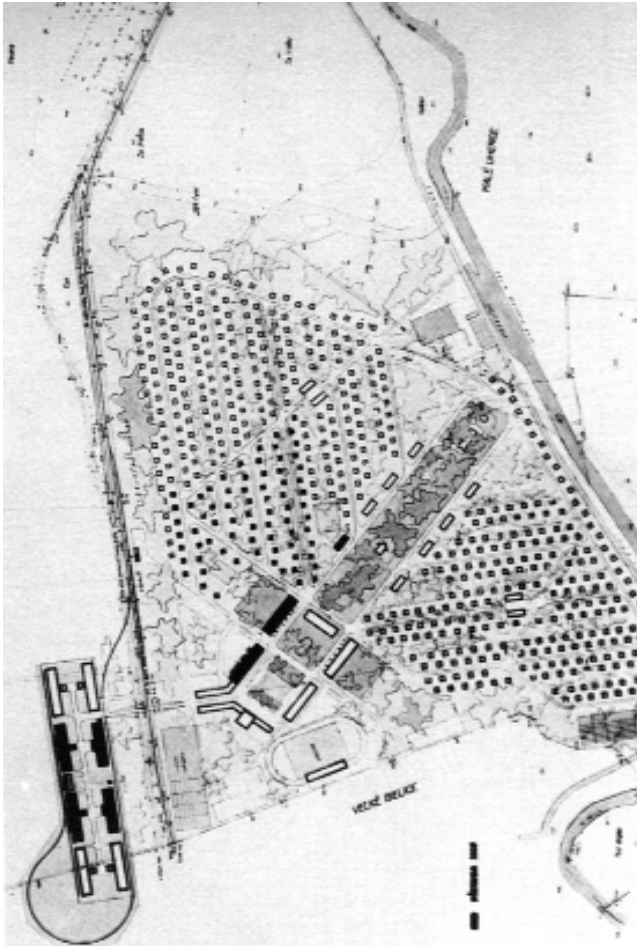


Consistency of Serial City:

Batovany (Slovakia) designed by Architects of Bata Co.

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Symmetrical version of the General Plan of Batovany. J. Vozenilek, 1938

Historical Frame: End of the First Czechoslovak Republic in 1939

The itinerary of the 3rd International Meeting of Architects in Central Europe, co-organized by magazine *l'Architecture d'Aujourd'hui* in September 1935¹, traced an interesting line through five Czechoslovak cities of Prague, Hradec Králové, Zlín, Brno and Bratislava, besides Budapest and Vienna, thus confirming that the interwar avant-garde architecture in Czechoslovakia was not taking place exclusively in Prague.

Unlike in the 1920s, when tensions between rationalist theories of architecture as science versus architecture as artistic practice dominated the architectural scene, the 1930s were driven by the ever present economical and political crises. It was when theories on minimal housing standards and economy of construction proclaimed by functionalists, in Czechoslovakia especially by Karel Teige, were applied and realized by private investors and companies mainly for pragmatic reasons.

In the 1930s the Bata Group was a well-known and prosperous shoe-making company. Bata had begun manufacturing shoes in the 1920s and the company continued successfully, even expanding outside its hometown of Zlín in the 1930s.² The company established production facilities in Czechoslovakia, as well as abroad, e.g. in Croatia (Borovo), Poland (Chelmek, Otmet), The Netherlands (Best), Switzerland (Möhlin),

and even in the USA (Belcamp), India (Batanagar) and Brasil (Batatuba).

The architecture of the ideal industrial city of Zlín and later other functionalist cities produced by Bata Co. "in series" was essentially based on the economic and social philosophy of the businessman Tomáš Bata, and after his death in an airplane accident in 1932 followed by Jan Bata.

Formed a strong group of architects and hired internationally well-known architects like Le Corbusier to participate in competition juries or in the corporate design itself. Bata understood that it was necessary to create above standard conditions for living and work. He built cities for his employees in order to spend their efforts, energy and time for the work in the factory and gained their loyalty. However, his intentions were primarily economic. The functional city was for him more about building corporate identity than realizing an ideology.

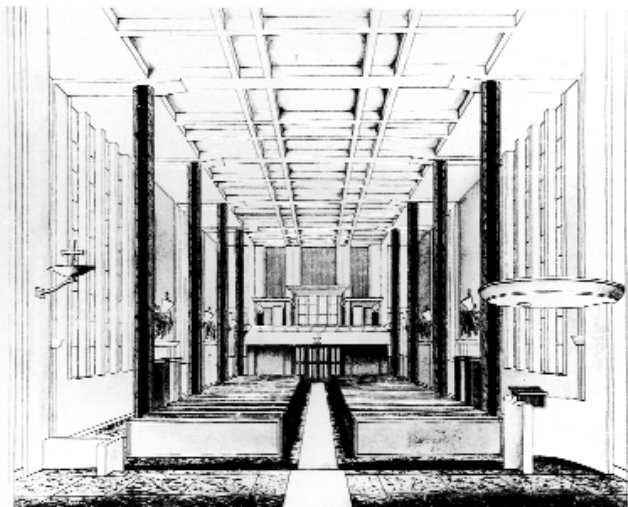
The construction of the city of Batovany (Slovakia) started shortly before the democracy of the First Czechoslovak Republic was destroyed, and the autonomous Slovak State was created. After the proclamation of Slovak independence in 1939, the outcome of pressure from Berlin, Bata faced a complicated situation, suddenly being viewed as Czech and therefore a foreign investor in Slovakia. Jan Bata was, however, a very skilled

and pragmatic businessman. He signed advantageous contracts with the Slovak government (he provided the government with a loan and received entrepreneurial freedom in return). In doing so, he secured prosperity in Batovany during the long years of war. After 1939, further construction for the newly created community of ideal functionalist town, what is here called the "serial city" of Bata Co, continued.

"Aim: Serial House (...) Realizators: Companies and Real Architects" ³

There were few investors for the realization of big scale projects such as functional cities - Bata Co. was one of them. And Le Corbusier was one of those who saw in the capitalist and pragmatic Czechoslovak businessman the chance for his own projects to be realized. In 1935 Bata hired Le Corbusier to design regulation plans of the Great Zlín and Hellocourt (France) industrial towns that were left unrealised.

He was invited to work for the Bata Co. in Zlín for a few months in 1935; he made designs of the company's shoe shops and family house prototype. Often his projects were replaced with standard projects produced by the company's architectural studio -some of his types for shop windows and facades were partially applied-. For the design of the Bata Co pavilion of for the world exhibition in Paris in 1937 the company refused the pro-



Catholic church, interior design. V. Karfik. Early 1940s

ject of Le Corbusier from 1935. His stay and visits to Czechoslovakia were rich in work produced but he never came to consensus with Jan Bata, and returned to France without a client.

On the other hand, the presence of Le Corbusier in the jury of the international competition for a 'family house' (jury members: Le Corbusier, Edo Shön, Pavel Janák, Bohuslav Fuchs, Jaroslav Syřište), announced by Bata Company with the aim to avoid a formal monotony of Zlín residential quarters, was a sign of mutual respect between the architect and the businessman. The jury awarded four proposals with prizes and bought 25 proposals out of the 289 design proposals from nine countries that were submitted to the competition on April 15, 1935. First place was awarded to two designs: the design of a house by the architect Erik Svedlung, and the semi-detached house design by Adolf Beneš and František Jech. The experiment and continuous innovation of prototype houses and production of serial houses became the building method of the Bata Company. Therefore, in many aspects Le Corbusier's idea of "houses in series" promoted in his *Vers une architecture* came to realization as early as in 20s and 30s under the trademark of Bata Co.

In the course of time, the prototype houses - either those selected in the international competition or others that were commissioned to the chief architects of Bata Co., evolved into family house projects that were anonymous. It was a perfectly well thought out system of standardization. Repeated use of plans and construction processes guaranteed a good result. In charge of the position of the chief architect of the company were František L. Gahura, Josef Gocár, Vladimír Karfík, and Jirí Voženílek.

Besides planning activities for Zlín, the central planning office also supervised the activities of the newly founded satellite towns like Batovany supervised by architects Vladimír Karfík (1930-1945), and after him by

1.- Kubova, Alena: Following Unknown Modernity: "The Expeditions of French Architects to Zlín", *Architektúra & Urbanizmus XXXV*, 3 - 4, Bratislava, 2001, p. 67.

2.- Moravčíková, Henrieta - Doricová, Slávka - Topolčanska, Maria: "Bata's Architecture. A problematic cultural heritage?", *Docomomo Journal*, 32, Paris: Docomomo International, March 2005, p. 54.

3.- Le Corbusier - Saugnier: *Za novou architekturu* (First Czech edition of *Vers une architecture*). Praha: Nakladatelství Petr Rezek, 2005, p. 210.

4.- Dulla, Matúš - Moravčíková, Henrieta: *Architektúra Slovenska v 20. storoci*. Bratislava: Slovart, 2002, p. 119.

5.- Moravčíková, H.: "Batovany - Partizánske: an exemplary Slovak industrial town", *Architektúra & Urbanizmus XXXVII*, 3 - 4, Bratislava, 2003, p. 116.

Jiri Voženílek (1945-1948).

Already before 1930, when Vladimír Karfík was offered the position of the chief architect of Bata Co., he was a very qualified architect. His practice in offices of Le Corbusier (1924-1925) and of Frank Lloyd Wright (1930) gave him experience that he later applied successfully. Bata hired Karfík to form and lead one of the biggest planning groups in Europe of the time (the office was a team of 60-90 architects and engineers). His first commissions after arriving from U.S.A. were two projects for Bata Co. in Bratislava: the Slovak capital city-the Department store (1930) and Roman Catholic Church (1932), built with the standard ferro concrete skeleton system used in the Zlín factory⁴. Later on, the design of a repeated type of the church designed for the Bata's city of Otrokovice in 1940 (Czech Republic) was applied in Batovany and is his main realization in this city.

Except designing famous department stores of Bata Co. all around Europe (e.g. in Bratislava, Liberec and Amsterdam), it was his design for the world exhibition in Paris in 1937 that the company realized after refusing the project by Le Corbusier.

Among the architects working in the Bata's group the strongest follower of Karel Teige's scientific functionalism and architecture as science was Jiri Voženílek.

Already during his studies in Prague he was engaged in leftist oriented activities of groups around Karel Teige. Voženílek was a founder of a new intellectual group PAS (Working Architectural Group, 1932) manifesting a strict scientific approach of architecture and an affinity to Teige's theories. He joined Bata Co. in Zlín in 1937. He participated in planning several "serial" towns (e.g. Best in Netherlands, Tiszafoldvár in Hungary). After WWII, he managed the planning office of Bata Co. He was involved in the post-war general plan of Zlín (1946). His regulation plan of Batovany was respected decades after the first faze of implementation at the end of the 1930s. While Tomáš Bata created and spread the

Czechoslovak version of Scientific Management in Czechoslovakia, Jiri Voženílek ranked among the leading representatives of scientific functionalism and promoters of scientific architecture.⁵

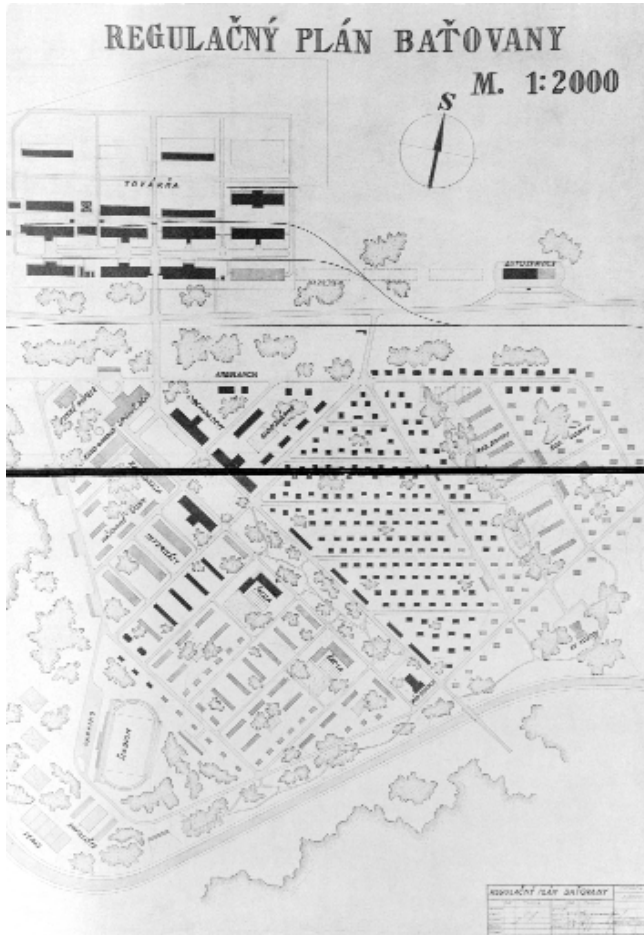
The Bata architectural planning office in Zlín worked on the concept of an ideal industrial town from the mid-1930s onwards. Most avant-garde architects of that time didn't get the opportunity to implement their visions. However, the planners of the Bata office got to realize such modern dreams on a large scale. In doing so, they gained much theoretical knowledge and practical experience. In 1937, they wrote a book titled *An Ideal Industrial Town*, but it was never published. Despite this, three serial cities of Zlín - Batovany, Zruc nad Sázavou and Sezimovo Ústí (the last two are in the present Czech Republic) - were designed in accordance with the unpublished book's principles.

From Serial House to Serial City (From Zlín to Batovany)

The method of building serial towns was being formed gradually -parallel with the development of the entire Bata shoe-making group. The theoretical concept of the ideal industrial city was combined with that of Garnier's *garden city* and could thus be developed fully in large scale experiment: from a town-planning concept through the design process to typified executions.

The firmly defined procedures of approving the projects from the headquarters loosened little by little only in the distance of satellite cities. It has to be emphasized that although local projects took local peculiarities into account, their essentials remained firmly embedded in the vocabulary of the Bata's Zlín. The aspect of economic efficiency remained the main criterion of the decision-making concerning new projects implementation.

Batovany, a new serial city of the prototype of Zlín, was established in 1938. Its construction began in 1939 according to the general plan by J. Voženílek. The town-



General Regulation Plan of Batovany. J. Voženilek, 1946



Modernization of Slovakia in 1930s

planning concept for a town with 5,000 to 15,000 inhabitants was based on scientific functionalism principles. The town plan, serving as the guideline for the construction, commenced in 1939, was based on an ideal layout previously elaborated by Voženilek for an industrial town with 5000 to 15,000 inhabitants that could be built in series, with variations according to local conditions. The town's spatial layout was based on dividing individual functions into relatively autonomous units, and determined by the cardinal points or prevailing wind directions. The area of the plant was spread over the northern boundary of the town, and was separated from residential and public areas by a traffic corridor and vegetation. At the same time it was linked with the main public place, Labour Square, via a broad street so-called the promenade. The square represented the town's main compositional and symbolic axis. It followed a west-east direction, framed by public buildings, including a community house, town hall, cinema, department store, schools, student dormitories and a church. Residential quarters were located on both sides of the square, including areas with detached houses, semi-detached houses, a quarter with terraced houses and apartment blocks. The houses were positioned in order to maximally utili-

6.- Novák, Pavel: Zlínská architektura (Zlín Architecture). Zlín: Agentura Cas, 1993, p. 262.
 7.- Doricová, Slávka - Topolcanská, Maria: "Alternations of Bata Company individual living standard: case Batovany - Partizánske". *Architektúra & Urbanizmus* XXXVII, 3 - 4, Bratislava, 2003, p. 147 - 170.



General view of Batovany in early 1940s

ze the southern orientation. The southern part of town comprised a sports area with a public swimming pool and a stadium. Vegetation was an inevitable part of the town's spatial concept, in accordance with Bata's vision of "a factory and town in gardens". An urban park covered a major area of the Labour Square. The residential buildings were freely distributed in vegetation and without barriers between the individual plots.

Besides Jirí Voženílek and Vladimír Karfík, the appearance of Batovany was significantly influenced by Miroslav Drofa's proposals of residential building prototypes, applied in series with minor material or spatial variations. The peripheral Construction Department in Batovany took over the complete *modus operandi*.

The system of relations between the Zlín's Planning Office and the Construction Departments in the satellite towns had a firm hierarchy and defined rules. At the same time each of the satellite towns had its own planning and execution unit that adapted the Zlín's plans to local situations.

Some of the basic types were directly "exported" to Batovany, other Zlín prototypes were "innovated" in the Zlín's Studio or the Batovany Construction Department, and only afterwards were they being applied. The archi-



General view of the factory in 1941

tect František Fackenberg headed the local construction department after it had been established in 1938. Thanks to his experience acquired in Zlín, Fackenberg was perfectly familiarized with Zlín's local architecture. In his position he approved practically all project documents and he even planned a number of building types for Batovany himself.

Individual housing played an important role in Voženílek's general plan. According to the original version of 1938 General Plan⁶, the individual housing zone with diagonal streets touching the urban park was built symmetrically on both sides of the main communication axis of the town in a mirror-like manner. In the whole zone cluster development was applied, with houses forming a chessboard pattern. A partly modified version of this original concept was used in the following phases of the residential quarter building. In the final version of his general plan Voženílek replaced the cluster development on the southern part of the park by a strictly rectangular street network of solitary buildings of apartment houses and row houses. It is therefore interesting to compare Voženílek's general plan with the general plan of the Martfu - Tiszaföldvár satellite town, another Bata's site in Hungary, dated 1941.⁷



General view of the first phase of residential quarter with serial houses from 1939

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- 8.- Moravčíková, Henrieta: "Social and Architectural Phenomenon of the Bataism in Slovakia", *Slovak Sociological Review*, 6, Fall 2004, Bratislava, p. 537.
9.- Karfik, Vladimír: *Architekt si spomína*. Bratislava: SAS, 1993, p. 134.



Serial redbrick family house today

The construction of the first street of the residential quarter began in 1938. Redbrick facades of new houses gave the street both its name and a typical "Zlín" character. Other streets were built in parallel to Red Street, with the serial character being gradually modified and enriched in terms of form and typology.

In Batovany, several types of detached family houses were built. They differ in the number of apartments, roofing, interior layout, and surface treatment. As far as the number of apartments is concerned, three types of detached houses were built - for one, two or four families, with the semi-detached houses clearly prevailing. Roofing of the houses can be classified into two basic

types: flat roof and saddle roof. Unlike other settlements, saddle roof is definitely dominant in Batovany.

In terms of surface treatment, there are also two types of houses - un-plastered and plastered ones; in both cases building construction is made of brick. In this aspect, Batovany differs from the other settlements as most of the houses are plastered here. Besides single-family houses, or semi-detached houses, also decent apartment houses were built in Batovany, the six-flat detached houses and eight-flat detached houses.

The major part of Batovany was planned and built during the World War II. In countries under German and Italian political influences the architectural models coming from these centres gradually prevailed. The conservative residential architecture of Germany, bound to Romanesque tradition, influenced the character of residential development in Batovany, too. Saddle roofs (required by construction regulations of the Slovak State), arches above the entrances and wooden shutters or decorative details corresponded more with "Blut und Boden" German architecture than Zlín Modernism. In Batovany, this trend was strong for two reasons. Firstly, it was the influence of the Slovak State's cultural policy that set Italian and German architecture as an example to local architects. Secondly, the management of Bata's Zlín headquarters was directly under the German influence.⁸ The new German director Miesbach prompted Bata's architects not to design "Bolshevik or American projects", and he even organized an excursion to show them the right German architecture.⁹ And it is this combination of modern town planning and conservative architecture that gives Batovany its unique position.



Serial redbrick family house today

Consistency in series

If we were to choose one element that critically influenced the appearances of all Bata's towns, it would definitely be a prototype of redbrick family house applied in series. The prevalence of family houses in Bata satellites results from the opinion of Tomáš Bata; he wanted his employees to "work collectively, but live individually".

What the group of Bata Co.'s architects did was the materialisation of new models of human settlement as conceived by Tony Garnier (*Une cite industrielle*, 1917), Ludwig K. Hilberseimer (*Projekt Hochhausstadt*, 1924), Le Corbusier (*Plan Voisin*, 1925) or Nikolaj Milutin (*Socgorod*, 1930).¹⁰ Zlín was a prototype of rational industrial settlement based on standardization and repeated use of identical spatial modules, which we can consider to be 'the very first execution of a functionalist town'¹¹.

Serial housing in the new functionalist city as experimented already since the 1920s in Zlín was in many specific locations, Batovany being one of them, reproduced with alternations very successfully. In the case of Batovany the serial production of space took place consistently over a period of big political changes, arising in

10.- Moravčíková, Henrieta: "Batovany - Partizánske: an exemplary Slovak industrial town", *Architektúra & Urbanizmus* XXXVII, 3 - 4, Bratislava, 2003, p. 115.

11.- Moravánszky, Ákos: *Competing visions. Aesthetic Invention in Central European Architecture, 1867-1918*. Cambridge (Mass.), London: The MIT Press, 1998, p.60.

12.- Cohen, Jean-Luis: "Anymore Context? Discussion". *Anymore*. Paris: 1999, p. 141

the last years of the first Czechoslovak Republic, constructing the city through war years and meeting expectations of the collective needs of socialist society and approach to design after the 1948 change of regimes.

An overwhelming majority of projects originated directly in Zlín. Many of the project plans remained unsigned. In their headings there was a simple sign: "According to Zlín plans". This is how the continuity of development and consistency of concept were maintained from the prototype Bata houses to their serial applications worldwide, and from the prototype city of Zlín itself, to Bata serial cities like Batovany.

In a sense, the worldwide serial production of cities designed by architects of Bata Co. was an experiment on the edge of architecture and geography, representing the idea of how "to operate spatially and to architecturally strategize economic reality"¹².

Batovany (later renamed Partizánske) has preserved its character as a garden city, though its general plan has been slightly modified several times. However, the town's architects respected Voženilek's vision up to the 1960s, which confirms the quality of its timeless urban-planning concept from the 1930s.