Degradation of Public Spaces on the Example of Selected Squares and Markets in Wielkopolska

Karol Tomczak

https://orcid.org/0009-0003-5098-6568 karol.tomczak1@up.poznan.pl

Paweł Szumigała

https://orcid.org/0000-0001-8069-787X pawel.szumigala@up.poznan.pl

Department of Green Areas and Landscape Architecture, Faculty of Agriculture, Horticulture and Biotechnology, University of Life Sciences in Poznań

Summary: Markets and squares are one of the most important urban spaces, both in terms of function and and urban layout. Through changes over the years in their functioning, many of them have begun to lose their attractiveness. Unfortunately, in many cases, efforts to restore the former splendor of urban layouts result in the deepening of progressive degradation. Through the use of comparative analysis, it was decided to show how the markets and squares in the Wielkopolska region have changed in recent years and to identify the directions of revitalization activities that negatively affect both space and the environment.

Keywords: public spaces, revitalization, degradation, land use, concretosis

Introduction

For centuries, public spaces have been an integral part of urban areas, enabling the integration of the local community while combining a number of functions that have changed over the years. Markets and squares can be considered the most important such places. This is most evident in small towns, where they play an important role in urban layouts, often even forming their central point. Thus, they can be classified as spaces that perform representative functions and at the same time constitute some of the most important places in the life of the city.

Through a series of changes in both spatial and functional layouts, many markets and squares have begun to undergo degradation. In the last two decades, more and more efforts have been made to improve their condition and revitalize such urban spaces. In many cases, due to lack of funds or projects poorly adapted to the needs of local residents, the effects of such projects fall short of their objectives, so they do not have a positive impact on the area, and even lead to its degradation.

The purpose of the article is to present the situation in which selected markets and squares in small towns in Wielkopolska have found themselves. A comparison of how the revitalizations of the areas carried out in the last 20 years have affected the layout and importance of the importance of greenery, as well as the currently implemented development plans.

Spatial and functional changes in public spaces

Originally, markets were the only public space in cities. They were mainly concentrated in markets with commercial and service functions. In the Middle Ages, these spaces were devoid of any greenery, and other land-scaping elements were present in very negligible amounts. This arrangement of markets with a market character persisted until the 20th century, at which time measures began to be taken to change their functioning. Markets were removed from the market slab, and commercial functions and services were moved to buildings located in areas adjacent to the market or to premises located directly on their frontage.

At the same time, more attention began to be paid to the role of greenery in cities. Kazimierz Wejchert presented the need to introduce greenery and incorporate it into market space. Through a series of analyses, he reasoned that its proper arrangement could emphasize the rank and enhance its aesthetic value. After the first transformations of marketplaces, the commercial function ceased to play their key role, and markets and squares became large empty paved spaces. Through the placement of planting arrangements, walking avenues were created in the form of rows of trees along main streets and the borders of squares. Monuments were often created to commemorate figures of merit to the country or locality, around which green spaces were created. This helped restore public life in major urban areas and introduce new functions to them, mainly recreational and representative.

The biggest changes were made in the period after World War II. Commercial functions to a greater extent disappeared from the surface of the markets, and more greenery began to be introduced into its space. The transformation was carried out quite spontaneously, often without a major assumption of a thoughtful scale of the establishment. As a result, squares were created in parts of the market or in its entirety, often with a representative function, whose greenery disturbed the legibility of the layout of the former space. A great influence on the transformation was the development of communications and the introduction of its functions in many public spaces. Important transportation hubs were created in the immediate vicinity of the squares, which resulted in the introduction of elements related to public transportation, such as bus shelters or, or even reducing its space at the expense of running it through the center of the square. Due to the increase in the amount of individual transportation, sequences of parking spaces were created along the surface of the markets or transformed part of their surface into public parking lots. All transformations were accompanied by supplementing the space with elements of small architecture, such as benches, lighting, trash garbage cans, as well as those of larger dimensions such as monuments or fountains.

Revitalization Activities

Due to the economic and social crises that began to affect many smaller towns and cities at the end of the 20th century, measures began to be taken to improve their situation. They concerned them primarily to spaces that had undergone some degree of degradation, including historic city centers. The main action to improve, renew and transform the fabric and urban areas is revitalization. This concept in terms of activities and their effects has been defined in various ways, which contributed to defining it s exact scope in the Law of October 9, 2015. Revitalization was formulated as "the process of bringing degraded areas out of crisis, carried out in a comprehensive manner, through integrated actions for the benefit of the local community, space and economy, concentrated territorially [...]." Originally, revitalization was mainly limited to the renovation of key elements of public spaces, such as infrastructure, monuments and markets and squares. Thanks to EU funds, which cities and municipalities have been able to use since 2004, it has been possible to carry out comprehensive revaluation processes of entire areas instead of individual objects. Thus, markets and squares, considered to be among the most important elements of the in the revitalization process, were able to be renovated in such a way as to create a multifunctional and cohesive space.

In many cases, measures to improve public spaces deviate from the comprehensiveness of the assumptions of revitalization activities. Due to the cost resulting from the complexity of the revitalization processes,

¹ Obwieszczenie Marszałka Sejmu Rzeczypospolitej Polskiej z dnia 23 lutego 2021 r. w sprawie ogłoszenia jednolitego tekstu ustawy o rewitalizacji.

subsidies were often insufficient to implement all the assumptions. Projects had to be tailored to the capabilities of a particular municipality or locality. As a result, they were limited to activities that changed the functional and visual aspects of a given space by modernizing it and rearranging the layout of the development, without conducting the necessary analysis or public consultation.

It is also worth mentioning the role greenery should play in the process of urban space renewal. With proper shaping of plantings, it can positively affect the legibility of the urban layout of a square or market, and increase their prestige while maintaining the recreational and leisure function for residents. The revitalization planning process pays attention to need to maintain the principles of sustainable development, i.e. making economic and social transformations and social changes while preserving the state of the environment.

Unfortunately, in many cases of urban renewal, greenery is considered unimportant and is left out of projects. Trees and shrubs are cut down, and lawns are transformed into paved surfaces. Such actions are caused by an attempt to restore the historical spatial layout, largely devoid of vegetation. Another reason is the financial issue involving with the maintenance of greenery. The plantings found in public spaces must be taken care of in order to preserve their aesthetic qualities, maintain their health and carry out seasonal maintenance, which involves with additional costs.

Squares and markets covered mostly with impermeable pavement do not provide adequate water flow, which can lead to flooding of buildings on the frontage. The lack of adequate shade causes the square surface to heat up, raising temperatures and lowering humidity. As a result, the resulting areas become significantly less friendly to residents as well as the climate of the surrounding area in its surroundings.

Method and scope of study

Markets and squares are an important element of urban areas, especially for smaller-scale urban layouts. Many projects aimed at improving such spaces do not positively affect on their situation and even cause degradation in terms of environment, functionality, aesthetics and identity.

The scope of the research was urban spaces in the form of squares and markets, in whose area revitalization activities have been carried out over the past 20 years. With the help of a case study, it was decided to select small-sized towns (from 2.5 to 27 thousand inhabitants) located in central Wielkopolska. Among them, a comparative analysis of the existing land use situation was applied to the layout before its transformation as a result of revitalization. This made it possible to identify the changes that have the strongest negative impact on the perception of the renewed area, as well as to select the spaces characterizing the greatest contrast in layout and amount of greenery. In this way, the survey of spaces was narrowed down to 3 squares and 4 squares in a total of 7 of the following towns: Czarnków, Kórnik, Murowana Goślina, Rogoźno, Ryczywół, Wągrowiec and Środa Wielkopolska.

A comparative analysis was used to show the biggest changes brought about by revitalization. Spatial layouts from the early 21st century were juxtaposed with their current situation, thus assessing changes the amount of greenery in the study area and the change in its function. Then, through a site visit, the current development of the area was checked. In this way, the main functions performed by a square or market year-round, the elements of small architecture that stand out in their space, and what impact they have on its identity.

The results of the conducted analyses are summarized in tabular form.

Table 1. Changes in the development of green areas and the share of biologically active areas in the area of squares and markets of selected localities. Study by K. Tomczak

markets of selected localities. Study by K. Tomczak											
Share of biologically active area after revitalization	3%	7%	%6	21%	10%	7%	%				
Development of greenery after revitalization	A row of trees with low plantings along the southern and eastern borders of the market, a lawn with flowers in the northeastern part	The rows of trees in the northwestern and southeastern parts of the market and along the northeastern frontage, supplemented by pots in the central area	Irregularly spaced lawns of various geometric forms, some supplemented with single plantings, rows of trees along parking spaces in the eastern part of the market, supplemented with pots in the central area	Walking alleys with rows of trees along the eastern and western borders of the square	a strip of dense plantings around the market square plate on the north, east and southwest sides	a belt of medium-sized plantings and individual trees surrounding the market on the north, east and south sides, supplemented by pots on the west side	rows of trees with low plantings along the northwest and southeast borders of the market, shrub plantings along the northeast border				
The year of revitalization	2011	2015	2016	2018	2016	2009	2011				
Share of biologically active area before revitalization	76%	11%	24%	37%	29%	36%	13%				
Development of space before revitalization	Square in the southern part of the square, lawns along the western and northern sides of the square	A square in the central part of the square, a row of trees along the northeast frontage, lawns in the southeastern part of the square	regular arrangements of lawns with plantings, square in the northwestern part of the square	Square, walking avenues in the northern part of the square	square	square in the northern part of the market, lawns with medium plantings around the parking lot in the southern part of the market	Lawns with rows of trees along the northwest, southwest and southeast borders of the marketplace				
Surface	4520 m ²	10170 m²	8630 m²	7400 m ²	5800 m ²	3670 m²	3730 m²				
Type of space	Market	Square	Square	Square	Market	Market	Market				
Population	10-15 k	5-10 k	15-20 k	10-15 k	2.5-5 k	25-27 k	20–25 k				
City	Czarnków	Kórnik	Murowana Goślina	Rogoźno	Ryczywół	Wągrowiec	Środa Wielkopolska				
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Table 2. Elements and objective components of the development of the space of selected squares and markets after revitalization works. Study by K. Tomczak

Elements referring to the triad or local history		Statues of Jan of Czarnków and an insurgent of Wielkopolska	O C	monument commemorating the insurgents of Wielkopolska	OL	Sculpture of bullock	Ö	reconstruction of statues of saints
	characteristic elements	Ö	thumbnail of the square	flagpoles	pergola	pergola	sundial	flagpoles
	public transport facilities	O _C	bus shelter	OU	OU	bus shelter	bus shelter	OU
Elements of small architecture	commercial and service facilities	small gastronomy with beer gardens	beer gardens of premises located in the frontage of the marketplace	OU	small catering	OU	OU	OU
Elements of sm	monuments and statues	occur	2	occur	occur	occur	Ou	occurs
	fountains	occur	occur	occur	OU	occur	occurs	occurs
	functional forms (seats, trash cans, lighting)	occur	occur	occur	occur	occur	occurs	occurs
Parking spaces or parking lots		occur	occur	occur	occur	occur	occurs	OU
Upgraded		occur	occur	occur	occur	occur	occurs	occurs
City		Czarnków	Kórnik	Murowana Goślina	Rogoźno	Ryczywół	Wągrowiec	Środa Wielkopolska
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Transformation and the role of greenery

Greenery transformations resulting from implementation projects are characterized by a significant reduction of biologically active area in market spaces. Most often, they were carried out in a drastic manner, by completely or significantly leveling the previously existing vegetation. The square space was then supplemented with new, orderly, but much poorer greenery. At present, the introduced vegetation is usually limited to single plantings, formed by rows of rachitic, medium-sized trees and shrubs, placed on small area lawns or in pots made of concrete or wood.

The most drastic examples of the above transformations are the spaces in Wągrowiec and in Kórnik. As a result of the revitalization of the market square in Wągrowiec, the existing greenery system was removed almost entirely. By eliminating lawns and low greenery in the southern part, while from the square in the northern part, only three trees located within its borders were preserved. As an addition, only a strip of hedge was introduced, routed along the three borders of the square, as well as pots with trees on the western side.

In the case of Kórnik, the already small amount of greenery (11% of the square's area) was reduced almost fourfold. The square located in the center of the space and the lawns were eliminated, and instead of them rows of small trees appeared – in the northwestern part and in the parking lot on the southeastern side. The square is complemented by pots with trees, shrubs and seasonal flowers.

With the removal and transformation of greenery, the function they serve in space changes. Among the analyzed markets and squares, before revitalization, 6 out of 7 were mainly filled by squares (Wągrowiec, Czarnków, Kórnik, Rogoźno) or greens (Murowana Goślina, Ryczywół) fulfilling a recreational and leisure function and constituting the surroundings of monuments. Due to the reduction of greenery, new vegetation arrangements are mainly limited to rows of trees supplemented by low or medium plantings. Thus, two main methods of forming greenery layouts in urban spaces can be noted.



Fig. 1. Market square in Czarnków before revitalization orthophotomap. Source: https://mapy.geoportal.gov.pl/imap/lmgp_2.html?gpmap=gp0



Fig. 2. Market square in Czarnków after revitalization orthophotomap. Source: https://mapy.geoportal.gov.pl/imap/lmgp_2.html?gpmap=gp0



Fig. 3. Independence Square in Kórnik before revitalization orthophotomap. Source: https://mapy.geoportal.gov.pl/imap/Imgp_2.html?gpmap=gp0



Fig. 4. Independence Square in Kórnik after revitalization orthophotomap. Source: https://mapy.geoportal.gov.pl/imap/Imgp_2.html?gpmap=gp0



Fig. 5. Powstańców Wielkopolskich Square in Murowana Goślina before revitalization orthophotomap. Source: https://mapy.geoportal.gov.pl/imap/lmgp_2.html?gpmap=gp0



Fig. 6. Powstańców Wielkopolskich Square in Murowana Goślina after revitalization orthophotomap. Source: https://mapy.geoportal.gov.pl/imap/lmgp_2.html?gpmap=gp0



Fig. 7. Karol Marcinkowski Square in Rogoźno before revitalization orthophotomap. Source: https://mapy.geoportal.gov.pl/imap/lmgp_2.html?gpmap=gp0



Fig. 8. Karol Marcinkowski Square in Rogoźno after revitalization orthophotomap. Source: https://mapy.geoportal.gov.pl/imap/Imgp_2.html?gpmap=gp0



Fig. 9. Market in Ryczywół before revitalization orthophotomap. Source: https://mapy.geoportal.gov.pl/imap/Imgp_2. html?gpmap=gp0



Fig. 10. Market in Ryczywół after revitalization orthophotomap. Source: https://mapy.geoportal.gov.pl/imap/Imgp_2. html?gpmap=gp0



Fig. 11. Market in Środa Wielkopolska before revitalization orthophotomap. Source: https://mapy.geoportal.gov.pl/imap/lmgp_2.html?gpmap=gp0



Fig. 12. Market in Środa Wielkopolska after revitalization orthophotomap. Source: https://mapy.geoportal.gov.pl/imap/Imqp_2.html?gpmap=gp0



Fig. 13. Wągrowiec market before revitalization orthophotomap. Source: https://mapy.geoportal.gov.pl/imap/Imgp_2. html?qpmap=qp0



Fig. 14. Wągrowiec market after revitalization orthophotomap. Source: https://mapy.geoportal.gov.pl/imap/lmgp_2. html?qpmap=gp0

One of them consists in introducing in the area of the market plate an arrangement of formed lawns filled mainly with low and medium vegetation, sometimes with a tree placed in the center (Murowana Goślina) or rows of low trees (Kórnik). They are aimed at improving the aesthetic value of the space or, through their forms and their arrangement, creating layouts, directions, giving the space in which they are located a more representative character. Another method is to locate plantings within the limits of the square's slab, on several sides, which enclose the space in a concrete way (dense vegetation of different heights – Ryczywół) or conventional (rows of trees, sometimes supplemented with lower vegetation – Wągrowiec, Czarnków). It can be considered

that greenery shaped in this way creates another urban interior in the market area, constituting its walls. This allows it to perform the function of fencing off, separating the square from oppressive spaces, which are usually traffic routes and parking lots.



Fig. 15. Condition of greenery in the square in Rogoźno. Fot. by K. Tomczak, 2024

Note the example of the renovation on the square in Rogozno, where, despite a significant reduction in the existing greenery, it has retained some of its functions. The rows of trees located on the eastern and western sides, which were additionally supplemented with dense shrub plantings. Thus shaped, the greenery both demarcates the space of the square from the surrounding communications, and maintains its recreational and leisure function through the walking avenues running through it, with seats placed along them. Unfortunately, a significant negative aspect of this greenery, is its state of maintenance, depicted by trees infested with fungal diseases and trampled and shriveled lawns.

Space development

With the renovations carried out, it was also decided to analyze the elements and objects that make up the development of the space of squares and markets.

The most distinctive aspect that drew attention was the completion of pavement upgrades in the form of replacing the flooring, which was carried out in all the surveyed localities. The newly used materials mainly consisted of concrete slabs and paving stones maintained in shades of gray and yellow. The patterns of the pavement were formed into geometric arrangements of different scales, which mainly constitute a checkerboard (Kórnik, Rogoźno, Wągrowiec, Środa Wielkopolska), but also stripes (Czarnków) and more complicated forms (Ryczywół). An exception is the square in Murowana Goślina, where the floor layout is devoid of a specific geometry. There are sharp as well as round forms here, arranged in a chaotic manner without much justification.



Fig. 16. Market square in Czarnków Fot. by K. Tomczak, 2024



Fig. 17. Niepodległości square in Kórnik Fot. by K. Tomczak, 2024



Fig. 18. Powstańców Wielkopolskich square in Murowana Goślina. Fot. by K. Tomczak, 2024



Fig. 19. Karol Marcinkowski square in Rogoźno. Fot. by K. Tomczak, 2024



Fig. 20. Market square in Ryczywół. Fot. by K. Tomczak, 2024



Fig. 21. Market square in Wągrowiec. Fot. by K. Tomczak, 2024



Fig. 22. Market square in Środa Wielkopolska Fot. by K. Tomczak, 2024

As mentioned earlier, pavement transformations in revitalization projects involve with the reduction of biologically active area, but also with the deployment of other functions in the space. The most common elements in or around the square slab area are dedicated parking spaces for cars, which are present in the case of 6 out of 7 localities. The revitalization measures carried out did not affect their occurrence in the space, but caused a reduction in their number by changing their location. Spaces designated for parking spaces were removed from the square slab, and instead were located on the periphery of the square (Murowana Goślina, Kórnik) or around it, along traffic routes (Wągrowiec, Czarnków). In some cases, the separated parking lots were left in their original locations, and the changes made were limited to upgrading them. An example of such an action is Ryczywół, where the space set aside for cars accounts for nearly half of the entire market square.

In the case of all squares, small architectural objects were replaced or placed. The main elements were seats, which were primarily benches, followed by trash garbage cans, lanterns and flower pots, made of wood, concrete and steel. Another very popular solution (6 of 7 localities) is to place fountains in the markets and locate them in the central points of the space. Most often, they occur in the form of a floor (Czarnków, Kórnik, Murowana Goślin, Rogoźno, Środa Wielkopolska), distinguished by placing a surface around it, arranged in a characteristic arrangement or using a material of a different color. Another solution was used in Wągrowiec, where the fountain has a more traditional form, with additionally placed lighting. In addition to the aforementioned objects, one can also find elements characteristic of particular spaces or found only in specific markets. These include pergolas (Rogoźno, Ryczywół), a sundial (Wągrowiec) and a miniature square (Kórnik).

Among the large number of objects, development of the analyzed spaces, one can also distinguish various types of monuments referring mainly to historical figures and events. Unfortunately, among the 5 localities where they are located, in only 3 of them elements referring to culture and local history occur in a very negligible number. On the square in Murowana Goślina there is there is a monument commemorating the insurgents of Wielkopolska. In Czarnkow there is located a sculpture referring to the same events and another one depicting the medieval chronicler – Jan of Czarnkow. A statue of an ox, referring to the town's coat of arms, has been erected in the Ryczywole market square.

Conclusions

Through the examples presented, it is possible to indicate the basic activities to which the transformation of selected squares and markets was limited, and how they present themselves in functional terms. The changes resulting from them deviate from the most important revitalization assumptions and were mainly closer to construction or accompanying revaluation activities.

The most noticeable effect is the marked modernization of the space resulting in the loss of its individual character. In all analyzed spaces similar materials are used, both for paving and small architecture objects. Elements introduced into the space have modern forms – most often simplified, referring to the prevailing trends. In this way, reference to the history of the place and its local climate is also disappearing. A similar situation can be observed in the cities of Lubuskie province. An analysis by D. Dymek and J. Jóźwiak shows how

changes in market areas have led to the disappearance of the geniusloci of a place.² Spaces began to adopt a similar layout with the use of the same materials and duplication of small architecture elements. The similarity associated with material and compositional solutions, together with the lack of elements referring to local culture led to the unification of all spaces.

Another aspect is the clear tendency to reduce the biologically active area. In all analyzed spaces, even with less invasive transformations, the amount of vegetation was reduced by at least half. This was accompanied by the cutting down of existing trees and the introduction of new, younger plantings in their place. Such activities are not limited to the Wielkopolska region. The gradual "concreting" of public spaces can also be seen in localities in other parts of Poland. This fact is due to the fact that landscape analyses are not carried out before revitalization work is undertaken. In the case of some spaces, the removal of disordered greenery and its replacement with paved surfaces results in the exposure of objects, disrupting the perception of an urban interior such as a square and its urban layout³.

This leads to another problem of low functional diversity in market spaces. Developed areas are adapted to hold occasional public events in their place. In the case of permanent functions, they focus mainly on transportation and recreation. Due to the low diversity of forms and the number of small architecture elements used, these spaces become unattractive for recreation and the needs of local residents. As a result, squares and market squares become places where traffic routes, both pedestrian and vehicular, intersect and vehicular. In this way, they lose their character as functionally sustainable spaces, which also provide leisure and recreation for local residents and those who use them.

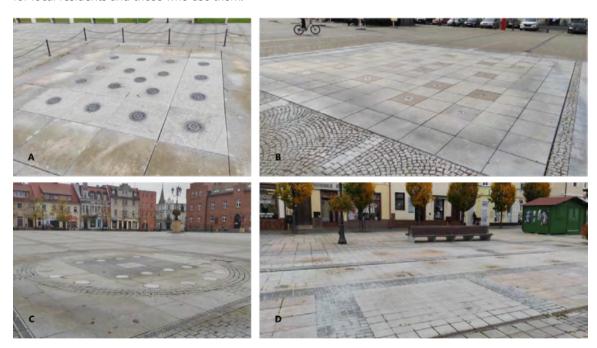


Fig. 23. Surface fountains located in the analyzed markets and squares. A – Rogożno, B – Czarnków, C – Środa Wielkopolska, D – Kórnik. Fot. by K. Tomczak, 2024

² D. Dymek, J. Jóźwik, Kształtowanie placów miejskich na przykładzie miast województwa lubelskiego, AnnalesUniversitatisMariae Curie-Skłodowska Sectio B, vol. LXXVI, 2021.

³ A. Kozak, K. Kimic, Rola zieleni w procesie przemian zagospodarowania rynków miasteczek Lubelszczyzny, Kwartalnik Architektury i Urbanistyki, no 4, 2014, 5–36.

Summary

The revitalization of public spaces, in theory, should be done in a comprehensive manner and should have the effect of improving it on many levels. Through transformations performed in a "superficial" way, without a thorough understanding of the character of the place, the changes that occur to some extent affect its degradation. It is recognized that the biggest problems include: unification of space, lack of diversity of functions and "concreting" of the area.

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In conclusion, the transformation of the central areas of towns and cities such as markets and squares should be more adapted to the needs of modern users while maintaining the relevant historical values. In addition to seasonal functions such as public events, there should be substantial spaces that allow for recreational as well as representative functions. The best answer to these needs is to incorporate greenery into them, which, while maintaining the appropriate form and its scale, can positively influence the local climatic situation and the visual perception of market spaces and their historical layouts.

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