-Mazurskie Voivodeship]. *Ochrona Zabytków [Protection of Monuments]*, 2, 63–92.
- Dominiczak, J. (2016). *Miasto Dialogiczne i inne teksty rozproszone [The Dialogic City and other scattered texts]*. Wydział Architektury i Wzornictwa, Akademia Sztuk Pięknych w Gdańsku [Faculty of Architecture and Design, Academy of Fine Arts in Gdansk].
- Duchowski, M., Drozda J., Kopczyński B., Litorowicz A., Pietszako A., Rojek Z., & Wittels K. (2016). *Mury. Diagnoza dynamiki środowiska twórców malarstwa monumentalnego – raport badawczy [Walls. Diagnosis of the dynamics of the community of monumental painters – a research report]*. Instytut Badań Przestrzeni Publicznej [Institute for Public Space Research].
- Dziadzia, B. (2015). Kiedy sztuka wytwarza kapitał. Zaangażowanie i sztuka w przestrzeni publicznej [When art produces capital. Engagement and art in public space]. In B. Dziadzia, B. Głyda-Żydek & S. Piskorek-Oczko (Eds.), *Sztuka w przestrzeni publicznej. Artystyczne wymiary wytwarzania kapitału społecznego i kulturowego [Art in public space. Artistic Dimensions of the Production of Social and Cultural Capital]* (pp. 15–30). Fundacja Animacji Społeczno-Kulturalnej [Foundation for Social and Cultural Animation].
- Filip, A. (2015). Partnerskie działania artystyczne i ich rola w kształtowaniu wielkoprzestrzennych wizji urbanistycznych [Partnership artistic activities and their role in shaping large-scale urban visions]. In B. Dziadzia, B. Głyda-Żydek & S. Piskorek-Oczko (Eds.), *Sztuka w przestrzeni publicznej. Artystyczne wymiary wytwarzania kapitału społecznego i kulturowego [Art in public space. Artistic Dimensions of the Production of Social and Cultural Capital]* (pp. 121–135). Fundacja Animacji Społeczno-Kulturalnej [Foundation for Social and Cultural Animation].
- Gralińska-Toborek, A., & Kazimierska-Jerzyk, W. (2014). *Doświadczenie sztuki w przestrzeni miejskiej [Experiencing art in urban space]*. Fundacja Urban Forms [Urban Forms Foundation].
- Hong Kong Tourism Board Introduces Sham Shui Po District Through the Lens of an Award-Winning Videographer (n.d.). *business Wire*. Retrieved January 8, 2022, from <https://www.businesswire.com/news/home/20180927005082/en/Hong-Kong-Tourism-Board-Introduces-Sham-Shui-Po-District-Through-the-Lens-of-an-Award-Winning-Videographer>,
- Instytut Badań Przestrzeni Publicznej (IBPP) [Institute for Public Space Research]. (2016). *Walls. Diagnosis of the dynamics of the community of monumental painters, Warsaw*.
- Jagodzińska, A. (2017). Rewitalizacyjna funkcja kultury i dziedzictwa kulturowego [The revitalising function of culture and cultural heritage]. In J. Hausner, A. Karwińska & J. Purchla (Eds.), *Kultura a rozwój [Culture and development]* (pp. 265–286). Nieoczywiste Publishing House [Unobvious Publishing House].
- Jarecka-Bidzińska, E. (2017). *Warszawska Praga – szukanie tożsamości [Warsaw's Praga – a search for identity]*, *Zeszyty Naukowe UW [UW Scientific Journals]*, 53(2), 81–98.

- Jemioł, M. (2019). Kultura i sztuka w procesie rewitalizacji na przykładzie Dolnego Miasta w Gdańsku [Culture and Art in the Process of Revitalization on the Example of the Lower Town in Gdańsk]. In M. Dymnicka & S. Kowalski (Eds.), *Miasto jako przedmiot badań architektury i socjologii* [The City as an Object of Architecture and Sociology Research] (pp. 52–63). Wydawnictwo Politechniki Gdańskiej [Gdansk University of Technology Publishing].
- Kaczmarek, M. (2017). Graffiti kontra murale. Intencje twórcy a recepcja społeczna sztuki ulicy [Graffiti versus murals. The Intentions of the artist and the social reception of street art]. In S. Hryń & D. Juruś (Eds.), *Ulice, centra, peryferie* [Streets, Centres, Peripheries] (pp. 37–52). Oficyna Wydawnicza AFM [AFM Publishing House].
- Królikowski, J. T. (2011). *Interpretacje krajobrazów* [Interpretations of landscapes]. Wydawnictwo SGGW [Warsaw University of Life Sciences Publishing].
- Królikowski, J. T. (2019). Krajobraz jako wyraz wartości [Landscape as an expression of values]. In A. Drapella-Hermansdorfer, O. Mycak & M. Surma (Eds.), *Krajobrazy Europy. Krajobraz jako wyraz idei i wartości* [Landscapes of Europe. Landscape as an expression of ideas and values] (pp. 9–16). Oficyna Wydawnicza Politechniki Wrocławskiej [Publishing House of Wrocław University of Technology].
- Królikowski, J. T., Rykała, E., & Rybak-Niedziółka, K. (2017). *Projektowanie krajobrazu miasta* [Urban landscape design]. Wydawnictwo SGGW [Warsaw University of Life Sciences Publishing].
- Lachowska, K., & Pielużek, M. (2020). Miasto jako przestrzeń ideologiczna – analiza sztuki ulicznej towarzyszącej aktualnym protestom w Chile [City as an Ideological Space – an analysis of street art accompanying the current protests in Chile]. *Annales Universitatis Paedagogicae Cracoviensis. Studia De Cultura*, 12(2), 93–121. <https://doi.org/10.24917/20837275.12.2.7>
- Lisowska-Magdziarz, M. (2019). *Znaki na uwięzi. Od semiologii do semiotyki znaków* [Signs on a leash. From semiology to semiotics of signs]. Księgarnia Akademicka [Academic Bookstore].
- Marschall, S. (2008). The transformation of symbolic identity: wall art and the city in the Republic of South Africa. *African Arts*, 41(2), 12–23.
- Miles, S. (2005). “Our Tyne”: Iconic Regeneration and the Revitalisation of Identity in Newcastle Gates head. *Urban Studies*, 42(5/6), 913–926. <http://www.jstor.org/stable/43197304>
- Moch, W. (2016). *Street art i graffiti. Litery, słowa i obrazy w przestrzeni miasta* [Street art and graffiti. Letters, words and images in the city space]. Wydawnictwo Uczelniane Wyższej Szkoły Gospodarki [University Publishing House of the University of Economics].
- Norberg-Schulz, Ch. (1980). *Genius loci. Towards a Phenomenology of Architecture*. Academy Edytion, London.
- Nowy mural chopinowski na warszawskiej Tamce (n.d.) Goog Looking. Retrieved January 8, 2022, from <https://goodlooking.pl/backstage/nowy-mural-chopinowski-na-warszawskiej-tamce>
- Palicki, S., & Stachowska, P. (2016). Artistic Aesthetization in Urban Revitalization Processes. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu* [Research Papers of Wrocław University of Economics], 418, 265–273. <https://doi.org/10.15611/pn.2016.418.26>
- Peirce, Ch. S. (1997). *Wybór pism semiotycznych* [A selection of semiotic writings]. Wydawnictwo Polskie Towarzystwo Semiotyczne Warszawa [Publisher Polish Semiotic Society Warsaw].
- Porębska, M. (2010). O potrzebie piękna w przestrzeni publicznej miasta [About the need of beauty in the public space of a city]. *Czasopismo Techniczne. Architektura* [Technical Journal. Architecture], 107, 155–163.
- Pressland Editors. (2019, January 25). Birth of radical transparency. https://medium.com/@pressland_editors/the-rise-of-radical-transparency-9d266fdb111c
- Riggle, N. A. (2010). Street Art: The Transformation of the Ordinary. *Journal of Aesthetics and Art Criticism*, 68(3), 24.
- Rose, G. (2010). *Interpretacja materiałów wizualnych. Krytyczna metodologia badań nad wizualnością* [Interpretation of visual materials. Critical methodology of visual research]. Wydawnictwo PWN [PWN Scientific Publishing House].
- Scheffler, N. (2022). Community Involvement in Urban Heritage. In M. Göttler & M. Rippl (Eds.), *In Community Involvement in Heritage Management: Guidebook* (pp. 14–21). Regensburg: OWHC. <http://openarchive.icomos.org/id/eprint/1812/>
- Schmidt, J. S. (2006). Konstruktywizm jako teoria mediów [Constructivism as a theory of media]. In E. Kuźma, A. Skrendo & J. Madejski (Eds.), *Konstruktywizm w badaniach literackich. Antologia* [Constructivism in Literary Studies. Anthology] (pp. 311–334). Universitas.

Skalski, J. (2007). *Analiza percepcyjna krajobrazu jako działanie twórcze inicjujące proces projektowania* [Perceptual analysis of the landscape as a creative activity that initiates the design process]. Wydawnictwo SGGW [Warsaw University of Life Sciences Publishing].

Stangel, M. (2008). *Urban Renewal in the Information Society – Information and Communication Technologies in Revitalization Processes*. Silesian University of Technology Press.

Węclawowicz-Bilska, E. (2011). Kierunki współczesnego rozwoju przestrzennego miast europejskich [Directions of contemporary spatial development of European cities], *Czasopismo Techniczne* [Technical Journal], 12, 324–342.

Złudzenie optyczne na muralu PEETA w Mannheim w Niemczech (n.d.). The Illest. Retrieved January 20, 2020, from <https://www.theillest.pl/mural-peeta-mannheim>