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THE OPTIMISED MAN AND HIS ARCHITECTURE

CZŁOWIEK ZOPTYMALIZOWANY I JEGO ARCHITEKTURA

Abstract

The production of shoes at the turn of the 20th century was based on the craftsmanship of cobblers, who made shoes to measure. The shoemaker Tomáš Baťa revolutionised this production, standardised it and began producing tens of thousands of pairs of shoes a day in the Czech Republic, but after the Second World War, virtually all over the world. In order to do this, it was necessary to change the mentality of a man, a shoemaker, who had to transform himself from a person who sews shoes into a worker who produces shoes. The tool for this transformation was architecture and urban planning, both corporate, i.e. company management offices, public buildings, i.e. cinemas and community centres, and housing.

Keywords: avant-garde, Baťa, private city, utopia, Zlin

Streszczenie

Produkcja butów na przełomie XIX i XX w. opierała się na rzemieślniczej wytwórczości szewców, którzy produkowali buty na miarę.

Szewe Tomáš Baťa zrewolucjonizował tę produkcję, zestandaryzował ją i zaczął produkcję dziesiątek tysięcy par butów dziennie w Czechach, ale po II wojnie światowej, właściwie na całym świecie. Aby dokonać tego czynu należało zmienić mentalność człowieka, szewca, który z osoby szyjącej buty musiał przekształcić się w robotnika produkującego obuwie. Narzędziem tej przemiany była architektura i urbanistyka zarówno firmowa, czyli biura zarządu firmy, użyteczności publicznej, czyli kina i domy kultury, jak i mieszkaniowa.

Słowa kluczowe: awangarda, Baťa, miasto prywatne, utopia, Zlin

The turn of the nineteenth and twentieth centuries was a period of civilisational and technological breakthroughs, of industrial production, the product of which was new art and architecture of a new type. These phenomena and industrial progress required civilisational changes, and these necessitated a profound change in the principles of architecture.

A change in the type of architecture can be understood as a change in the way of building. What is important, then, is what something is and not what it looks like. An “old-type” building has massive walls and relatively flimsy wooden ceilings, then wood and steel or arched ceilings made of ceramic or stone. This results in high forces falling on the external walls and especially on the corners. Hence the mass of the walls, small windows, stone

corners, buttresses extending downwards. In the new type of building, the opposite is true. The use of a reinforced concrete floor binds the building horizontally and causes the internal supports to carry most of the load, the internal wall supports only part of it, and the corner has little structural significance. Mies van der Rohe in his Crown Hall in Chicago exploited this principle by building very flaccid supports at the corner in contrast. The change from the traditional old building type to the new building type is a fundamental change and not a stylistic change; it is a change in the essence of a thing, not its appearance. The appearance is the result of a change in structure.

Using the example of Zlín in the Czech Republic, in Moravia, it is possible to trace how construction, landscape and the world can change in a few years with the introduction of new views, technologies and buildings.

At the beginning of the 20th century, Zlín was a small town typical of northern Austro-Hungary, with a market square, church, inn and traditional residential buildings of the kind found in this area. Tomáš Baťa, son of the local shoemaker, was born in the village in 1876. According to family tradition, he also became a shoemaker and sewed shoes with his father. Baťa was impatient, however, and forced his father to hand his business over to him during his lifetime and not as an inheritance, and thus young Tomáš became the owner of the workshop as a young man. However, shoe sewing turned out not to be the best business and the workshop collapsed.

However, the young entrepreneur was innovative enough to find a recipe for recession, and that was standardisation. Leather shoes in the 19th century were made-to-measure and the leather was matched to the ordered product. However, every animal skin is different and there is a problem with standardisation. Baťa wanted to standardise shoes and produce them in typical sizes as we know them today, expressed in numbers; this makes it possible today to order even via the internet, where you can order a shoe without measuring by specifying its size and sometimes other parameters. e.g. width. This idea is difficult to realise in natural materials such as animal skin because of their diversity. Baťa tried to realise his concept in another material and succeeded. It turned out that the sole, which has to be durable, should be leather, but the shoe itself should not necessarily be leather and could be textile. The shoe could then consist of parts cut by the cutter from multiple layers of material according to a template specific to the model and size.

The idea was ingenious, but it didn't come from nothing; Baťa was fascinated by Ford, was in the US and worked there, and is believed to have spied. It seems that the solutions used by American corporations at the time are part of the world's civilisational heritage and should not be protected. He should therefore be forgiven for this, because the work organisation solutions applied by Baťa took the production of goods in Europe to a different and better level.

Thanks to a contract for the supply of shoes for the army, which Baťa received from the Austro-Hungarian monarchy during the First World War, it produced 10,000 pairs of shoes a day, employing 5,000 workers. It is estimated that Baťa has produced and sold 14,000,000,000 pairs of shoes to date.

In order to make such an acceleration in production, people had to be changed and groomed into super-efficient and faithful workers.

Meanwhile, on the morning of 12 July 1932, Tomáš Baťa insisted on taking off in his favourite aircraft, Junkers J13D1608, from Otrokovice Airport near Zlín with the intention of taking a business flight to Switzerland. The pilots took off despite the dire weather conditions and dense fog and, as legend has it, hit the chimney of the Baťa factory with the

plane's wing and Baťa died at the crash site. This was a shock not only to the family and the factory, but also to European business. Meanwhile, the business was immediately taken over by Jan Antonín Baťa, Tomáš's half-brother, 17 years his junior. It was thought that the company would have to fail, as Jan was considered an unsuccessful and obscure businessman. However, the opposite happened.

Jan Baťa not only continued his brother's achievements, but also started to form a new man, a new society and a new architecture. Jan carried out all these projects successfully.

Many years later, Alejandro Aravena, as commissioner, wrote in the motto of the 15th Venice Biennale of Architecture that: "Architecture is giving forms to places where people live. These forms are sometimes meliorative and sometimes pejorative. The forms we give to places probably suit some people and not others."

We don't know if Aravena noticed that people take the form that architecture gives them, but Jan Baťa knew that. Man lives in architecture, which has a tremendous impact on him and shapes his behaviour. John Summerson wrote that Great Britain gave mankind poetry and a detached house. There is a lot of megalomania in this, but also a particle of the truth; a single-family home with its discreet entrance, living room, adjoining kitchen and separate bedrooms upstairs has shaped millions of families and influenced the shape of British society. Architecture shapes the people who live in it; it is a kind of vessel, and the people who live in it take the form of the liquid contained in that vessel.

Jan Baťa wanted to raise a worker of a new type: ruthlessly obedient and faithful, who always acts for the good of the company and never wastes time. This man goes to work in the morning, then rests at midday reading propaganda books, or spends time in the cinema watching propaganda films, eats lunch in the canteen, and comes home late and is so tired that he has to go to bed to be ready for work the next day. Various organisations, foundations and schools were set up to raise the new man. In school, it was compulsory to wear corporate attire and have absolutely regular attendance. After school, the pupils would change into work clothes and go to work producing shoes. Any insubordination was severely punished.

The newcomer was very much tied to the workplace, because just like the owner, who didn't see life outside the company, his employee had to be tied to it forever. This may suit many, because such a position gives a sense of security, stability and excludes fears about the future, but it takes away a sense of freedom and creativity.

The new man did not have to be creative, it was enough that he obeyed orders.

Therefore, the worker could feel happy being a cog in this machinery of production; wages were substantial, prospects were good and Zlín was becoming one of the most progressive production centres in Europe.

So, Jan Baťa began his expansion in Europe, the gigantic Czech success began to spill over into other countries; in Poland, as Baťa's closest neighbour, he established headquarters or factories in a number of locations where shoes had until recently been produced. These include Chelmek near Chrzanów, Radom (Radoskór plant), Otmęt (now within the city limits of Krapkowice, but then in German Upper Silesia as Deutsche Schuh Aktiengesellschaft Bata). The idea of shaping a new man began to spread around the world. Tomáš Baťa and his brother, and later his son, tried to build their organisational and production system and consequently their social and finally urban system outside Zlín and outside the Czech Republic. By the 1960s, they had managed to build urban structures in 57 locations in Europe, South America, North America, Asia and Africa.

This idea cannot be realised without architecture and without architects, because architecture gives form to places and architecture shapes people.

In February 1935, a competition was announced for a workers' house in Zlín. The jury, in which Le Corbusier participated, chose a house designed by the Swede Erik Svedlund. The house was minimalist and small; it was free-standing, had 50 m² and three storeys. The house was the cheapest possible proposal and was surprisingly economical. It is worth mentioning that the house had a basement with a garage for a car, a living ground floor and a ground floor with two bedrooms and a bathroom, so even by today's standards it offered the very decent comfort of a single-family home. In future modifications of the Svedlund house, the kitchen was reduced; it was recognised that the new man could eat in the canteen, it was cheaper and quicker that way, so the kitchen was no longer needed. The idea is Soviet, because there were attempts to build flats without kitchens (after all, you can eat in the canteen) and without bathrooms (you can use a communal bath). Svedlund's design was realised in many copies, original and modified. Contemporary accounts describe the house as very functional, but consider the lack of a large kitchen where the daily life of the household members takes place to be a significant drawback. In Central European culture, the kitchen, as a place for preparing meals, but also for eating them with guests and friends, is an important utilitarian value.

The dwelling house has thus become an instrument for profiling the triple life, i.e. the psyche of the working family. The worker is expected to work for the good of the company, to get up early, not to overeat, to be at work punctually, to relax by reading a book or taking a walk around Tomáš Baťa's mausoleum. He can also go to the largest cinema in Europe designed by František Lydie Gahura.

Gahura, born in 1891, was a relatively young man when he became Zlín's designer for Tomáš Baťa. Unfortunately, he naturally became the designer of Baťa's mausoleum after Baťa's death in an aeroplane accident in 1932. He also designed a shoe factory in East Tilbury in Essex, England, and became a key player in the design of all Zlín's buildings. He assumed the position of chief architect of Zlín and was responsible for the urban planning of this city and others, including Chelmek in Poland.

Gahura was the creator of an astonishing invention: he detected that the 6.15 × 6.15 metre structural module could be universal and used for residential, office and industrial construction alike. This principle was reasonable for the technologies known at the time and the quality of reinforced concrete. Zlín was built on this module and still functions like this today. Office and production buildings are built on the same module.

František Lydie Gahura designed the cinema for the Baťa workers in 1933. Obviously, the cinema had to be huge, as it was to be the workers' resting place during the midday break and had more than 2,500 seats in the auditorium. Baťa's ambition was for the cinema to be the largest in Czechoslovakia, and it was. Workers were not allowed to sleep, but they were allowed to watch films, especially those that promoted increased productivity in the shoe industry.

The Velké Kino in Zlín still functions today, even though it is a small city. The number of seats has now been reduced, as there are no people willing to buy tickets in this quantity.

The urban planning of Zlín and other cities of the Baťa empire was governed by the principle of making a new man, one who was to be well paid, but also obedient and who would only make the right moves to increase production. This seems inhuman from today's perspective, but a stable workplace and a secure wage were values not to be despised.

Zlín's urban planning had to be filled with architecture and here Baťa's ambitions were very high. Urban planning must be filled with good architecture, otherwise it will not function properly. Seeing the ambitions of Polish millionaires today, it is astonishing that an industrialist who was the son of a shoemaker from the Czech countryside could aim so high. Jan Baťa is said to have contacted Le Corbusier about choosing a designer for his Zlín headquarters. There is no record of his conversation with the Master and no direct account of this conversation, although such a conversation is very likely.

Vladimír Karfík, born in 1901 in Idrija in present-day Slovenia, was a graduate of ČVUT in Prague and later worked in many international offices around the world. He worked in Paris for Le Corbusier and in the Taliesin studio for Frank Lloyd Wright. It is said that when Baťa was looking for an architect for his flagship buildings in Zlín, he consulted both Le Corbusier and Wright who recommended Karfík to him as the ideal building designer for Baťa in Zlín. Karfík was given the commission and fulfilled it superbly. The first building Karfík realised for Baťa was the office building, which housed the company's management. Karfík was in his thirties at the time and designed the most modern building in Europe.

Baťův mrakodrap (Baťa's skyscraper) was the tallest building in Czechoslovakia and was the pride of Zlín, but it was one of the most modern buildings in Europe and remains so today. The building is equipped with paternoster lifts, i.e. lifts that operate continuously without stopping. This is now considered dangerous, and rightly so, although this solution is very cost-effective. Baťa's office was also placed in a lift, or rather a lift; a platform with the director's office, with his desk, telephone and archive, was placed at the corner of the building. The director moved around the building vertically, i.e. he was able to control the different floors from a distance. There are no reliable sources of information as to whether this way of controlling employees was effective, but productivity under these conditions was probably high. The building had a roof terrace and a system that allowed the façade to be washed from the outside, thanks to devices mounted on the top floor. These devices allowed the façade to be washed at any time.

Karfík's buildings became the standard for Baťa cities, or industrial cities all over the world. These buildings are also referred to as private cities, or corporate cities, and there is no great mistake here, as these cities usually had a private investor. This leads to the idea of an industrial city like Nowa Huta. This is a paradox because Zlín and its clones, built all over the world, which are the product of extreme capitalism, create the same urban structures as socialist buildings, which are the product of a system that protects the property of the working class.

Zlín is an example of a modernist city built on the basis of utopia. A new man, brought up in the new system of a new industry, producing a new product, lives in a new architecture and has a new experience. This man is subjected to either a capitalist or a socialist regime, which are ultimately similar in this aspect. Architecture serves the man who happens to be a worker, so it is modest, minimalist, easy to implement. Great architects have made a successful statement in this area; architecture does not have to be rich, it does not have to be commissioned by millionaires, it can be tailored to the needs of the average person who earns little. It is the lesson of Zlín, Gahura, Karfík and Baťa and humility that lead us to architecture for the people, as Aravena suggests. This transformation of the theatrical space means changes in the relationship between artists and the audience, as well as blurring the boundaries between actors and spectators.

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