No. 9 2012

## IMPACT OF KARL HENRICI'S IDEAS ON THE DEVELOPMENT OF SETTLEMENTS IN KNURÓW IN THE YEARS 1904-1939

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German planners trying to effectively solve the problems of the complex housing situation at the beginning of the 20<sup>th</sup> century, eagerly reached for the ideas of the Austrian planner, Camillo Sittego (1843-1903), who in his designs<sup>1</sup> drew attention to architectural scale, proportions and the presence of spatial elements such as squares, green areas, as well as the breadth and the distances of buildings. It has also become important to access recreational, cultural and service facilities as easily as possible. Knurów Settlements were designed according to these principles. Their intensive development took place 1904-1939.

Keywords: industry-owned housing estates for workers, building typology, workers' Settlements, cultural identity.

## 1. INTRODUCTION

Since 1904 a number of changes were introduced in the plans and the location of the project of Knurów Settlement.

However, since its implementation up to the present, little has changed the spatial shape of the estate. The most valuable, in terms of urban design and architecture, is Settlement III for workers. It was created in a unique period, when many architects have tried to change the approach to design. Knurów Settlement III incorporated a modest type of a farmhouse with a garden, referring to the English cottage, and Henrici's ideas, visible in the urban system,

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<sup>&</sup>lt;sup>1</sup> described in detail in Sitte's work: City planning according to artistic principles.

which expressed the avant-garde ideas in architecture. The picturesqueness and the simplicity of the architecture shaped its unique character. The Settlement III for workers, along with Settlements for office workers and Settlement IV, is a great example of this type of building from the early twentieth century since it is one of the few Settlements which preserved almost unchanged to the present day. This constitutes about its uniqueness and value as a monument of architecture and thus, by cognitive identification, contributes into the protection of the cultural milieu and may help to take steps to alter the image and enhance the attractiveness of Knurów, and in the long term the quality of life.

## 2. THE DEVELOPMENT OF A COMPLEX OF SETTLEMENTS IN KNURÓW

The settlement in Knurów was associated with the discovery of coal and the construction of the mine. Knurów, a former small village, becomes a mining town [6]. The development of Settlements in Knurów took place in the years 1904-1939. This is when subsequent complexes of houses were erected, which differed in the character of building. The preparatory works aiming at constructing of the mine (exploration of resources, land dimensioning) were commenced yet in 1889. Developing mining industry required more and more employees. Thus, yet in 1903 it was obvious that it would be necessary to built a housing estate for the employees. The management of the company decided to recognize the housing needs for workers. They obtained sample projects with cost estimates from neighbouring companies: the Ballestrem and the Schaffgotsch families. Plans and designs for four-family houses and two-family houses were received, with the information that they are most willingly inhabited by workers. Basing on the data, the first designs were elaborated. These included: a four-family house, designed in 1903; houses for the I Settlement for office workers (designed in 1903, the implementation started in 1904). All properties are built in a similar style with elevations made of brick with plastered planes, tiled roofs. The system did not stand out for its special urban planning. Until 1915, the construction was maintained according to the plan, in a uniform style. This Settlement was demolished in the 80s, and the land was designed for new housing estates.

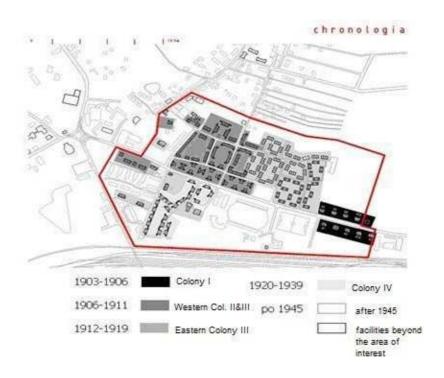


Fig. 1. The chronology of the construction of the particular parts of the estate (according to Ciosek J., 2008)

The situation changed significantly when a prominent German city planner, Karl Henrici, Professor at the Department of Architecture of the Technical University of Aachen, was invited to Knorów, presumably as a consultant to the design, by local architects in 1904, who at that time was an government counsellor, a decorated for his achievements in undercover construction and transportation. He began the work on the project by identifying the needs of local population and the elaboration of a functional program of the estate. The plan included to build a Settlement consisting of about 1,000 houses for workers and 100 houses office workers. In his note entitled "Results of site investigation visit and a meeting in Knurów 28.10.1904" Henrici writes:

"First of all, the plan should relate to the existing groups of houses; however in such a way that it would produce a closed image of the town. The plan should include the diversification of people. To achieve this, some land should be designed for merchants, craftsman, etc., or they should be exchanged" [5].

As a result, in 1904-1905 Henrici prepared a self-study model project. It assumed a north-south arrangement of roads which would join the Settlement with the plant. Three ways led to places were public utility buildings were grouped. The main road, situated in the vicinity of the mine yard [5], led to the centre (market square) of the Settlement. The market square constituted the central point of the design. It was surrounded by two-floor houses as well as the most important public utility buildings.

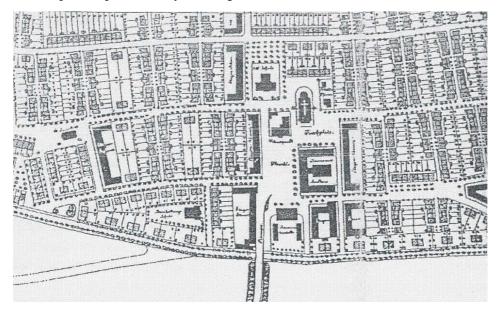


Fig. 2. Designed by K. Henrici in app. 1906 (source: K. Weissach, W. Machowsky. Das Arbeiterwohnungshaus, Berlin, 1910)

Henrici planned the settlement in the way that it would be possible to expand it as well as he foresaw the organisation of some recreational areas adjacent to the Settlement. In order to join the Settlement with the surrounding areas and make the expansion possible, Henrici planned the crossing roads up to the northern border of the Settlement. Minor streets with houses were weaved in to the frame of the main streets. They were originally planned not to be used for transport but to be used as safe places for children to play. Along the 100-meterlong street there were grouped from 20 to 28 single-family houses. Two-floor houses, apart from the market square, were also planned along the crossing roads which connected the Settlement with its outskirts.

Henrici applied various types of housing building including: detached, semi-detached and terraced houses. However, each of the houses was supplied with its own garden and outbuildings. They were designed in the rural style, as small, one-floor or two-floor houses with attics. Their scale and character referred to English "cottages" or peasant housing typical for the region. Each house was given an individual character through details. Eleven types of houses were designed, and the total number of 90 houses was erected. One type of houses did not survive to the present – it was the type of a two-family house.



Fig. 3. Settlement III for workers, 1905. Designed by K. Henrici (source: "Der Städtebau", 1906, Nr 6)



Fig. 4. Settlement III for workers, 1913. (source: K. Seidl, Das Arbeiterwohnungwesen, Kattowitz, 1913)

Settlement III in Knurów was erected in 1907-1919. Due to mining reasons, different area of location was selected for the Settlements (II Settlement for workers), Henrici's concept was not implemented. It remained only in the form of sketch design, a kind of guidelines, which further planners in Knurów referred to in their designs. It did not exclude further consultation with Karl Henrici. Some publications suggest that the author of the Settlement III for workers was Henrici himself, as well as the concept of the further extension of 1913.

Although Henrici's project was not completed in the form as proposed, he was undoubtedly the person who influenced the shape of the Settlement III for workers. The local version of the design was drawn according to his recommendations.

The plan of Knurów of 1919 finally shows the form and the extent of the realisation of Settlement III, which has been marked on the above presented plan with a darker colour.

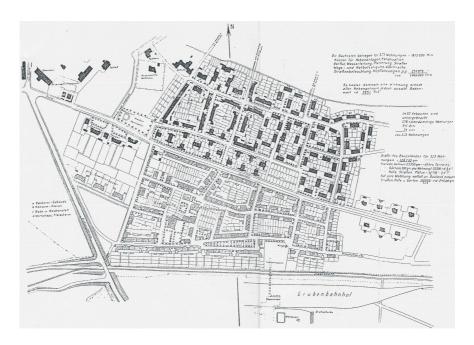


Fig. 5. The project of the Settlement to be implemented Repr. from: K. Seidl,
Das Arbeiterwohnungwesen, Kattowitz 1913

# 3. CHARAKTERISTICS OF THE URBAN ARRANGEMENT OF THE SETTLEMENT IN KNURÓW

The current area of residential Settlement III forms an almost regular rectangle of approximate dimensions 550 m by 250 m. The construction of housing estate is defined by a network of six streets of the north-south direction and three streets of east-west direction. One of the streets "crosses" the whole area of the estate and is extended along the north-south direction, linking compositionally Settlements III and IV, and the whole residential area with the area of the mine, constituting the main vertical axis of the design. A distinctive feature of the system is the lack of straight sections of streets.

The introduction of winding streets aimed at increasing the picturesqueness of the settlement, and to avoid monotony. The internal communication in Settlement III was also designed as a system of pedestrian and driving lanes, with the assumption that the space would be also used as of space for children to play. The network of streets divides the estate into several different quarters. Houses are grouped in separate quarters, thus creating interior

courtyards. The desire to diversify the space is clearly visible. Each of the resulting quarters building has its own unique character. Each of the formed quarters of building has its own unique character. The differences between the western and eastern part of the settlement are clearly visible. The western part of Settlement III is characterized by greater regularity of the street system and the building line and by a more varied architecture. There are eight types of buildings (originally 9), while in the eastern part there are only two, very similar, types. However, the whole forms a harmonious combination.

There is no schematic urban layout, irregularly shaped network of streets, the gentle curves of streets, forming picturesque outlooks, the ends of the streets are closed with perpendicular walls of building, broken lines of houses - these are the features that made it possible to create a well-balanced urban interiors with a customized scale. The climate of small-town architecture is achieved by: spectacular views, the scale of development, and intimate urban interiors.

Settlement IV for the working class is different in nature from Settlement III. Together with Settlements II and I (for office for workers) they look more like a suburb of a Prussian town. In terms of urban planning, however, it is not a special value. The original plan for the southern part of the estate, assumed the development of this part of the estate which would be compositionally consistent with Settlement III. The implementation was not realised according to the plans, and the built part does not even have a complete centre of services. Settlement IV, partially built is not a fully "closed" and "complete" system. It is clear that its further development had been planned. There were attempts to supply this incomplete system in the western part with some sports fields – the original version assumed a pitch - now a stadium was built. However, neither then nor now the parts were or are connected.

Settlement II and I (for clerks) included a lot of privately-owned areas of greenery. Currently, such a system did not survive. The composition of the estate has been changed. Development was concentrated, utilizing these large gardens for new housing, which does not merge with the preserved historical buildings.

All residential buildings, at the time of their erection, were characterised by high standards and functionality. One of the features improving the living conditions was the toilets accessible, without having to go outside, from specially designed loggias. It was a great convenience for residents, as in the previous buildings for workers, such solutions were not used. The objects within Settlements for clerks and inspectors, the sizes of apartments were larger and their standards were higher. But even here there were several types of buildings: for clerks of the first and second categories were 2-family or 4-family houses

respectively. Houses for inspectors were single-family buildings. Settlement III in Knurów was designed as a settlement-garden with greenery playing an important role. In addition to the above-mentioned green backyards and front yards, the streets were lined with trees.

The intention was that the green areas would carry some compositional (greenery along the streets and green groups at their ends) and recreational (sports grounds) features. The public utility buildings were surrounded by generally accessible common green areas. Although the existing services: a school, the post office, a factory shop and the laundry, the whole premise lack in an organised centre with services.

#### 4. BUILDING TYPOLOGY

The type of building in Settlement III for working class in Knurów is characteristic for a small-town. The parallels to this type of development can be found in the designs of such Silesian estates as: Giszowiec in Katowice, Rokitnica in Zabrze, or Settlement Załęska Hałda for working class. The inspiration for the building was a combination of the architecture of the Silesian countryside house and an English cottage.

Today, there are 13 basic types of houses in several varieties which can be differentiated in the Settlement. There was even one more type, but it did not survive to this day. The individual buildings differ in the plan, the shape of the roof or in the details (loggias, avant-corps).

Despite the large number of types of developments, the architectural uniformity was maintained in Knurów. This was achieved by using the same materials and thanks to the uniform character of the development. All the buildings are two-floor objects for four to 21 families. Driven by economic factors the idea to erect detached houses was abandoned. Each apartment for workers had a fairly large kitchen with the space for a sink.

It consisted of one or two bedrooms. It was also equipped with a veranda. Each of them had a separate entrance. Sanitary rooms were on the landing or in a utility room (located in the veranda). Housing intended for officials were larger. They are equipped with several bedrooms, a kitchen, a maid's room, a pantry, a bathroom and a hallway.

The housing estate ensured its citizens optimal and suitable conditions for life.

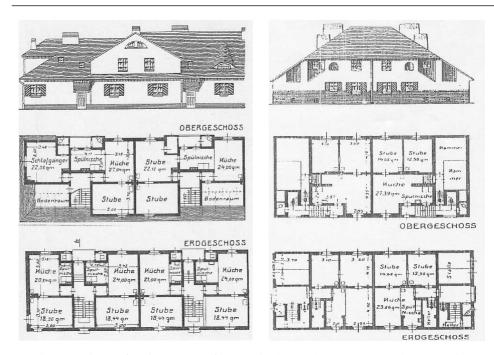


Fig. 6. Projects of various types of houses in the Settlement Knurowska - elevations and projections. Repr. from: K. Seidl, Das Arbeiterwohnungswesen, Kattowitz 1913

### 5. SUMMARY

Settlement III for workers in Knurów, although its implementation had not been completed, has had a huge cultural value in the whole region. This is the work of one of Europe's largest urban planners of the beginning of the twentieth century. It is the evidence of the enlightened thinking of shaping urban housing units. It seems that despite the passage of time, the manner and approach to the design proposed by Karl Henrici have been still valid. Henrici showed how to shape the space to favour the sense of identity of the inhabitants, bring out its advantages and improve the attractiveness and safety of the residence. The present condition of the Knurów Settlement is devastating. It is absolutely indispensable to immediately take the necessary measures in order to determine the possibilities of how to shape and protect it in order to preserve the cultural identity of one of the Silesian towns.

## **BIBLIOGRAPHY**

- 1. Akant: Studium konserwatorskie III Kolonii Robotniczej w Knurowie, Gliwice 1993.
- 2. Chojecka E. (red.): *Sztuka Górnego śląska od średniowiecza do końca XX wieku*, Muzeum Śląskie w Katowicach, Katowice 2004.
- 3. Cioska J.: Rewaloryzacja zespołu kolonii robotniczych i urzędniczych w Knurowie. Projekt centrum Gliwice 2008.
- 4. Figaszewski J.: *IV kolonia robotnicza w Knurowie*, Przegląd lokalny Knurów nr 23/96.
- 5. Henrici K.: Wynik wizji lokalnej i narady w Knurowie 28.10.1904, notatki.1904.
- 6. Seidl K.: Das Arbeiterwohnungswesen, Kattowitz 1913.
- 7. Sokołowska-Moskwiak J.: *Idea miasta ogrodu na przykładach osiedli miast górnośląskich*, Wyd. Pol. Śl., Gliwice 2011.

### WPŁYW IDEII KARLA HAINRICIEGO NA ROZWÓJ KOLONII KNUROWSKICH W LATACH 1904-1939

#### Streszczenie

Narastająca u progu XX w. migracja ze wsi do miast w poszukiwaniu pracy doprowadziła do powstania gęstych skupisk zabudowy, które w połączeniu z przeludnieniem i katastrofalną sytuacją socjalno-bytową wymusiła konieczność wznoszenia nie tylko przyfabrycznych zespołów mieszkaniowych, lecz całych osad robotniczych. Niestety osiedla patronackie tylko częściowo rozwiązywały potrzeby ówczesnego mieszkalnictwa. Wobec skomplikowanej sytuacji mieszkaniowej w miastach, urbaniści niemieccy starając się skutecznie rozwiązać problemy, chętnie sięgali po idee austriackiego planisty Camillo Sittego (1843-1903), który w projektowaniu (Sitte C., *City planning according to artistic principles*) zwracał uwagę na skalę architektoniczną, proporcje i występowanie elementów przestrzennych jak placów, terenów zieleni, a także na rozległość i odległość zabudowy. Koniecznością stał się również o ile to możliwe łatwiejszy dostęp do rekreacji, obiektów kultury czy obiektów usługowych. Zgodnie z tą zasadą zaprojektowano zespół kolonii w Knurowie, których rozwój przypada na lata 1904-1939.