Impact of Wartime Destruction and Post-War Politics on the Social Reconstruction of a Modern City – on the Example of Magdeburg

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Abstract. Magdeburg seems to be a particular example illustrating complex urban processes of the post-war development of Central and Eastern Europe. Devastations of the Second World War are still visible in the multiple aspects of the city life – its spatial form, social aspects, cultural heritage and others. Post-war ‘cleaning phase’ exceeded the regular debris removal and caused further elimination of city heritage. Continued within the next decades rebuilding processes, especially under the Socialist Realism impact, transformed the new plan into a patchwork derived from alien urban patterns, neglecting and erasing previous identity. The 1990-ies commercial aspects contributed to further changes, unfortunately also redeveloping the city centre into one-use form. Unwanted urban qualities resulted after 1990 in the enormous shrinkage, followed by the vast demolition of the housing areas. The paper refers to the post-revitalisation aspects of the IBA Saxony-Anhalt 2002-2010 and further involvement of the Kompetenzzentrum Stadtumbau projects. The recent workshops have driven the attention to the housing heritage of the 1920-ies, which became the topic of the revitalization workshop prepared by international teams from University of Applied Sciences at Dresden (a coordinator), Università degli Studi di Padova, Cracow University of Technology, Lahti University of Applied Sciences and Szent István Egyetem University in Budapest. The program was coordinated by Kompetenzzentrum Stadtumbau Magdeburg with the collaboration of the Ministry for Regional Planning and Traffic of Saxony-Anhalt and the City of Magdeburg. The part of the paper presents various aspects of revitalization of the “Cracau Estate”, the proposal involves traffic calming aspects and social participation.

1. Introduction

The history of Magdeburg reflects the situation of other East German cities, which have been heavily damaged during the Second World War. The post war processes of rebuilding had visible consequences of spatial transformations of an urban form. Magdeburg was also impacted by German reunification, facing high demographic changes. Seeing the city from a significant time perspective allows to raise a question if the spatial transformation could affect the social conditions of the city?

Magdeburg is facing social problems, as its population is getting older and still shrinking. Its urban conditions need to be reconnected to the real social demands and communities. These issues became the basis of the International Building Exhibition IBA Urban Redevelopment of Saxony-Anhalt program 2002-2010. Magdeburg still needs a support in the further development, which became an important question for the international workshop under the leadership of Kompetenzzentrum Stadtumbau Magdeburg in March of 2017.
2. Resilient City History

Magdeburg origins trace back to the times of emperor Charlemagne, from the beginning associating its past with military history of Europe. The city became famous in the urban history with its Magdeburg Law, which was introduced to establish settlement regulations in multiple Middle Europe cities, including Krakow and Wroclaw among others. Magdeburg’s long past had at the beginning catholic roots, as emphasised by the settlement of the Archbishopric in 968 [1]. While 16th century and the personal influence of Martin Luther turned the city into the Protestant Reformation movement, transforming Magdeburg into strong Protestantism centre, one of the most important German cities of the time. In 1631 during the Thirty Year’s War a military attack of catholic forces, called ironically ‘Magdeburg Wedding’, left the whole area in complete ruin. Only the stone basements of the houses and some churches survived. Most of the population was killed or taken away by the J. Tilly’s army. Out of 20,000 inhabitants only 400 people survived. As often the case of cities destroyed by enemies, in contrast to the ones destroyed by natural disasters, Magdeburg was rebuilt. The process showed enormous ability of the city to rebirth. The pattern followed traces of the survived footprints of the houses, introducing also major new street axes – as proposed within the rebuilding plan of Otto von Guericke. [2, 3]

Later centuries of prosperity, particularly the era of industrialisation of the 19th and the beginning of 20th century, led to the spatial and architectural development. The end of a Second World War ceased the time of stability. The British Royal Air Forces air bombing on 16th January of 1945 completely devastated the city. Sir Arthur Harris, the head of the RAF estimated the destruction of Magdeburg at 41%, at the area exceeding 300 ha, but the real damage was much higher [4]. The main impact of the attack was directed to the centre, leading to the complete destruction of the core of the city. Later evaluations of U. Hohn estimate the level of destruction as higher than 50% [5, 6]. The secret report of W. Churchill prepared in April 1945 shows how dramatic the results of strategic bombings were: „It seems to me that the moment has come when the question of so called ‘area bombing’ of German cities should be reviewed from the point of view of our own interests. If we come into control of an entirely ruined land, there will be a great shortage of accommodation for ourselves and our Allies: and we shall be unable to get housing materials out of Germany for our own needs because some temporary provision would have to be made for the Germans themselves.” [7, 8] In the direct war attacks the city lost several thousands of inhabitants. Many citizens did not survive the war or did not decide to come back to the destroyed city. We might compare the demographic peak of 1940 and 346 thousand inhabitants to the number of only 175 thousand who decided to live in Magdeburg just after the war [3]. Even so destructed, for the second time in its history, the city was able to literary get reborn from the ashes.

3. City centre – two phases

3.1 Socialist Realism period

After the war a city was cleaned of ruins. Its amount was enormous, reaching around 6 million cubic meters. The process of removing of debris exceeded the process of regular purification. It was continued in the following years, allowing for the further elimination of ‘unnecessary buildings’. As in other East German cities, the monumental buildings tended to disappear, not because of their bad technical condition, but because of other, often ideological reasons. Historical monuments were demolished if they were not fitting the new plans. In Magdeburg several historical churches were destructed in the after war decades. Among them was the famous St. Katherine church, which survived the bombing, but was destroyed for the purpose of widening the main street intended for manifestations.

Almost completely cleaned city surface became a real ‘tabula rasa’ letting the planners to start again. Magdeburg faced substantial transformations, being left on the ‘eastern side of the curtain’, as a part of established a few years later German Democratic Republic. The moment of a proper reconstruction of the city coincided with the publication in 1950 of the 16 Urban Design Principles, which shaped also

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[1] After: http://www.magdeburg-tourist.de/Start/Tourism-Leisure/Portrait-of-the-city/The-Chronicle-of-Magdeburg/index.php?NavID=115.4&object=tx|115.14.2&La=2; (Access: 21.03.2018).
other German cities, as Dresden, Leipzig or Berlin. Urbanisation followed the new social order, reflecting the expected political life of a socialist country. Within the new ‘Principles’ the role of the centre was completely transformed. It was to become the decision-core of the city and the political centre of life. Its form would be determined by political, administrative and cultural functions. Public squares and main streets were planned to serve for political manifestations and marches. [9, Figure 3]

Figure 1, 2, 3. Magdeburg – the new typology of the post-war city. Historical Monastery of Our Lady surrounded by the later formed urban spaces (to the top). Historical parts of the city which survived the war destruction at Hasselbach Platz (bottom left). Socialist realism city extension by Ernst-Reuter-Allee (bottom right); (Photos of an Author).

As a result of this ideological influence on the spatial rebuilding process, Magdeburg became a different city, not reflecting its historical outline and architecture. Later modernist influence on the adjacent to the centre housing areas caused also the de-densification of the city – as compared to the previous structure. The other decisive change was a functional approach allowing for zoning the city, which certainly limited many aspects of a previous vibrant social life. [Figure 1,2]
3.2 Commercialisation phase

Another moment, which significantly affected central areas of Magdeburg was the fall of the Berlin Wall. Since 1990 political changes were reflected also by proceeding spatial transformations in the former East Germany. The long-awaited access to consumer goods has contributed to the acceptance of many controversial transitions. One of the visible symptoms of the change become an introduction of vast commercial spaces to the central areas. They were often introduced in the most attractive part of the city. In case of Magdeburg the city core was almost cut in half with the sequence of shopping malls starting at the railway station and finishing at the river banks. To ensure the proper amount of customers, the basement level of the city was transformed into the enormously vast underground garage.

In a sense, the entire inner area has been transformed into a shopping centre. The mono-functional axis has replaced many other functions and especially little shops of the inner city areas. Customers moved to comfortable, isolated from the outside conditions, but still artificial and privately controlled spaces. As the result, outer streets were ravaging. At the same time the vibrant city's life was performed inside a huge downtown shopping mall. Proponents of the concept think that introduction of shopping function has maintained residents inside the city and attracts them to the city centre. For opponents, the functioning of an extensive complex of buildings takes place at the expense of the natural city's public life.

4. Facing the shrinkage

4.1 Demography versus the political change

The political and economic change of 1989 was a beginning of dramatic socio-economic and ultimately also urban disaster. The transition was followed by the simultaneous decrease of importance of heavy industry. As to exemplify, in Magdeburg out of 167,000 of workers in 1990 only 85,000 were employed in 1999 [10]. West Germany and their major cities became naturally more attractive for young and middle age generations, who left their homes, shops, little enterprises and moved in pursuit of a better future. Consequently, their former places of residence, still belonging to cooperatives, emptied out. Abandoned apartments were subject to devastation and gradual deterioration. Closed shops and restaurants did not encourage people to return. Depopulation of former East Germany became alarming and further processing. The particular example of this unwanted phenomenon become Saxony-Anhalt, which faced the population drop reaching 20% or even 30% [11]. Projected population decline by 2025 in case of small communities, as for example Schierke by Wernigerode, could be as high as 50% [12, 13].

Even such strong industrial centres as previously was Magdeburg, did not manage to avoid the problem. Further numbers illustrate the demographic catastrophe. In 1990 the city has a population of 277,000 inhabitants [1], which was just after the peak of 1989, when Magdeburg reaches 288,355 people [10]. In 2013 there is only 233,000 people, which shows a drop of almost 16%. At the same time the average age of an inhabitants grows from 38,3 to 45,4 years. The number of citizens of 65 and older rises up from 13,1% to 23,84%. [14].

4.2 Shrinkage vs IBA Saxony-Anhalt 2002-2010

Facing the enormous shrinkage, Saxony-Anhalt is looking for new models, which would counteract the negative processes. International Building Exhibition – IBA conducted in the years 2002-2010, seems to be a unique example of various and creative approaches. Up to date, IBA programs have been focused on larger cities, and more ‘flagship projects’ as in Berlin. The IBA Saxony-Anhalt revitalization works were carried out in 19 middle-size towns, including Aschersleben, Bernburg, Bitterfeld-Wolfen, Dessau, Halberstadt, Halle, Stendal, Köthen, Lutherstadt Eisleben, Wittenberg, Magdeburg, Merseburg, Naumburg, Quedlinburg, Sangerhausen, Schönebeck, Staßfurt, Wanzleben and Weißenfels [11]. Their situation illustrates difficult consequences of the unification.
Figure 4. The “Neu Olvenstedt” Estate in Magdeburg - a model shows the process of planned demolition starting from 2002: buildings signed in red were demolished, of the marked with blue some upper floors were dismantled; (Author’s photo of a model, source [14]).

The population decline seemed to be a reluctantly moved topic. Negative demographic and economic forecasts not only emptied the cities, but also discouraged private entrepreneurs to invest further. The situation became more and more difficult to reverse. More and more limited possibility of creating new jobs forced other groups of people to migrate. P. Oswalt, who describes the foundations of the IBA program, within the comprehensive publication of the distinctive title “Less is Future”, writes how difficult it was for planners to establish adequate rules [15]. Newly formulated assumptions included a concentration on the city centre. This approach stayed in visible contrast to urban planning methods applied in the German Democratic Republic. During GDR times planners used to move investments to the suburbs. Continuous development of peripheries had negative impact on the condition of central areas. Presently the restoration of the city's identity, by strengthening its centre, can become a very important factor in revitalization. [15, 16]. The IBA planners had to seek solutions in many aspects alternative to the standard. One of the most important factor was to find new stakeholders, who would not be great entrepreneurs at this particular case. The potential needed to be carefully constructed, basing on the local communities. IBA lists many smaller organisations, as housing cooperatives, ecclesiastic and religious communities, independent NGO and other associations of inhabitants. [17]

Demographic shrinkage at the scale experienced by Saxony-Anhalt, concerns actually the real demolition of buildings. It becomes a necessary action, trying to solve particularly difficult social situation of people living in empty houses or estates. Urban restructuring involves planned demolition or dissembling of the higher floors of buildings. It becomes a particularly complex process for planners, architects, but most of all to the inhabitants and cooperatives. Social involvement and understanding appears in this case essential. Each demolition decision requires to convince the owners, neighbours and should be a result of negotiations. Landscape architecture becomes a new important factor of the post demolished city. [16, 18]

Destruction of existing buildings is one of the most important and the most difficult operations undertaken in case of shrinkage. In the years 2001-2010 Saxony-Anhalt becomes the experimental ground, where the architects and urban designer need to plan the demolition of the city parts. The range of the project is enormous. As for an example in Ascherleben 1,200 housing units were demolished, in Hansestadt much more, reaching 4,238. Magdeburg takes at this scale the leading position. In the year 2000 one of the five apartments in the city stays empty. If we transform it to the numbers, there are 29,473 inhabited housing units [10]. In 2003 the city is facing famous demolition of 16th floor block of
flats at Neustadter Feld [14]. But the destruction peak comes a year later, when 2,127 housing units get destroyed [10]. Within the years of 2002-2009 in Magdeburg there were 8,248 housing units demolished. [Figure 4]

The shrinkage is associated not only to the spatial actions. It is affecting the overall social situation of the city. Shrinkage becomes the factor, which will have a decisive impact on the future of the city and its further development, discouraging the investors to come, forcing young people to leave the city. The complexity of the situation has to force multiple actions and programs, performed on many levels of city life. Magdeburg government entering the IBA Urban Redevelopment of Saxony-Anhalt is undoubtedly looking for new ideas. The new proposals are concentrated on the main topics of “City of Science” and “City on the Elbe”. The river is to become a major axis of cultural, living and urban transformations. The projects are concentrating on the certain areas of identity, taking over the theme of “Living beside and with the Elbe”, as an implication for the people and the city to move closer to the river. Three main areas are considered as the most important: The Science Port, city centre and South-East Magdeburg. Science Port is as post-industrial area restructured for research and business as a science district, conducted within the cooperation of University of Otto von Guericke [10]. Among the major investments, there are also small interventions – as IBA Shop introduced on the ground floor of the refurbished multi-family housing block, placed at the Elbe. The space is used for exhibitions offering information about Magdeburg urban history, adapted also for common workshops, conferences and lectures. It is understood as a place of “communication”, [10].

IBA projects are working with greater or lesser success. The most important element of the program, was to show the citizens, that it is also due to their understanding and care, that the city can recover. Turning attention of the inhabitants to their city was an important sign of giving Magdeburg another chance.

5. In the search of stable development
5.1 Integrated Urban Development Concept ISEK – Magdeburg 2025
The city is slowly getting to another phase, seeing its situation much more carefully. The drop of the population was slightly halted. The city planners are still concerned about the future, as the Head of the Planning Department Heide Grosche, but the city is slowly gaining its population. Present forecasts predict the drop from -2,61% to 1,84% in the years 2014-2030. The most probable would be a change of -0,25 %, which is not too dramatic [3, 19]. But does it mean that Magdeburg is over its demographic catastrophe? The gain is reached due to the incomers, not through the stabilised population growth [3]. It clearly means, that the city still has to work on its identity. An important element of further planning proposal, introduced by the city, as presented by H. Grosche, became an Integrated Urban Development Concept ISEK for Magdeburg 2025. The plan is continuing the IBA idea of reinforcing the city centre. The last years seem to re-evaluate and strongly come back to the historical sense of the internal core. ISEK is also aiming at planning on densification of the central area. Magdeburg wants to be a city of “short distances” which should help the inhabitants to identify with the central functions, while having good accessibility to them. [3].

The 2025 perspective is strongly associated also with an issue of Magdeburg as a Capital of Culture. In case of many other cities, belonging to the map of European Capital of Culture become a turning moment in the history. As to remind Krakow after 2000, Graz after 2003, Mons after 2015 or recently Wrocław. Magdeburg is also preparing for the positive feedback, but still has to undertake necessary transformations.

5.2 The revival of 1920-ies modern housing estates
Among the new perspectives searched, certain attention has been driven to the modern estates of the 1920-ies. The influence of Bruno Taut, who was invited after the First World War by Mayor Hermann Beims to Magdeburg, resulted in the creation of unique housing complexes. Taut decided not to densify any more the tight historical inner city. Instead, he developed his interests of forming resembling garden-
city concept of living satellites placed around the central city. In 1923 he prepared the Master Plan for Settlement, showing Magdeburg as a centre surrounded by new housing areas. [3, 22]

As a result, the city bloomed with multiple modern in urban design and very contemporary in function and form architecture. Also the social aspects became important, programming the layouts enabling for the access to the light, with green courtyards and connected to the outside parks or recreation areas. Modern housing complexes offered Magdeburg citizens healthy and comfortable living conditions. Architectural realizations were brave in many aspects, including also the colourful wall finish, as to express the modernist’s formal experiment [Figure 7]. Their density and character varied, showing high potential and creativity of architects of that time. The eight modern style housing estates of the 1920-ies are presently under the protection of monument preservation, including estates: ‘Anger’, ‘Curie’, ‘Herman-Beims’, ‘Heimat’, ‘Cracau’, ‘Schneidersgarten’, ‘Westernplan’ and designed by B. Taut himself and A. Glimm – Garden-City Colony “Reform”. The complexes were built in the years 1911-1939 and happily survived the bombing of 1945 which so dramatically hit the city centre. [3, 20-23]

5.3 International Student’s Workshop “Open Space Development of Modernist Housing Estates in Magdeburg”

Careful architectural revitalisation of the 1920-ies modern style housing complexes undertaken by the city helped to improve their general technical and aesthetic condition. Though the issue of social revitalisation was still left unsolved. The search for new approaches become a reason of organised by the City of Magdeburg in collaboration with Kompetenzzentrum Stadtumbau Magdeburg and University of Applied Sciences in Dresden in 2017 an international workshop. The university teams included: Università degli Studi di Padova, Cracow University of Technology, Lahti University of Applied Sciences and Szent István Egyetem University in Budapest and professors: C. Scherzer (a coordinator), E. Aarrevaara, B. Almási, L. Bortolini, P. Kowalski, P. Semenzato, D. Sizmadia and K. Racoń-Leja. The project was conducted with the cooperation of the Ministry for Regional Planning and Traffic of Saxony-Anhalt. The city invited participating institutions and their students to undertake the analysis of the complex situation of three estates, involving “Cracau”, “Herman-Beims” and Colony “Reform”. The teams prepared various proposals in the form of strategy addressed to different spatial, social, economic and ecological issues, [18, 23, Figures 5-6].

5.4 “Cracau” Estate as “The Nest”

In case of “Cracau” Estate, the basic problems are associated with an issue of the lost sense of community. Semi-public courtyards and are often taken by the private little gardens, often neglected or unused. The public areas are overwhelmed by transport functions, which is visible in other housing complexes as well. Private cars are taking the space which could be used by the community. Little garages are being implemented in the middle of formerly opened courtyards. One of the concepts prepared by the international team including: C. Moro, D. Robinson, K. Grochal, L. Nagy and V. Rolina is based on re-creation of the social identity of the place, considering it as “The Nest” for inhabitants. Future social diversification and changes, as scheduled by the authors, are associated with gradual transformations of the community areas – step-by-step changing private allotments into mostly common gardens and significantly reducing private-use areas. All changes should be introduced by inhabitants – involving the scale of change and form of usage. The place is privileged by the river front, but having in reality a little access to it. Proposed strategy would transform the Elbe boulevards into an area for people and bicycles – with calmed traffic of a one-way street. As the result we would achieve green living streets with pedestrian priority and opened spaces instead of parking areas.
Figure 5, 6. Multifamily modernist’s estates from 1920-ies: „Cracau“ Estate designed by J. Goederitz, C. Krayl and P. Wahlmann (1929-1938) and „Hermann-Beims“ Estate by W. Zabel and A. Otto (1925-1929); [20] (photos author).

Figure 7, 8. Concept of the “Colourful City of Magdeburg” - 1921/1922 original expressionist’s colour on the Otto-Richter Strasse by Carl Krayl [22]. Present reinterpretations of ‘colourful identity of a city’ - Green Citadel of F. Hunderwasser as a way to create the place in the centre
“Cracau” Estate is probably just before changes. Planned excessive investments, involving a new bridge will dramatically increase the traffic in the area. “Parking places or green areas?” – seems to be often repeated dilemma in case of all the modernists’ estates. How do we make people change their living habits? Without a goal of having green, sustainable neighbourhoods, the reduction of individual traffic and parking in the area would not be possible. Proper quality and increase of frequency of public transport, reinforced by electric car use and bicycle sharing might be listed among the proposals. Would the change be too radical? If we come back to the beginning of the “Cracau” Estate - the main means of transport was a tramline, and individual car transport was almost non-existent. As the result an estate offered vast open green and public areas – an ideal of which we might presently start to dream about again.

6. Towards final conclusions
Last century marked Magdeburg with dramatic loss of its central areas. One of the post Second World War consequences was the shift from the historical city to the new ideologically formulated central core – touched first by Socialist Realism, modernism and further changes caused by opening to the free market economy. Urban transformations could be listed among other reasons which in the past led towards the demographic catastrophe, although it could not be easily measured.

What is the identity of present Magdeburg? The city is trying to make its space more appealing to the inhabitants and tourist. Among the trials, there was an invitation of famous Austrian post-modern artist F. Hundertwasser, to transform one of the city blocks into a “Green Citadel”, placed on the previously demolished multifamily housing structure.

One may like this building or not, but its realisation seems to be a clear statement of looking for “place making” architecture. Its kitschy architecture is attractive, since so different to the mono-functional unified commercial malls [Figure 8]. Among the trials to attract to the city, the renovation of the examples of modern style architecture with its original colourful experiment initiated by B. Taut and implemented by C. Krayl seems to be much more convincing idea [Figure 7]. Magdeburg might be also regretting that it got rebuilt. Especially if compared to Dresden, which is imitating its past and identity by the controversial Neumarkt area restitution. The growing public acceptation of the process and the “beautification” of the city centre allowed Dresden to forget about the shrinkage.

The history of Magdeburg shows its certain ability to rise up from the debris. Let’s hope, that its resilient character will be reflected also in the final ceasing of still possible shrinkage. The success is always depending on the engagement of caring for their city people – which was and is a valuable feature of Magdeburg inhabitants.

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