
PROTECTION AND RENOVATION OF PUBLIC AREAS IN A MODERNIST CITY: THE CASE OF THREE STREETS IN THE HISTORIC CITY CENTRE OF GDYNIA

HIRSCH Robert ¹

ŁOZOWSKA Celina ²

- 1 Robert Hirsch, Wydział Architektury Politechnika Gdańska, 80-233 Gdańsk, ul. Narutowicza 11/12, Miejski Konserwator Zabytków w Gdyni
robert.hirsch@pg.edu.pl
ORCID 0000-0002-5427-3202C
- 2 Celina Łozowska, Urząd Miasta Gdyni, 81-382 Gdynia, al. M. Piłsudskiego 52/54
c.lozowska@gdynia.pl
ORCID 0000-0003-1058-0742

ABSTRAKT: This article concerns issues related to the preservation and restoration of public space in Gdynia's city centre, which was designed and built mainly in the 1920s and 1930s. In 2007, a major part of the city centre was entered into the register of monuments as a historic complex of urban architecture. Moreover, in 2015, the area was declared a Monument of History. Protection of a complex of urban architecture covers not only the renovation of historic buildings but also the protection of public spaces that comprise an integral part of the historic complex. Therefore, preservation of the historic shape and design of public space in the centre of Gdynia is one of the city's key conservation tasks. Since protection of urban space in relatively young historic centres (less than a hundred years old) is a novel issue from the perspective of conservation, it is therefore worth analysing. Issues connected with the protection and restoration of public space in the centre of Gdynia are exemplified by three historic streets, built in the late 1920s and located within a historic complex entered into the register of monuments. They have been the subject of various investments in recent years. The streets differ in terms of their historic condition, renovation requirements, social expectations and investment plans. Already at the developmental stage of investments all these factors have led to different assumptions and approaches, bringing different results in each case.

SŁOWA KLUCZOWE: Gdynia; public areas; modernism; monument protection; historic monuments

1. Introduction

The urban complex of the centre of Gdynia was designed in the second half of the 1920s and was largely formed until the outbreak of the Second World War. In 2007, the most important part of the urban complex – an area covering almost 88 hectares and about 450 buildings, mostly 5-6 storeys high – was entered into the register of monuments.¹ 8,000 people are estimated to be living in the protected area.

Apart from the predominantly historic architecture, complemented with some contemporary buildings, the area is characterised by large public spaces. It is primarily a network of wide streets combined with large squares and a unique, stylish artificial pier – the Southern Pier. The area's two longest perpendicular communication routes (streets with squares) constitute the grid of the complex, with the first route formed by 10 Lutego Street – Kościuszko Square – Jana Pawła II Alley, and the second extending from Świętojańska Street and Kaszubski Square to Portowa Street. Each route is about 1,800 m long and demonstrates the impressive scale of the entire enterprise.

The first plan of the city centre, the so-called development draft, was prepared in 1926 at the Ministry of Public Works in Warsaw (Sołtysik, 1993). The implementation of the plan's main points, i.e. erecting buildings, developing infrastructure and arranging streets and squares on the basis of later, more detailed plans, took place in the following years and was being carried out until 1939 (fig. 1), although not all were successfully realized at that time. The implementation of pre-war urban plan was generally continued after the German occupation; however, local modifications were introduced while some elements of the plan were entirely abandoned. In many places, public areas outlined and largely developed before the outbreak of the Second World War have retained their original shape, layout and structure, which are very similar to modern utility standards.

2. Characteristics of the centre of Gdynia

The centre of Gdynia has many characteristics that distinguish it from other historic complexes of much longer history. These characteristics significantly affect the functioning of the area, the investments carried out there and preservation maintenance, particularly regarding public spaces. The table below contains a summary of the main, specific characteristics of the historic centre of Gdynia, including public spaces, and the consequences of those characteristics (table 1).

Table 1. Characteristics of the centre of Gdynia and its public spaces, as well as their consequences

CHARACTERISTICS	CONSEQUENCES
Relatively large area of the complex	Large number of public spaces of various character
Large number of permanent residents	Intensive use and modernisation of the area for the past few decades

¹ The decision of the Pomeranian Monument Conservator of September 21, 2007, No. 1815.



Short period from the time of the construction of the complex, as compared with other complexes of historic monuments	Elements of the arrangement of public spaces maintained in original form
	Preserved rich documentation in the form of photos and texts originating from the period of construction or shortly afterwards
Incomplete development of the plots by WWII (only 50%)	Lack of consistency in urban planning and architecture, also pertaining to public spaces
Design of streets and squares in the interwar period similar to current urban standards	Functional durability of solutions despite urban development, e.g. streets endure the challenge of contemporary traffic
Application of cutting edge solutions in the 1930s regarding the surfaces of streets and squares, using ones not usually associated with historic cities ²	Renovation works occasionally involved removing historic elements not considered as having historic value
Intensive use for decades; the large city centre lacked preservation maintenance	Significant and unrestrained redevelopment of some public places in response to utility needs
In 2007, the city centre was entered into the register of historic monuments	Protection of the area, including the adoption of protective clauses in local development plans
Tourist attractions located mainly in the heart of the area	Residents' problems predominantly related to issues such as traffic and parking space

The abundance of archival materials concerning the structure and construction of streets and squares – a rare occurrence for historic complexes – results from the fact that the arrangement was developed not long ago. This is particularly important for activities related to conservation protection, including that of public spaces.³ Dynamic development of the network of streets can be inferred from the fact that “in the official list in the address book of Gdynia in 1933, there were 71 streets; four years later, after the expansion and connection of further districts – there were almost 570” (Kitowski & Sokołowska, 2001, 7). Moreover, in 1928 “curbs necessary for future paving, or street arrangement, were laid in 10 Lutego Street” (Sokołowska, 2016, 21), while “paving was completed by mid-1930, including the streets of 10 Lutego, Świętojańska, Starowiejska, Abrahama” (Kitowski & Sokołowska, 2001, 7). Also, the rich photographic documentation from the 1930s shows the original arrangement of these spaces (photo 1).

3. The scope of protection of historic public spaces in Gdynia

- 2 These include surfaces made of concrete elements of various shapes, e.g. Trylinski's (hexagonal) blocks, made of poured concrete, or the combination of the then innovative asphalt and stone cubes, as well as street curbs with built-in lighting.
- 3 Although slightly modified later, the designed street widths of Abrahama Street (15 metres), 10 Lutego Street (30 metres) and Starowiejska Street (20 metres) had already been defined in the 1926 city development plan, for example. See: Sołtysik M. J., (2003). *At the junction of two eras. Architecture of town houses in Gdynia in the interwar period*, Gdynia: Alter Ego, p. 52.



Historic public spaces in the centre of Gdynia are under protection, along with the entire urban layout; they have been entered into the register of monuments in 2007 and recognized as a Monument of History in 2015.⁴ This is primarily the result of regulations generally applicable in Poland, which statutorily define the area as a “historic urban or rural layout – a spatial urban or rural layout containing building complexes, single buildings and forms of designed greenery, arranged in a system of historic ownership and functional divisions, including streets or road networks” (article 3, point 12 of the Act of 23 July 2003 on the protection of monuments). Accordingly, conservation protection of urban layout also covers public spaces located within the boundaries of the monument.

Conservation protection of specific parts of public space in the modernist centre of Gdynia has also been regulated in provisions of local development plans adopted by the Gdynia City Council. Protection requirements have been defined both generally (“when developing public spaces, individual designs of appliances, street furniture and greenery should be used to secure unique features and identity of the centre of Gdynia”⁵) as well as in detail. Examples of the latter include the following:

- “It has been determined that the surface [stone pavement and curbs] of Starowiejska Street and Szkolna Street shall have its historical character preserved; in the case of renovation or reconstruction of the street, it is allowed to relocate the surface, replace the elements that are technically worn out and correct the outline, provided that the original traditional form of these elements is preserved.”⁶
- “It has been determined that the surface of 10 Lutego Street shall maintain its historic character [existing strips of stone paving and curbs]; in the case of renovation or reconstruction, it is permitted to relocate the surface, replace the elements that are technically worn out and correct the outline, provided that the original traditional form of these elements is preserved.”⁷

The above provisions specify some of the requirements (e.g. the protection of indicated historical surfaces). However, many conservation decisions regarding potential changes are the result of analysis and evaluation of the impact that the transformations may have on the

4 Ordinance of the President of the Republic of Poland, 23 February 2015 (Journal of Laws of the Republic of Poland, 16 March 2015, item 356) on the recognition of Gdynia City Centre as a Monument of History. In addition, the monument “Gdynia – Early Modernist City Centre,” located within the protected urban layout, is a Polish candidate to the UNESCO World Heritage List. In 2019, the area was included in the UNESCO Tentative List, and the application was submitted in 2022 by the City of Gdynia after obtaining recommendation from the Committee for World Cultural Heritage in Poland and the Ministry of Culture and National Heritage.

5 Local development plan of the centre of Gdynia, the area of Kościuszko Square, Jana z Kolna Street and 10 Lutego Street; uniform text approved in the resolution No. XXVII/662/16 of the Gdynia City Council of 21 December 2016, §6 par. 1, point 2c.

6 *Ibid.*, §5 par. 1, point 2d.

7 Local development plan of the City Centre and the Wzgórze Św. Maksymiliana district in Gdynia, and the streets Władysława IV, 10 Lutego and Świętojańska, approved in resolution No. VI/92/11 of the Gdynia City Council of 23 March 2011, §5 par. 1, point 2d.



value of the protected system.

4. Examples of contemporary investments

Various investment have been carried out within the public spaces in the historic centre of Gdynia after WWII. Some of them were necessitated by the ongoing maintenance and spatial reorganization of the city, while others were related to the need to adapt the area to modern utility requirements. They include not only minor investments, such as pavement repairs, local functional improvements, e.g. lowering curbs at pedestrian crossings or changes in traffic organization, but also major works, e.g. reconstruction of streets, squares and intersections, functional changes related to parking spaces or pedestrian areas, adaptations for people with impaired mobility, as well as construction of mini gardens and pocket parks.

In the case of public space in Gdynia situated within the area entered into the register of monuments, the question of maintaining balance between the functional needs of a modern city and the preservation of the protected complex's historical values is of fundamental concern. Therefore, the scope of obligatory conservation protection and thus the scope of acceptable transformations of streets and squares raise many questions. It is difficult to define the extent and conditions of reconstruction regarding, for example, changes to the street surface, its course or links between roads and pavements. Equally so, the above relates to the introduction of such items as non-historic greenery, modern street furniture and infrastructure, among others. Considering general conditions, the problem remains as to what specific factors should be taken into account when making conservation decisions regarding changes to streets (table 1). Analysing and solving such issues must be premised on conservation protection of these spaces as it impacts the preservation of heritage values. This can be shown in more detail on the basis of specific examples.

5. Case studies of three streets in the city centre

Contemporary investment in public spaces within historic areas depends on various factors. These conditions and their implications are exemplified by 10 Lutego Street (from Dworcowa Street to Świętojańska Street – 650 m), Starowiejska Street (from Gdynian Wsiedlonych Square to Kaszubski Square, 750 m) and Abrahama Street (from Starowiejska Street to the end of its course – ca 1000 m, with particular emphasis on the section from 10 Lutego Street to Batorego Street). The three streets are located in the area entered into the register of monuments as an urban complex and have been selected for discussion and comparison. All of them were important for the structure of the city centre in the interwar period. As a result of changes made after WWII, each street now has a different character, but Abrahama Street has been transformed along its entire course to a particularly large degree.

The authors have analysed the factors that have influenced the form and scope of protection. What follows is a presentation of the characteristics, the degree of preservation as well as the scope of investment and its results in the case of each of the three streets.



10 February Street

STREET CHARACTERISTICS



Fig. 1. Gdynia, 10 Lutego Street, the arrangement of the street in the second half of the 1930s; photo from private archives.

10 Lutego Street was arranged in place of Aleja Kuracyjna, which was planned at the beginning of the twentieth century to link the railway station and the beach. In the 1930s, 10 Lutego Street became one of the main compositional axes of the early modernist city centre (fig. 1). The width of the former avenue was then increased to 28 m. The street was laid out using a combination of modern bituminous surface and side lanes of cobblestones with curbs made of longitudinal basalt bricks. Cobblestone lanes were intended for the traffic of vehicles without tires, and as parking lanes (fig. 2). Rows of linden trees were introduced on both sides of the street. Encased in concrete enclosures, the trees were planted in twos, in regular square lawns.

DEGREE OF PRESERVATION

From its establishment, 10 Lutego Street was intensively used and modified according to current utility needs, especially at the turn of the twentieth and twenty-first century. This led to the loss of many elements of its original arrangement over the last several decades. The historic side lanes from the interwar period and some of the stone curbs have been preserved. In many places, the condition of the surface worsened and cobblestones needed to be repaired and relocated. Conservation protection of these elements had been guaranteed in the provisions of the local spatial development plan.



Apart from the main cobblestone lanes, which testify to the unique character of the street, no original pavement surface or other elements of the arrangement have been preserved.⁸ No historic reinforced concrete lampposts have survived as these have been successively replaced throughout the city since the 1980s. At the beginning of the twenty-first century most of the trees were cut down to create parking bays.

SCOPE OF INVESTMENT



Fig. 2. Gdynia, 10 Lutego Street, historic road surface at the turn of the 1920s and 1930s, where asphalt was combined with cobbled side lanes; photo by B. Ponikiewski.

In 2017, out of many proposals submitted to the Civic Budget, co-developed by residents, one project was selected concerning the recreation of the pre-war row of trees in 10 Lutego Street in its northern section, i.e. from Świętojańska Street to Mściwoja Street.⁹ The project was completed in December 2019 and urged further reconstruction of the street. In 2020, as part of the local government's Climate Centre project, a number of renovation activities were carried

-
- 8 The cobblestone lanes have been currently discontinued in several places at designated pedestrian crossings, where they have been replaced with asphalt to improve the comfort and safety of pedestrians. In addition, the eastern section of the road at the intersection with Świętojańska Street was redeveloped and broadened. Currently, there are plans to restore the former width of the roadway and recreate the cobblestone lanes.
- 9 The project called "Let's bring back trees to 10 Lutego Street/Common City. Let's make the City Centre green" was submitted by the Common City Association. The project won with 748 votes. The value of the project was estimated at PLN 210,000.

out, including the elimination of a significant number of parking bays, and the restoration of the original width of pavements. Owing to the above, comprehensive reconstruction of the old arrangement of trees was made possible. Since the conditions for the growth of trees were unfavourable due to dense traffic and chemical measures against icing, it was decided in consultation with the conservator of monuments to introduce a foreign species of greater resilience (gingko tree) yet with features similar to the historical one (linden tree). Pavements were given a new surface made of concrete blocks of smaller format than in the original design, supplemented with textured slabs and directional markings for people with disabilities. A bicycle path was marked out in the northern part along the pedestrian lane (fig. 3).



Fig. 3. Gdynia, 10 Lutego Street, after renovation works, which included the conversion of parking bays as well as the reintroduction of the historic width of pavements and the replanting of trees; photo by B. Ponikiewski.

RESULTS OF INVESTMENT

The renovation of 10 Lutego Street aimed to restore the most characteristic elements of the historic composition from the interwar period. The former layout of the street, with wide pavements and rows of trees, was reconstructed and the side lanes of cobblestones on the roadway were repaired. Due to modern needs (concerning public transport stops, cyclists or people with disabilities) and the climate conditions that affect the city's greenery, comprehensive reconstruction of the original arrangement and of all its elements could not be pursued. Slight modifications to improve functionality and usability were accepted. In terms of conservation, they were assessed



as having no significant impact on the protected urban layout and on the atmosphere of the place, which has not changed significantly.

Starowiejska Street



Fig. 4. Gdynia, Starowiejska Street during renovation works in 2022, which involved relocating the historic surface made of hexagonal blocks; photo by R. Hirsch.

STREET CHARACTERISTICS

The historical layout of the centre of Gdynia was defined by three settlement phases: rural, holidaymaking and urban. This arrangement created the basic grid of streets, including plots and buildings. Together with the preserved residential buildings at No. 10A and No. 30, Starowiejska Street (formerly Wiejska) is the most important preserved component of the rural phase. In the second half of the 1920s, the street was subjected to regulation when the winding country road of the old settlement changed its course into a straight line and the road surface was paved with stone blocks. The preserved curvature at the western and eastern ends is a reminder of the street's former irregular course.

Buildings along the street originate mainly from the interwar period, but many were also built after WWII. Starowiejska Street clearly demonstrates a given period's architectural approach to public space. Buildings from the 1920s and 1930s were designed with the street frontage, quite narrow pavements and a cobbled roadway, while buildings from the 1950s and 1960s were

constructed with the frontage drawn back, the pavements widened, and green areas. Further, surfaces of access roads and yards in the latter period were made using concrete blocks and not stone, as was characteristic for the 1920s.

DEGREE OF PRESERVATION

Starowiejska Street presents the highest degree of preservation regarding the arrangement and historic substance from the beginning of its construction. The most important elements of its development and composition include the original shape of the street and its surface, paved along the entire length using a fish-scale arrangement, with curbs made of black, elongated basalt blocks, which have survived to the present day. The various stages of development of this part of the city are documented by the considerable length of surviving stone curbs, the arch-shaped corner curbs as well as various types of surfaces, including hexagonal Tryliński's blocks, in the entryways leading to inner yards. All these features, which reveal various historical strata, are under protection. In addition, conservation protection of preserved historical elements of the roadway was secured thanks to their inclusion in the provincial and communal registers of monuments¹⁰ and in individual cases (as mentioned above) thanks to being specified in the local development plan.

The original pavement surfaces made of square concrete slabs (50x50 cm) with anti-slip recesses have deteriorated after many years of use and provisional repairs. As in the case of 10 Lutego Street, lampposts from the interwar period have not survived. Unlike in other spaces in the city centre arranged in the 1930s, trees along the regulated Starowiejska Street were planted only after WWII and have been since supplemented with a variety of species. Some of them, however, have not endured harsh urban conditions.

SCOPE OF INVESTMENT

In 2018, the authorities of Gdynia decided to undertake extensive consultations in order to diagnose social needs regarding the street and its future, including its optimal functioning from the perspective of various groups of users. Public discussions, surveys and workshops with architects were organised, and the residents jointly worked out proposals for spatial and functional transformations. According to research results, the intimate historic atmosphere of the cobbled street was assessed positively, unlike the excessive number of cars and the poor condition of greenery and pavements. Ideas were put forward to completely eliminate or significantly reduce car traffic, to create more shared space, and to temporarily close the street to vehicles in order to organize outdoor events. As a result of the report summarizing the several-stage social consultations process, the Mayor of the City decided to create more space for pedestrians in Starowiejska Street and limit vehicular traffic.¹¹

Conducted research has taken into account the needs of heritage protection, basing on conservation guidelines. General conservation requirements include, among others, preservation

¹⁰ Ordinance No. 7334/18/VII/U of the Mayor of Gdynia of 16 January 2018.

¹¹ 55% of respondents approved of this solution, which made this project the only one to receive support from more than a half of all respondents, although 30% were decidedly against it (Stokłuska, 2018).



of the existing width of the roadway with separate pavements, preservation of the historic road surface and stone curbs with local repairs, preservation of the historic surfaces of access roads to inner yards or former gates (fig. 4), and preservation of original materials, dimensions of stone elements, colours, types of joints as well as the brickwork of reused items. As for the degraded surface of pavements, it was decided to replace them on the provision that references be made to historical solutions, specifically concerning the square concrete slabs. Due to the varied style and time of construction of buildings along the street, some liberty was allowed for the newly designed street furniture, including street lamps, designed in a non-historical maroon colour to add diversity. Efforts to increase the area for pedestrians resulted in the creation of pedestrian zones with parklets, i.e. places to rest with seats and greenery, installed in a non-invasive and reversible way. At the degraded intersections, where asphalt had been reapplied, polished stone-block speed bumps were introduced to slow down the traffic. Finally, decisions were made to preserve existing trees and add seventy new ones owing to their value for both the entire city and the region, including rows of hawthorns that have lent Starowiejska Street a unique character.

RESULTS OF INVESTMENT

All original elements of the street's development have been preserved, while missing ones were supplemented with historical stone material obtained from demolitions in other parts of the city, where the choice of material was secondary or it was extracted in minimal amounts, or with elements stylized as historical, as in the case of missing sections of stone curbs and concrete slabs of pavement surfaces. Detailed conservation issues were discussed on an ongoing basis directly at the construction site. Conservation modernization and its conditions also had to be closely related to multi-stage participatory activities and the needs of residents, specifically regarding the increase of space for pedestrians at the expense of cars. Therefore, it was necessary to introduce modern elements such as parklets, which made it possible to retain the original layout and width of the roadway, and to separate pavements. At present, the street maintains its historic decor and original elements, which have been enriched with modern utility details that are clearly highlighted in a different colour (burgundy).

Abraham Street

STREET CHARACTERISTICS

According to pre-war urban plans, Abraham Street was meant to be one of the most important axes in the centre of Gdynia, a commercial and residential district. However, after WWII, the planned layout changed. Along a significant length of the southern part of the street, pre-war frontages were discontinued, yielding to different forms of development. As a result, this section of the street lost its communication role within the structure of the city, and its function was reduced to that of an internal road. New buildings with gate entryways were erected at several intersections along the street¹², dividing it into several shorter sections that would now play the role of intra-quarter roads. In terms of communication, the streets that

12 The intersections of Abraham Street with Armii Krajowej Street, Obrońców Wybrzeża Street and Kilińskiego Street.

were perpendicular to Abraham Street, connecting Świętojańska Street with Władysława IV Street, acquired greater importance.

DEGREE OF PRESERVATION



Fig. 5. Gdynia, Abraham Street, the section between Batorego Street and 10 Lutego Street, during the redevelopment into a so-called woonerf; photo from the archives of the Municipal Conservator's Office.

The street's degraded rank in terms of communication in the city centre led to the preservation of pre-war cobblestones that are now subject to conservation protection. As for the historical arrangement of the northern parts of the street, including the short section from 10 Lutego Street to Batorego Street – which is the focus here – virtually nothing has survived to this day.

The described section of the street has been transformed to a high degree. No historical surfaces of roadways and pavements were preserved, and those that had been re-introduced were in poor technical condition. The road system was significantly changed due to the introduction of parking spaces. Moreover, since cars would park on the pavements, technical bollards of low aesthetic value were installed to prevent this. Lone trees in poor condition were the only remnants of the street's historic arrangement.

SCOPE OF INVESTMENT

The reconstruction project of Abraham Street concerning the section from 10 Lutego Street to Batorego Street was proposed as part of the 2016 Civic Budget and further extended by the



city authorities to cover, among others, the reconstruction of underground installations.¹³ The project intended to create a so-called *woonerf*, i.e. the first shared space in Gdynia where priority would be given to pedestrians and cyclists. A new surface with geometric patterns, made of two-coloured concrete slabs of various size (fig. 6), replaced the separation of the roadway and pavements (fig. 5). Car traffic was limited to a narrow lane in the middle of the street, and the speed limit was reduced to 20 km/h. Such reorganization of space facilitated the introduction of much greenery and many outdoor catering facilities. Additional street furniture was installed, including benches, bicycle racks and modern lamps. The project had to meet the accessibility standards of the city of Gdynia (Wysocki, 2013). Accordingly, directional guiding and warning systems were added to the pavements, and either they were adjusted to the level of house thresholds or ramps were built allowing unrestricted use of commercial premises located on the ground floor.¹⁴ The investment was commissioned in June 2019.

In addition to the reconstruction of this section of Abrahama Street, other works will be carried out there in the near future¹⁵. Due to the historical significance of the street as an important route, a new arrangement was developed in 2022 to outline the former course of Abrahama Street by either uncovering or reconstructing cobblestones (depending on their state of preservation) in the former roadway's asphalt surface at intersections with selected streets.

RESULTS OF INVESTMENT

The reconstruction of the section of Abrahama Street into the contemporary form of a *woonerf* is an example of current trends concerning utility and social expectations in modern European cities, where the idea of the so-called “shared space” has been implemented since the 1980s (Karlikowska & Kimic, 2017). However, not all such concepts may be compatible

13 Project titled “The City Centre convenient for pedestrians – more greenery, better lighting and street furniture” was proposed by the Miasto Wspólne [Common City] Association. The project won with 1,476 votes. The value of the project was estimated at approximately PLN 450,000, and the final cost amounted to approximately PLN 3.8 million. The entirety of the underground infrastructure was replaced, including water and sewage systems, rain water drainage and heating network.

14 In terms of accessibility, at the stage of implementation the project faced problems related to performance and functionality. The levelling of the pavement with the entrance to one of the historic town houses (No. 28) required unnatural elevation of the surface to the level of the building plinth; as a result, the façade would accumulate moisture and the basements could be flooded during heavy rainfall. In addition, adjusting the height of pavement levels at various sections made the surface “wavy.” Meanwhile, the problem of accessibility was solved only partially because architectural barriers inside the buildings remained, for example in the form of stairs with several steps in the halls.

15 In 2022, the renovation of Abrahama Street in its northern section from Starowiejska Street to 10 Lutego Street was initiated. This section was similarly preserved in original form and had undergone transformations comparable to the part of the street where the *woonerf* was created. However, the project was discontinued. Current renovation plans include replacement of degraded pavement surfaces and introduction of new greenery in place of parking bays. Additional street furniture and new lamps have also been designed. Moreover, a pedestrian crossing at the intersection with 10 Lutego Street has been planned. Additionally, road works revealed a fragment of non-typical historic road surface made of concrete slabs in the shape of circles with four-armed fillings. Thanks to cooperation with the contractor – Eurovia Polska S.A. – the elements were secured and relocated to a new place by a green strip at the entrance to the building in 17 Abrahama Street.



Fig.6. Gdynia, Abrahama Street, the section between Batorego Street and 10 Lutego Street after conversion into a so-called woonerf; photo by B. Ponikiewski.

with conservation protection. Radical transformations were allowed in the case of this street due to its lesser role in the city structure, the significant degradation of this space, and specific social expectations. Further, proposed transformations would not violate the requirements of protecting the historic urban layout. In a way, it was also an experimental solution, but these implementations significantly improved this part of the city in terms of functionality and attractiveness. There was limited impact on the value of the urban layout of the protected city centre, which further validated the above decisions.¹⁶

The conservator's approval for the current arrangement of this part of the street responds to the changing approach towards protecting historical cities, also from the perspective of conservation. These principles appear in recent conceptual documents concerning the protection of historical urban areas that are subject to continuous evolution and changes: "the conservator's plans [...] should take into account how given changes can be managed by verifying specific solutions and regarding the protection of historical heritage in connection with social and economic aspects" (Karta Krakowska 2000).

¹⁶ The design and implementation of the *woonerf* received special mention in the competition for the "Best Public Space of the Pomeranian Voivodeship 2021" (for its harmonious combination of pedestrian, bicycle and car traffic) and second distinction in the 2020 "Revitalized urban public space" category in the nationwide competition of the Society of Polish Town Planners.



In spite of these trends, Gdynia's *woonerf*, defined as a "street for everyone," should be approached as an experimental solution that was implemented and accepted as an exception due to a series of favourable circumstances (table 2). Surely, this particular solution should not be treated as the general direction for transforming the centre of Gdynia. After all, in the area covered by the conservator's protection priority is given to maintaining the historical layout of streets.

6. Summary of selected examples

The three examples described above demonstrate that despite similar protection resulting from being located in a historic area, the three streets were subject to different scopes of works, which brought about different effects. In each case, conservation analysis was conducted at the design stage, which resulted in the formulation of different conservation requirements. Specific conditions of each case meant that investments have had different outcomes, although none of them violate the principles of historic urban layout protection (table 2).

1. As regards the investment in 10 Lutego Street, the street was partially reconstructed, which included conversion of parking bays, restoration of the width of pavements, and introduction of trees in concrete-encased green areas. The historical appearance of the street was largely restored and its utility was improved, for example by introducing a bicycle path.
2. In the case of Starowiejska Street, revitalization involved the introduction of new elements to the street's arrangement and decor (pavements, lamps, parklets, and parking spaces for people with disabilities) and the restriction of vehicular traffic and parking, without interfering with the overall layout (specifically the separation of the roadway from the pavement with a raised curb) and the authentic cobblestone surfaces. Greenery was also preserved and new plants were added.
3. As concerns the discussed section of Abrahama Street (between 10 Lutego Street and Batorego Street), it was radically rearranged, although without undermining the urban composition of the city centre. These changes were the initiative of residents who wanted to have greater influence over their home district, which is a natural and desired tendency in modern cities (Montgomery 2015). The achieved result has been appreciated by the residents and visitors alike, significantly enlivening this part of the city. Meanwhile, it should be stressed that from the conservator's perspective, this adopted experimental solution reconciled the residents' expectations with the protection of historical heritage. Since it concerned an urban area entered into the register of monuments, the process is undoubtedly exceptional and of singular character.



Table 2. Detailed factors identified in analysis, affecting conservation requirements

Street	Degree of authenticity	Secondary transformations	Current significance in the city's structure	Social factors affecting the investment
10 Lutego	High in terms of both street arrangement and road surface	Significant but reversible , including non-historic bus bays, new parking spaces, removed greenery, etc.	Main tract – structural axis of the city	Engagement in the replanting of trees; contradictory expectations concerning the maintenance of parking spaces and the creation of bicycle paths
Starowiejska	High in terms of both street arrangement and road surface	Minor , including partial removal of greenery, secondary pavement surfaces and lamps, etc.	Main historic street that indicates the location of the former village	High level of social engagement, which was nevertheless difficult to reconcile with principles of protection
Abrahama	High in terms of street arrangement but low in terms road surface	Significant and partly irreversible – marginalisation of the rank of the street after WWII and its degradation to the rank of an inner street; local development truncating the course of the street	Historic street of secondary significance in today's structure	High level of social engagement and expectations, acceptable from the perspective of conservation



General conclusions concerning the above changes to public spaces in the historic centre of Gdynia:

- Each case is highly individual, requiring detailed conservation analyses.
- Protection of authentic elements such as pavements, curbs and trees is crucial.
- Where authentic elements are missing, protection can base on principles of composition, architectural context and local character.
- Not every contemporary solution related to arrangement is acceptable in historic spaces, requiring verification in terms of conservation at the design stage.
- Sometimes, historic solutions must be modified in order to address important utility needs such as safety of use, availability, etc. In Gdynia, this concerned adapting historical pavements to make room for bicycle lanes and parking spaces for vehicles used by people with disabilities, to lower curbs for the comfort of pedestrians, to set smooth-surface stone blocks across the cobbled roadways at pedestrian crossings, to introduce directional surfaces for visually impaired people, etc. Such modifications do not violate general principles of protecting the urban layout. Their effects are minor and reversible, but at the same time increase utility.

7. Conclusions

The 2011 UNESCO Recommendation on Historic Urban Landscape defines changes in historic cities as natural and necessary processes. According to this document, conservation authorities are responsible not only for the protection of heritage in the traditional sense (i.e. treating heritage protection as the primary objective), but also for the sustainable development of the historic city (i.e. treating heritage protection and development as being of equal importance). Some experts regard this as problematic, recognizing a contradiction between the application of traditional principles of conservation protection and the simultaneous development and modernization of the city, which may lead in practice to the choice of only the latter option owing to external conditions and pressures (Szymgin, 2013).

The three case studies of streets in the city centre of Gdynia presented in this article indicate that practical combination of heritage protection with urban development and modern utility needs can have positive results. Although changes to public spaces of historic cities like Gdynia are inevitable, proper protection and conservation supervision may ensure that modern modifications do not adversely affect the value and identity of historic spaces. In some cases, planned modernization investments that take conservation requirements into account may help to restore some of the lost historic values.

The three examples of streets in Gdynia demonstrate what factors may impact the scope and conservation requirements in relation to the modernization of public spaces in a historic city. While these examples refer to local context, it seems that defining the inviolable features and properties of given spaces is a universal and basic principle. For this purpose, it is necessary to determine the historic and contemporary role of those places in the structure of the city and to recognize their original arrangement, layout and structure, identifying preserved historic elements. Only then does it become possible to properly assess the range of admissible interventions and acceptable transformations.



Acknowledgments:

Authors are indebted to the Municipality of the City of Gdynia for assistance in the development of this article.

Authors' contribution:

Both authors of the paper have equally contributed to its creation.

Bibliography

Gajewska A., Goleńska A., Jonda J., Konsek P., Labus A., Ławecka A., Malicka-Skrzek S., (2021). Dostępność przestrzeni w projektowaniu woonerfów w historycznych centrach miast europejskich. *Builder*, 25 (6), 64-68.

Hirsch R., (2021). Ochrona i konserwacja historycznej architektury modernistycznej Gdyni, wydanie drugie, Gdańsk: Politechnika Gdańska.

Hirsch R., (2011). Prawna ochrona XX-wiecznych układów urbanistycznych na przykładzie Gdyni. *Ochrona Zabytków*, 1-4/2010, 263-278.

Karlikowska J., Kimic K. (2017). Idea uspokojenia ruchu ulic miejskich w XX i XXI wieku - przemiany w zakresie priorytetów społecznych i przyrodniczych. *Kwartalnik Architektury i Urbanistyki*, 3, 87-113.

Kitowski S., Sokołowska M., (2001), *Ulice Gdyni, o historii i patronach*, Gdynia: Alter Ego.

Kłapa J., (2020). Rozumienie pojęcia układu urbanistycznego w polskim systemie ochrony zabytków – wybrane zagadnienia. W: P. Dobosz, W. Górny, A. Kozień, A. Mazur (ed.), *Segmenty dziedzictwa kulturowego – między ochroną dziedzictwa materialnego a niematerialnego* (245-272). Kraków: AT Wydawnictwo.

Montgomery Ch., (2015). *Miasto szczęśliwe. Jak zmienić nasze życie, zmieniając nasze miasta*. Kraków: Wysoki Zamek.

Sokołowska M., (2016). *10 Lutego. Ulica symboliczna*, Gdynia: Verbi Causa.

Sokołowska M., (2017). *Starowiejska – ulica najpierwsza*, Gdynia: Verbi Causa.

Sołtysik M., (1993). *Gdynia miasto dwudziestolecia międzywojennego, Urbanistyka i architektura*. Warszawa: Wydawnictwo Naukowe PWN.

Sołtysik M. J., (2003). *Na styku dwóch epok. Architektura gdyńskich kamienic okresu międzywojennego*, Gdynia: Wydawnictwo "Alter Ego" Sławomir Kitowski.

Stokłuska E., (2018). *Porozmawiajmy o przyszłości Starowiejskiej. Raport podsumowujący konsultacje społeczne*, Laboratorium Innowacji Społecznych, <https://lis.gdynia.pl/starowiejska-przestrzenia-z-priorytetem-dla-piesznych-oraz-ograniczeniem-ruchu-kolowego/>.



Szmygin B., (2013). Rekomendacja o Historycznym Krajobrazie Miejskim – wdrożenie zmiany paradygmatu w ochronie miast historycznych, *Budownictwo i Architektura*, 12 (4), 117–126.

Wysocki, M. (2013). Standardy Dostępności dla Miasta Gdyni. Gdańsk: Politechnika Gdańska.