The Silesian University of Technology

No. 3/2008

PRE-WAR SOCIAL BUILDING CONCEPTS AND THE HOUSING NEEDS OF THE TIME AS EXEMPLIFIED BY THE SELECTED SILESIAN CITIES

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Received: 15.07.2008; Revised: 25.08.2008; Accepted: 03.09.2008

Abstract

In those of the Silesian cities which belonged to Germany before World War II, such as Gliwice, Bytom or Zabrze, the residential estates built in the twenties and thirties of the 20th century were homogenous settlements showing typical architectural designs. They were built under specific political, social and economic conditions and exemplify the extensive programme of budget housing accomplished in Germany after World War I. The values of such historical houses are now being wasted, due to either negligence or uncontrolled modernisation.

This paper is a fragment of an extensive study on residential estates dating back to the years 1919 through 1945, carried out within the framework of the research project: "Historical residential estates in the Upper Silesian cities of Bytom, Gliwice and Zabrze in the years 1919-1945. Build-up typology and present condition" (grant 5 T07F 011 25). The objective of the recent study has been to analyse the history of such settlements, to point to the distinctive features of the estates dating back to the period 1919 through 1933 (Weimar Republic) and those built between 1933 and 1945 (Third Reich), to define characteristic types of the buildings in architectural and urban planning terms and to research into their present condition. The analyses provided grounds to determine the scale of the changes and to name the reasons. Tremendous changes made to the structure of the analysed estates suggest that the lack of any restrictive regulations to control modernisation of historical architecture results in the decay of the original harmony of such historical quarters. It would be of purpose if mechanisms were created to utilise the investor's potential to revitalise the historical estates in an appropriate way and to build new ones which would link contemporary architectural trends with local traditions.

Streszczenie

W śląskich miastach, które przed II wojną światową leżały w granicach Niemiec, takich jak Gliwice, Bytom, Zabrze, osiedla mieszkaniowe budowane w latach 20. i 30. XX, tworzą zwarte, jednorodne zespoły zabudowy, o charakterystycznej typowej architekturze. Powstawały one w specyficznych warunkach politycznych, społecznych i gospodarczych i są przykładem realizowanego na szeroką skalę programu budowy tanich mieszkań, realizowanego w Niemczech po I wojnie światowej. Architektura tych historycznych zespołów mieszkaniowych nieustannie traci swoje walory, w wyniku zaniedbania, bądź niekontrolowanych modernizacji.

Artykuł jest fragmentem obszernego opracowania dotyczącego zespołów mieszkaniowych z okresy 1919-1945 wykonanego w ramach projektu badawczego na temat: "Historyczne zespoły mieszkaniowe miasta Górnego Śląska Bytomia, Gliwic, Zabrza w latach 1919-1945. Typologia zabudowy i stan zachowania" (grant 5 T07F 011 25). Celem pracy jest zbadanie historii powstania tych zespołów mieszkaniowych, określenie cech odróżniających zespoły z okresu lat 19191-1933 (Republika Weimarska) i 1933-1945 (Trzecia Rzesza), określenie charakterystycznych typów zabudowy w skali urbanistycznej i architektonicznej oraz zbadanie stanu zachowania. Analizy te stały się podstawą do określenia skali zmian i ich przyczyn. Ogrom dokonanych zmian w strukturze analizowanych zespołów daje podstawę do stwierdzenia, że brak bardziej rygorystycznych przepisów regulujących modernizacje historycznych zespołów spowoduje zanik pierwotnej harmonii tych historycznych dzielnic. Celowe byłoby stworzenie mechanizmów, dzięki którym potencjał inwestora byłby zaangażowany w proces prawidłowej rewitalizacji historycznych zespołów oraz budowy nowych, które łączyłyby współczesne tendencje w architekturze z lokalną tradycją.

Keywords: Social estates; standard housing; settlements; uncontrolled modernisation; conservation guide-lines.

1. INTRODUCTION

Contemporary spatial and architectural images of Upper Silesian cities appear as highly diversified ones. Upmarket prestigious projects witness deterioration of historical estates and the architecture hardly makes any formal reference to local traditions. Such situation has resulted from both, complex history of this borderland as well as political and economic changes of the transformation period. In those of Silesian cities which before World War II found themselves in German territories, e.g. Gliwice, Bytom or Zabrze, housing estates erected in the twenties and thirties of the 20th century show homogenous and dense development of distinctive architectural patterns. They were built under specific political, social and economic conditions and are examples of the cheap housing programme, implemented in Germany after World War I. Negligence or uncontrolled modernisation contribute to permanent loss of architectural values of such historical estates. Only recently the Upper Silesian heritage has been recognised in the context of European history and as such draw some more attention. It would be then of purpose to establish certain mechanisms which would involve the investors potential into proper revitalisation of historical architecture as well as building new estates which would link contemporary architectural trends with local tradition. However, in order to appreciate and to respect the architectural heritage, it is needed to recognise and to understand the history of the region.

This paper refers to the history as well as present condition of the housing estates, built in the years 1919 through 1945, i.e. between the end of World War I and the end of World War II, in three cities – Bytom, Gliwice and Zabrze. Two periods have been distinguished within that time span – the Weimar Republic (1919-1933) and the Third Reich (1933-1945). Showing different social and economic policies those two states had also different housing policies. The objective of this paper is to place the referred housing estates in a more extensive, social and political context and to illustrate their present condition.

2. SILESIA – A REGION MEETING THREE CULTURES

The present structure of Silesia was shaped basically as a result of the Austrian-Prussian wars of Silesia in the 18th century, two world wars as well as the Polish-Czech conflict regarding Cieszyn part of Silesia. In

1741 most of the Silesian territory found itself within the Prussian borders to loose its autonomous character. In the early 19th century the region was controlled by Prussian administration (1815) and subjected to Germanization. As a result, Silesia became one of Prussian provinces, eventually divided into three administrative districts (Regierungsbezirke): Wrocław, Opole and Legnica. The social awareness of Upper Silesia recognised it as the territories of Opole District which was facilitated by rapid economic and social changes carried out in the end of the 19th and at the beginning of the 20th century. Such transformations effected from property rights granted to peasants as well as industrialisation, urbanisation and from the consequent internal and external migrations. The notion of Upper Silesia (Oberschlesien) was then commonly used in all daily aspects of the newly shaped, industrial society of Opole District. It appeared in the names of institutions, commercial groups, social and cultural associations, political parties and finally – titles of newspapers and magazines, both German and Polish. The end of World War I saw another political and spatial reorganisation which (brought) divided Silesia among three countries: Germany, Poland and Czechoslovakia. That pattern ceased to exist in 1939 when all Silesian territories were incorporated into the Reich and a new administrative unit of Eastern Upper Silesia (Ostoberschlesien) was formed.

Throughout 1941-1945 the Silesian province was again divided into two parts: Oberschlesien with the capital in Katowice and Niederschlesien the capital of which was Wrocław.

After World War I and as a result of the Plebiscite, the Silesian uprisings and finally decisions of the Versailles Treaty, Upper Silesia was divided among the Weimar Republic and Poland (1921). Detailed marking of the borderlines lasted as long as until July, 1922. The German part was then divided into two provinces: Upper Silesia (Oberschlesien) and Lower Silesia (Niederschlesien). Another part of Silesia, brought back to Poland, was organised as the Silesian District, with its capital in Katowice.

Polish-German borderline drawn against any logical economic patterns broke the homogenous economic body, separated the cities and divided industrial plants, real estates and farmlands. Soon both countries faced numerous problems including those of reorganisation of industry, introduction of changes to the communication networks, different social structure and last but not least the housing question. Mass migrations taking place after 1921 resulted in the

major shortage of flats experienced throughout Upper Silesia. The resettlement programme moved more than 100 000 people from the Polish part of Upper Silesia to the German one during two years following 1922, while nearly 100 000 migrated from German Silesia to the Polish part [1].

3. UPPER SILESIA WITHIN THE BORDERS OF WEIMAR REPUBLIC

3.1. Weimar Republic facing the housing crisis following World War I

Weimar Republic needed to overcome some growing social problems since its early days, among those the substantial shortage of flats. Moreover, remarkable parts of the rural population migrated for the cities, setting therefore new demands for urban housing development. Progressing emancipation and remarkable changes in the mores, simultaneous to the worsening economic situation, forced the mothers to take up jobs which made it even more difficult to take care of the children. Traditional German Hausfrau (housewife) turned into a working woman, aware then of her vocational identity. Such were the conditions which demanded changes in the housing structure and building small flats for the working class.

The government of the Republic took responsibility for the housing policy and actions undertaken to solve the problem were accepted as major social priorities. The grounds for the reforms were provisions of the housing law approved by the Prussian Landtag (1918) to provide "each citizen with a reliable flat meeting his capacities" [2]. Despite war damages and tremendous compensation Germany had to pay following the lost war, the government made all the efforts to build new flats. After 1924 German capital was strengthened by foreign assets inflowing thanks to Dawis programme, in this way initiating the period of the 'golden twenties' (Golden Zwanziger Jahre). In many German towns social democrats got hold of the power which made it possible to implement larger residential estate projects [3]. 1 650 000 flats were built in Germany between 1919 and 1928, a model solution to social housing projects throughout Europe. The success was possible due to relevant building law as well as organisations, associations and public institutions established to encourage mass scale building, supported also by municipal self-governments of individual lands as well as by the exhibition trade. An important organisation was then Rfg (Reichsforschungsgesellschaft für Wirtschaftlichkeit im Bau und Wohnungswesen) supporting implementation of experimental residential estate projects aimed at the optimum and economically justified size of the flat area (Existenzminimum). The leader in experimental research was Deutsche Verbund which, among other projects, initiated erection of some experimental housing estates, like for example Weissenhof in Stuttgart (1927) or Dammerstock in Karlsruhe (1928). The housing policy if the Weimar Republic followed the assumptions of the reformatory movements taking place in urban planning at the beginning of the 20th century. Those were inspired by the visionary theories of Camillo Sitte, Ebenezer Howard and Tony Garnier. The strength of the movement was proved by the great urban planning contests, like those looking for reconstruction of Berlin (1910), Düsseldorf (1914) and Wrocław (1921) [4]. The major trend was to aim at rational urban structures, ensuring proper living space for the inhabitants, which in real terms meant construction of estates surrounded by green areas, as assumed by the "garden city" concept. Immediately after World War I architects of German avant-garde tended to loosen the urban tissue and to separate the functional zones of a city.

3.2. Implementation of the housing programmes in German Upper Silesia

Considering the economic and political role of the region, the governmental programme accepted by the authorities of the Weimar Republic to improve the housing conditions after World War I, recognised the territories of Upper Silesia as a priority. The organisation which contributed most to the development of the typical Silesian housing was "Schlesische Heimstätte" (1919) founded in Wrocław by Ernst May, who also chaired it in the years 1919 through 1925. It was thanks to that cooperative that general plans for settlement development were prepared in Silesia [5]. Coherent housing policy implemented in the Weimar Republic after World War I effected in residential estates similar in their urban and architectural design as well as the details applied. Residential areas were built up with low, two-storey, detached, semi-detached or terraced houses on lots with gardens. A cuboid mass of the building topped with a gable roof, occasionally with an attic, referred back to local architectural tradition. The buildings were decorated only with a modest, repeated detail, e.g. door and window trim, typical woodwork separation and clear plaster texture. In the mid-twenties of the 20th c. German housing architecture gains simple avantgarde forms created in the spirit of "Neue Bauen".

Building of small, budget flats was supported by the state and by individual companies. In Upper Silesia such activities were performed mainly by the housing cooperatives and associations, like for example: O.S. Wohnungfürsorgegesellschaft (Wofo), Heimstätten-Genossenschaft, Gemeinnützinge Heimstätten Aktiengesellschaft für Angestellten – Heimstätten (GAGFAH) or Gemeinnützinge Heimstätten Aktiengesellschaft der Deutchen Arbeitsfront Gleiwitz (GEHAG) [6]. Modest financial resources restricted diversity of the building forms in favour of typical architecture and standardised construction. It was in "Schlesisches Heim" periodical that Schlesische Heimstätte promoted modern and cheap methods for construction of typical houses and assisted in preparation of the technical designs as well as cost estimations. Ernst May himself published a series of articles entitled "Major types of Silesian Heimstätte including the financing charts" [7], which presented 16 types of houses, including 11 singlefamily designs. May preferred low build-up as he claimed that "Preferences for single-family low housing effects from the far fetched housing policy. It needs to be emphasised that insignificantly lower cost of tenement housing means in fact no savings at all, as it brings losses to the mental health of the inhabitants" [8]. Three categories of residential houses were then distinguished: those to be erected in the urban areas, in the suburban ones and in the 'semirural' locations [9]. The functional solutions adopted for all three types assumed clear separation of the cooking and living areas. Each of the types assumed three individual bedrooms, including a place to sleep in the living room. A room in the attic usually had its own entrance from the hallway so that it could be rented if needed. Not only the layout of the houses, but also the erection techniques were standardised. The priority of all the urban planning solutions as well as the architectural and construction patterns was to lower the maintenance costs of the buildings as much as possible [10]. Consequently it determined the urban layout, the form of the building and the construction materials used [11].

In the urban planning terms:

- the buildings were grouped in estates to provide mutual protection against the wind,
- semi-detaches and terraced designs were applied for heat losses smaller than in case of detached houses,
- North South and North East South West directions of the streets were preferred. Had it been necessary to build along East West line, a functional

layout of the would have eliminated unfavourable effect of the Northern orientation,

- winding streets were designed to eliminate draughts,
- fruit trees were planted in groups to provide natural protection against the wind.

The functional layout of the buildings aimed at the most favourable heating conditions at the lowest possible energy consumption. This is why:

rooms were "insulated" from the outside by the "protecting" area (staircase, toilet, larder, closet, kitchenette, office),

to heat the building more efficiently,

porches were constructed (especially in buildings oriented towards the North).

Selection of construction methods and of the building materials was determined by the economic factors:

- cavity walls of 30 cm in thickness (one half of the brick thickness clamped with iron hooks). The cavity was filled with slag rubble or large size Schima system hollow bricks,
- roofs were covered with tiles (clay shingle),
- · attics were insulated with straw and clay mats,
- dry slag was used to insulate the part of the building without a basement,
- wooden roof cavities were insulated with slag,
- interior walls between the heated and unheated rooms were erected in layers, cavities filled with slag.

How cooperatives enhanced mass building may be analysed taking into account one of the first of those - Wohnungsfürsorgegesellschaft für Oberschlesien GmbH Oppeln - "Wofo" [12], which was established in autumn, 1922, soon after the allied occupation forces had left Silesia. The shareholders of the company were: the state of Prussia, the Upper Silesian Province, the boroughs and the municipalities. The mission of such public utility organisation was to encourage construction of small and medium size apartments in the Upper Silesian province through technical and financial support to the municipal investors, building cooperatives and private developers. Responsibilities of the company included selection of location, supply of the designs, efforts to gain funds, commissioning of construction works to the building establishments, on-site supervision as well as final settlement of the project.

3.3. Tri-city of Gliwice, Zabrze and Bytom.

The borderline drawn between Poland and Germany after World War I divided Upper Silesia along the line parallel to the cities of Gliwice and Bytom and the borough of Zabrze. The history of both, Gliwice and Bytom, dates back to the Middle Ages. Before World War I they were not only major industrial areas but also commercial and cultural centres. It was between those two that the city of Zabrze emerged to be granted the municipal rights in 1922 [13]. New reality demanded new spatial development strategy for the three border cities. The general economic reconstruction plan of the Weimar Republic comprised the project of uniform economic, administrative and social growth of the Upper Silesian Industrial Region, developed by professor Gerlach a building counsellor from Berlin (1926). The project assumed an urban zone along the Polish border, composed by the organically linked major municipalities of Bytom, Zabrze and Gliwice. Such agglomeration was supposed to form a densely inhabited industrial belt along the frontier (600 000 sq. km, population of approx. 400 000 people). Another idea proposed to incorporate three cities into one with the centre in Zabrze. Considerations were also made to demolish Zabrze and Bytom to mine our rich coal deposits underneath and to build a new city in the vicinity of Pyskowice [14]. The prospects of expansion towards the East changed the Upper Silesian policy of the Reich and projects undertaken to create new agglomeration were all given up. The concept of the tri-city remained at the design stage, nevertheless the building authorities of individual cities took into account its assumptions when drawing their own development

The explicit spatial design of Gliwice became apparent after World War I thanks to the efforts of the chief architect and head of the Municipal Building Authority - Karl Schabik. Architect and theoretician aware of the up-to-date trend in urban development, he cooperated with "Schlesische Heimstätte" chaired by Ernst May. His vision of the spatial development of the city was the resultant of the "garden city" concept and the reality of a major industrial centre. His projects were aimed at urban deglomeration and surrounding the city centre by a ring of single-family residential estates. When choosing location for his residential areas he had to take into account the existing historical buildings, the industrial plants stretching along Kłodnica Canal as well as the communication infrastructure. The major criterion however was to ensure future inhabitants with proper hygienic conditions, among those – sun exposure, green areas and ventilation. Not too big and functional residential estates were built for homogenous occupational groups (civil servants, teachers, policemen) at the south-western and north-eastern outskirts of town. The first to appear in the early twenties was "Süd" estate in Rybnicka street (Rybnikerstrasse) and next in Daszyńskiego street (Kieferstädteler Strasse). Soon after, GAGFAH building association built houses for teachers, civil servants and policemen. Simultaneously the settlement of semi-detached houses was built in Tarnogórska street. Coming closer to the city centre we could meet prestigious, yet simple in their form, houses with high gable roof and modernised, classical or expressionist detail.

The urban and architectural development of Bytom followed patterns different to those met in Gliwice.

The city was surrounded by coal mines with their safety pillars which prevented any decentralised urban planning. Therefore new buildings were located in so far undeveloped lots within the city. It was only in the years 1927 through 1928 that the mining authorities allowed for some more areas to be builtup. In this way new housing estates were built adjacent to the existing 19th century houses. The years 1929 through 1930 brought development of the lots adjacent to the railway line which appeared redundant, once new borderline had been drawn. Then small residential districts with villas for wealthy inhabitants were built. The mass of a house built in the city centre was usually cuboidal with a high ridge roof, its style bonding tradition with the expressionist form of the details. However, the avant-garde forms of residential housing could hardly be encountered in Bytom or Gliwice. Because of the safety pillar surrounding the city, larger estates were built a dozen or so kilometres West of the city centre. In 1929 a workers estate "Helenka" (Helenenhof - now within the municipal boundaries of Zabrze) was built following the design by Albert Stütz, between the villages of Stolarzowice and Rokitnica. 1930 brought completion of Kameradenschafts Siedlung settlement and soon after, a small suburban estate, called Kleinsiedlung. Before Zabrze was granted the municipal rights, construction of housing settlements was closely linked with the industrial capital and based upon the concept of a workers estate, dating back to the early 20th century. Growing importance of Zabrze as the border city was followed by the booming housing industry. Not only did the number of the newly built flats rocket but first of all, the character of the projects changed. M. Wolf who held the position of the municipal architect since 1924, promoted modern residential architecture following the "Neue Bauen" patterns [15]. The residential architecture of Zabrze. originating from that period, appears diversified. The outskirts were dominated by typical single-family architecture set in the green areas. Moving closer to the city centre, vacant lots were built up with villas for wealthy classes or dense estates of typical multi-family architecture. An example of such detached house estate is the settlement built near the city centre between de Gaulle'a street (Adolf Hitler Strasse at the time of the Third Reich) and 3 Maja street (Dorothenstrasse). The settlement includes two- and three-storey detached single-family houses with gardens. Similar groups of villas were built also in Gliwice and Bytom. After 1928 traditional multistorey buildings with high gable roof tended to be replaced by flat roof apartment blocks. Such was the group of four floor blocks with small apartments for the workers. In the west the houses were adjacent to the recreation grounds with sport facilities (stadium, swimming pool, tennis courts, playgrounds). Directly by the buildings there are geometrical quarters of the workers' gardens, playgrounds and public green areas. The state-of-the-art in residential architecture was then the estate of small flats built between Piłsudskiego and Damrota streets by DEWOG cooperative in the years 1928 through 1933. There, 10 large apartment blocks were built on a 18-hectare lot. 150m in length each, the houses are parallel to Damrota street and form 4 groups separated by wide inner squares and streets, today named Czarneckiego and Zółkiewskiego streets. The estate included also a bath house and a laundry [16]. The longest (270 m) building in Zabrze was a modern four-storey "gallery estate" built along Roosevelta street in the years 1928-1929. There are four entry doors from the street leading into the shared long galleries overlooking the yard; from those one can reach 120 apartments as well as the laundry in the attic [17]. Some interesting architectural and urban planning solutions may be also found in Słowiański square. There, buildings with steel framework faced with red brick were erected around the square in two groups connected by a walkway. Part of the estates was later demolished which disturbed the composition of the square.

4. UPPER SILESIA IN THE THIRD REICH

In 1933 when NSDAP won the power to announce the birth of the Third Reich, one of the priorities was to accomplish the planned settlement programme in the borderlands of the reformed country. New social policy of the government brought then the concept of the workers estates with household farms. Mass scale construction of houses for the incoming settlers was also supposed to reduce the unemployment rate. Responsible for the housing and social policy of the state was the German Labour Front (Deutsche Arbeitsfront - DAF). The scale of the settlement programme was tremendous comparing to the Weimar Republic period as the number of settlers increased about twenty times. To execute the building projects, DAF founded a joint stock company named "GEHAG" (Gemeinnützige Heimstätten-Spar-und-Bau Aktiengesellschaft Berlin), the performance of which was supervised by the national and regional settlement offices. Among other members, in the supervisory board of GEGAG sat Richard Preiß from Gliwice. His responsibilities were to manage operations of this organisation in the industrial region of Upper Silesia [18]. DAF programme was intended to "tie the workers to the land". Large household farms (approx. 1000 m²) were supposed to feed a family (small livestock crop plants) and to bring annual savings of about 260 marks. At the same time the monthly instalment including repayment of the credit taken to build the house and the interest rate was as little as 20 marks [19]. Once the credit was paid back the ownership title was transferred to the inhabitants. Apart from the kitchen and the bedrooms, the functional programme comprised a pigsty and some utility rooms. The space in the attic could be adapted to serve as yet another room. Construction of such settlements was co-financed by the government which supported the development of housing projects. Had it not been for the state support, the monthly burden upon a family building a house would have reached the level of 30-32 marks [20]. The basic architectural pattern for the settlements was prepared by DAF management. A simple house with a gable roof was supposed to refer back to the local tradition ("Heimatstil"). A major issue was to strengthen the social bonds, therefore the most relevant solution was a settlement of single-family terraced houses. The programme to build such estates based on the following assumptions: a house should be safe, comfortable, healthy and available to a family whose burden to maintain a house should be no bigger than one fifth of their monthly income [21]. The first model

settlement was built in 1933 in Żerniki (district of Gliwice). In 1933 "Deutscher Ostfront" reported: "(...) The total number of flats in this estate will be 147. The inhabitants are mainly miners employed in "Ludwig" and "Gliwice" collieries and workers of Gliwice steel industry. To commute to work by bicycle they need about half an hour. The settlement is located in the truly rural surroundings which ensures healthy living conditions." 1937 brought completion of the estates in Brzezinka (district of Gliwice; 246 inhabitants) and in 1941 another one was built in Wilcze Gardło (district of Gliwice) following the design by Rudolf Fischer - a German architect from Bytom. The largest settlement was built in the years 1936 through 1938 in Zabrze in Mikulczycka street (Szczęść Boże, 320 houses). There, a typical house includes 2 rooms, a kitchen, a hallway and toilet in the ground floor and one room and an attic above. Close by there were some utility sheds. These days the estate turned into a demanded residential area and the small houses are usually extended.

5. PRESENT CONDITION OF THE PRE-WAR HOUSING ESTATES

Present condition of the historical settlements is highly diversified and depends mainly on their size and location. Transformations which took place in Poland after 1989 resulted in the redefined social needs. Growing welfare and real opportunities to improve the living standards have produced the demand for better comfort of life. Separation between "expensive" and "cheap" quarters has now been even more explicit. People tend to flee from the apartment blocks to the historical residential areas where one of the fashionable locations is the pre-war "garden city" concept resulting in the changed ownership structure. Originally dedicated to particular users like civil servants, teachers, policemen or workers, the houses were owned by the municipality before the building credit was paid back (about 20 years). Current stratification of financial capabilities, functional needs and aesthetic preferences influenced a different level of preservation of the original form as well as the architectural detail. Some typical forms of up-grade activities may now be observed:

- extended mass, changed details,
- minor additions (porch, balcony), changed details
- renovation of the original state, no changes introduced
- no modernisation at all.

The original characteristic features of the residential estates originating from the above referred period are now blurring:

- primary features (history)
 - proper ratio between the built-up area and the lot surface
 - even development line, both from the side of the street and the garden
 - typical rhythmically repeating design of houses
 - typical, repeatable details (window and door woodwork), architectural framework
 - homogenous roof topping
 - standard fencing
 - utility gardens
- secondary features (present day)
 - no proportions between the built-up area and the lot surface
 - no even development line, neither from the side of the street nor the garden
 - illegible types of buildings
 - diversified details (window and door woodwork), no architectural framework
 - different roof topping
 - different fences
 - decorative gardens

Those contribute to the harmonic homogeneity and building coherence decaying throughout the estate.

Deterioration of the mining industry resulted in stagnation of typically industrial Upper Silesian cities. Among the three municipalities referred to above, Bytom is suffering the worst situation. This has been due to restructuring of the mining industry as well as mine subsidence destroying the city buildings, which even collapse under extreme conditions. The settlements inhabited mainly by the working class population have not been renovated for decades and often show very poor technical condition. However, once the economic standing of the inhabitants tended to improve, as observed year by year now, the buildings are changing: the windows are replaced, facades thermo-insulated and porches constructed. Unfortunately when renovating their flats (e.g. replacing windows) the inhabitants usually think in terms of their own apartment - not the whole block. Similarly, owners of houses, think of their houses rather than of the whole estates. The lack of relevant, valid regulations concerning modernisation of the historical buildings (or infringement of the existing ones) as well as low awareness of the inhabitants if not the authorities, each year brings the decay of characteristic features of the pre-war style in the residential estates. The need for up-grade and adjustment of the houses to the present demands is out of question. It would be helpful however if mechanisms were created to utilise the investor's potential to revitalise the historical estates in an appropriate way. Such procedures assisting the inhabitants in accomplishment of their goals could be:

- preparation of options for model solutions to reconstruct particular types of buildings,
- supplying construction designs for architectural elements and details (window division, window and door trim, etc.) for each type of the buildings,
- cooperation with other organisations (e.g. academic) to develop strategies for particular estates,
- education in the realm of spatial perception and history of architecture, already at the primary school level.

When improving the functional values, it is important and worth every effort to prevent the ultimate disappearance of the characteristic features of this specific architecture which is part of the cultural heritage of the region and emerged from the progressive urban planning ideas of the early 20th century. Growing interest in architecture of the referred period among both, professionals and academics as well as the inhabitants themselves gives hope to preserve the original form of those estates which have not yet been reconstructed.

REFERENCES

- [1] Cf. Greiner P.; Pojęcie Górnego Śląska w aspekcie historyczno-przestrzennym (The notion of Upper Silesia in the historical and spatial aspect) in Raport z sesji naukowej 80 lat Górnego Śląska (Report in scientific conference 80 years of Upper Silesia). Pszczyna 2002, (in Polish)
 - *Gabzdyl M.*; Gliwice wczoraj (Gliwice yesterday). ed. Wokół nas, Gliwice, 1994 (in Polish)
- [2] *Miller Lane P*; Architecture and Politics in Germany 1918-45, Harvard 1985; p. 87.
- [3] Urbaniak, J.; Wrocławska wystawa Werkbundu. WUWA 1929 (Wrocław exhibition of Werkbund WUWA 1929). Muzeum Architektury we Wrocławiu (Museum of Architecture in Wrocław), OW PW, Wrocław 2002; p. 21 (in Polish)
- [4] Cf. Kononowicz W.; Wrocław. Kierunki rozwoju urbanistycznego w okresie międzywojennym (Directions of urban planning development in the mid-war period). OW PW, 1997 (in Polish)
- [5] Szczypka-Gwiazda B.; Pomiędzy praktyką a utopią. Trójmiasto Bytom – Zabrze – Gliwice, jako przykład koncepcji miasta przemysłowego czasów Republiki Weimarskiej (Between practice and utopia. Tri-city

- Bytom-Zabrze-Gliwice as an example of the industrial city concept in the Weimar Republic period). Wydawnictwo Uniwersytetu Śląskiego, Katowice, 2003, p. 17 (in Polish)
- [6] Schabik K.; Gleiwitz. Dari Verlag, Berlin, 1928.
- [7] May E.; Die Grundtypen der Schlesischen Heimstätte mit Finanzierungstabelle. Schlesises Heim, heft 3, 1924, pp. 71-77, heft 4, 1924, pp. 109-115, (in German) Die Typen der Schlesischen Heimstätte. Schlesisches Heim, heft IV, 1925, pp. 137-143, (in German)
- [8] *May E.*; Die Typen der Schlesischen Heimstätte, op. cit. p. 139.
- [9] Semi-rural areas as translated directly from German were rural areas in close distance from the city, inhabited mainly by workers owning small farmlands.
- [10] Schlesischen Heimstätte verified in practice efficiency of the implemented economizing solutions by inspections to the already inhabited houses. May E.; Warmeschutz im Kleinhausbau (Thermal insulation in small houses). Schlesisches Heim, Breslau, heft 1, 1924, pp. 11-15, (in German)
- [11] Schlesisches Heim. Breslau, heft 1, 1924, p. 15.
- [12] Schabik K.; Gleiwitz. Dari Verlag, Berlin, 1928, p. 84
- [13] Until that time Zabrze, although showing city characters, remained a rural commune and was referred to as "the largest village of Europe". It was only new political and economic situation that forced granting Zabrze the municipal rights.
- [14] *Dietz D'Arma L.*; Miasto Zabrze, jego rozwój i przeobrażenia przestrzenne w Kroniki Miasta Zabrze (The city of Zabrze, development and transformations). Zabrze Chronicles 1974, No. 7, p. 151 (in Polish)
- [15] In 1928 he invited, for urban planning of the city, Gustaw Alinger an architect of gardens from Berlin and Dominikus Böhma. Together they prepared a project of development of the northern areas of the city. *Szczypka-Gwiazda B.*; Pomiędzy praktyką a utopią. Trójmiasto Bytom-Zabrze-Gliwice, jako przykład koncepcji miasta przemysłowego czasów Republiki Weimarskiej (Between practice and utopia. Tri-city Bytom-Zabrze-Gliwice as an example of the industrial city concept in the Weimar Republic period). Wydawnictwo Uniwersytetu Śląskiego, Katowice, 2003, p. 52 (in Polish).
- [16] The houses are sunlit along East-West line. They are divided by staircases into 8 segments. On each floor of the segment there are 3 apartments. Two flats incorporate each a room of 17 m², a room "chamber" of 9 m² and a living room-kitchen with a cooking aisle of 16 m² total area. Such flats were, as defined by the Germans, 1 ½ room flats with a kitchen, hall and WC. The smaller flat has one room of 15 m², a kitchen of 17.5 m², a hall and WC. Each kitchen is provided with a balcony aisle. A single building

accommodated 72 flats, to give 720 in the whole estate. Construction of the premises was financed by the state credits. The first three apartment blocks built in Czarneckiego street were furnished with central heating and each flat was additionally provided with an attic and basement. As requested by the inhabitants the following houses built had coal ovens. Later, for economic reasons, the attics were given up.

- [17] On each floor there are four 3-room flats with a kitchen, hall and WC and 26 two-room flats with a kitchenette, hall and WC. The apartments were coal oven heated, each provided with gas installation, water, electricity supply and individual basement.
- [18] Kozina I., op. cit. p. 194, after OSW, 22.XII 1936.
- [19] Deutscher Ostfront, 1933.
- [20] Deutscher Ostfront op. cit.
- [21] Kozina I., op. cit. after: OSW. 13. 111. 1938.



Figure 1. "Süd" residential estate in Rybnicka street (Rybniker-strasse) in Gliwice built by "Heimstätten Genossenschaft" cooperative, 1920 – 1921. Photo: Schabik K. "Gleiwitz", Dari Verlag, 1928, p. 83



Figure 2.
The residential estate in Rybnicka street (cf. Fig.1) after modernisation of the late nineties of the 20th c. Harmony of the façade is interfered by different types of the windows. Photo by the author, April, 2005





Figures 3 and 4.

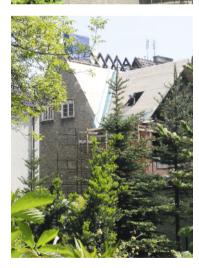
The residential estate in Rybnicka street. Examples of the original and contemporary corner window designs (modernised in the late nineties of the 20th c.) Photo by the author, April, 2005



Figure 5. Residential building in Piotra Skargi street (Dessauer-strasse) before modernisation; the estate developed by "Gagfah" cooperative, 1928-29. Photo by the author, September, 2007







Figures 6, 7 and 8. The building in Piotra Skargi street (cf. Fig. 5) upon the integrated upgrade comprising erection of the garden side wing, reconstruction of the interiors, replacement of roofing, wiring and plumbing, floors, plaster and windows. The traditional plain tile was unfortunately replaced by the valley type – "alien" to the design. Photo by the author, May, 2008



Figure 9. Residential house in Ligonia street (Seydlitzstrasse) built in the twenties of the $20^{\rm th}$ c. following modernisation of 2007. The original style of the building was carefully preserved, including the mass, the window details and the roofing. Photo by the author, September, 2008





Figures. 10 and 11.

The span of a new fence of the modernised building in Ligonia street (cf. Fig. 9) and the original, pre-war span of the fence of the property in the same street. Photo by the author, May, 2007



Figure 12.

A functionalist building in de Gaulle'a street in Zabrze by F and P. Röder, 1928. Photo after the files of PZK Kraków, 1980. Archives of the Municipal Conservator in Zabrze



Figure 13.

Present view of the residential building in de Gaulle'a street.

One of the few examples of the unchanged façade. Photo by the author, September, 2008



Figure 14.

The "gallery" estate along Roosevelta street (Kompfbahnalee) in Zabrze, 1928-1929. The bays supported on slim posts emphasise the entrance leading to the stairway from the street. The strip windows around the bays were walled during the late 20th c. and replaced by the rectangular ones. The windows were replaced throughout the estate managed by the same administrator which preserved the uniform character of the façade. Photo by the author, September, 2008



Figure 15.
The "gallery" estate (cf. Fig. 14) from the yard side. To improve the thermal efficiency of the building the originally open space stairways from the yard side were shielded in the late 20th c. with glass panes in the steel framework. All four stairways were upgraded in the same way, preserving the original, uniform design. Photo by the author, April, 2005



Figure 16.
The "gallery" estate following modernisation of one of the sections in 2008. The building is now administered by different housing communities. Renovation of the central part of the façade in 2008 disturbed the functionalist continuity of the building. Photo by the author, September, 2008



Figure 17.
The "gallery" estate: unchanged stairway in one of the originally identical segments. Photo by the author, September, 2008



Figure 18. The "gallery" estate: new glass panes of the stairway made in September, 2008. Photo by the author, September, 2008



Figure 19.

The "gallery" estate: the stairway of the modernised segment. The glass pane openings were walled in and replaced with a traditional window. The change in the detail and the aggressive colour resulted in the lost uniformity and continuity of the façade. Photo by the author, September, 2008





Figures 20 and 21.

A residential building in Damrota street (Pfarrstrasse) in Zabrze, erected by DEWOG in 1928. After the war, the originally open loggias of the bays were built up with glass. The changes introduced did not disturb the features of the style or harmony of the façade. Photo after the files of PZK Kraków, 1980. Archives of the Municipal Conservator in Zabrze





Figures 22, 23 and 24.

Present view of the residential building in Damrota street in Zabrze (cf. Figs. 20 and 21) With time passing the glass shielded bays were individually built up by the tenants. The uniform character of the façade was lost. Photo by the author, April, 2005

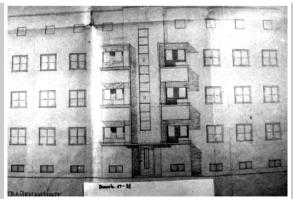


Figure 25.
The facade design for the building in Damrota street with the loggias built up later. Photo after the files of PZK Kraków, 1980. Archives of the Municipal Conservator in Zabrze