# BEYOND THE COMPANY: INTENDED AND UNINTENDED LEGACIES OF MODERN INDUSTRIAL URBAN PLANNING AND DESIGN -THE CASE OF THE BATA SHOE COMPANY SATELLITE TOWNS (1929-2015)

#### Víctor Muñoz Sanz

TU Delft

Between 1929 and 1945, the architects of the Bata Shoe Company in Zlín (Czech Republic), planned, and built, partially or in full, more than twenty modern industrial cities in Europe, Asia, and America. These towns were part of a corporate strategy of decentralization targeted at coping with the turbulences preceding World War II. The planning of those communities both reflected the company's managerial system and welfare capitalism and mirrored contemporary debates in town planning—Garden City, modernism, and Soviet linear planning. After World War II, the network of cities was separated by the Iron Curtain. From 1945 onwards, and beyond the company's influence, these towns have been exposed to a multitude of realities that have altered their planned lives. However, a comparative assessment of their post-war development has not been made. This paper looks at the resiliency of Bata's modern physical and community planning model to diverse social, economic, and political changes, in three continents. Based on extended fieldwork, it presents three case studies of Bata towns in transformation today—Batanagar, India; Batawa, Canada; and Borovina, Czech Republic. The study shows a series of intended and unintended legacies of their original planning that still determine the current development of those communities.

#### Keywords

industrial urbanism, corporate urbanism, multinational planning, visionary planning, working environments, Bata Shoe Company, company towns

#### How to Cite

Munoz Sanz, Victor. "Beyond the company: intended and unintended legacies of modern industrial urban planning and design – the case of the Bata Shoe Company satellite towns (1929-2015)". In Carola Hein (ed.) International Planning History Society Proceedings, 17<sup>th</sup> IPHS Conference, History-Urbanism-Resilience, TU Delft 17-21 July 2016, V.03 p.029, TU Delft Open, 2016.

DOI: http://dx.doi.org/10.7480/iphs.2016.3.1251

#### V.03 P.029 Víctor Muñoz Sanz

## INTRODUCTION

From being a small workshop in 1874, the Bata Shoe Company became a gigantic industrial concern in the 1920s, built on principles of scientific management and welfare capitalism under the leadership of its founder, Tomáš Baťa. Its growth engulfed Zlín (Czech Republic), its hometown, and transformed it into a modern industrial garden city satisfying the needs of both its industrial population and those of the company<sup>2</sup>. After the crisis of 1929, the enterprise expanded internationally, exporting capital and investing it in the construction of a series of industrial towns around the globe.

Between 1929 and 1945, the building department of Bata planned and built, partially or in full, more than twenty modern industrial satellite cities in Europe, Asia, and America. On the one hand, the architecture and urbanism of those settlements aimed at satisfying the requirements of the company in terms of industrial organization and living standards—shoemaking is a labour-intensive industry, so workers were the great assets of the company. On the other, the endorsement of the visionary planning paradigms guiding the company architects and planners—namely Garden City, modernist functional zoning, and, at a later stage, soviet linear planning—showed also an aim of using physical planning and design for representing and legitimating Bata's transformative modernity.

After World War II, the network of cities was split up. As Communists nationalized Bata and subdivided it into several national enterprises<sup>3</sup>, Bata managers rebuilt the company from Canada, keeping in operation the remaining company towns until their profitability was questioned, and manufacturing moved offshore. From 1945 until today, these towns, mirrors of modern planning debates, have been exposed to diverse realities altering their planned lives.

Some authors have looked at the post-war history of the towns in a comparative manner. Horňáková<sup>4</sup> delineated a brief timeline of the milestones of the European towns. In 2006, a conference convened by Šlachta and Silvan brought together the mayors of the Central European Bata towns to discuss the challenges for Bata's heritage after the fall of communism<sup>5</sup>. Then, Ševeček and Jemelka's editorial project specifically focused on the development of the towns between 1930 and 1950<sup>6</sup>. However, what it is missing is an assessment on the intended and unintended legacies of the planning and social ideas of the Bata satellites. With that, what is being missed is the opportunity to offer a new view and judgment on the results of modernity and modernism in urban planning and design in the period of the industrial economy, and to evaluate the contemporary relevance of the questions of modernism.

This paper is based on a survey of these cities in their post-industrial condition. It is a comparative work that has used field trips, photography, interviews, and archival material to evaluate of the urban legacy of Bata by looking at its towns in transformation. To illustrate this, after a brief account of the pre-1945 planning history of Bata, the cases of Třebíč-Borovina (Czech Republic), Batawa (Canada), and Batanagar (India) will be presented and discussed. With that, this paper aims to find some lessons, good practices, and inspiration for re-imagination of both future industrial and post-industrial cities and communities

## **PLANNING THE BAT'A TOWNS**

The planning of satellites did not only deal with architectural typologies or zoning regulations, but also with the natural, social, and infrastructural conditions of the sites. Ideally, the towns were to be situated in areas hit by unemployment, with plenty of semi-skilled labour, and isolated from the influence of big cities. Bata would own a large territory around the town, to avoid land speculation and usury. Finally, the settlements were remote yet well connected to roads, railroads, and waterways—sometimes airfields too—forming a network of communities that exchanged goods, capital, technology and know-how<sup>7</sup>.

## V.03 P.030 Víctor Muñoz Sanz

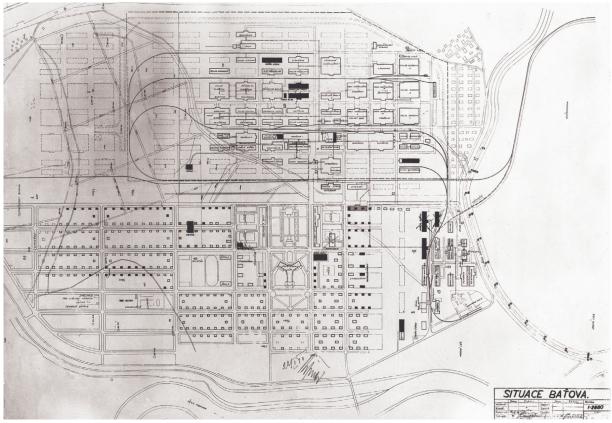


FIGURE 1 Plan of Otrokovice / Baťov, F.L. Gahura 1934-1938.

The building department at Bata became a laboratory for the development of industrial towns. Its architects would converge the company requirements with models as disparate as the Garden City or Miliutin's Sotsgorod<sup>8</sup>. František Lydie Gahura, a disciple of Jan Kotěra, was the architect in charge of the design of the first satellite cities. Their most defining element was the application of functional zoning in a non-hierarchical orthogonal grid that extended all over the site irrespective of its topographical conditions; the grid was used to organize the building program (Figure 1). Among these zones, the factory complex was in the most prominent location, with residential and recreational areas around it. Just like in Zlín, the typo-morphology of the housing blocks in Gahura's regulatory plans was that of cubical semi-detached units forming a checkerboard pattern on a landscaped field, with densities ranging from twenty to twelve dwellings per acre. Italian historian Mario Labò praised the modernity of Bata's urbanism abroad<sup>9</sup>. In particular, he applauded the fact that the company architects were not dissuaded by the specific circumstances of the new sites; what is more, the projects revealed a strong conviction for transforming the ground and subjugating nature in a high modernist fashion<sup>10</sup>, implementing the urban principles of Zlín even more firmly in "virgin territory"<sup>11</sup> than in the original.

In 1935, two reasons provoked a shift in the planning paradigm used in the subsequent Bata towns. First, the construction of the first plans suffered many setbacks, mainly due the fact that building a *tabula rasa* in inconvenient sites caused excessive costs. Second, the company had to face the pressures of local planning authorities and their requests for the use 'traditional' plans instead of modernist ones. Drawing from previous experiences, Josef Gočár and Robert Podzemný developed studies of ideal industrial towns for up to 10,000 people between 1937 and 1939, now under a heavier influence of the Garden City movement. Developing ideal models aimed at making the production of cities fully systematized to avoid unnecessary losses for the company. In their plans, these cities followed an organic leaf structure in which roads in the residential quarters diagonally converged into a green axis leading first to the social and commercial centre, and then to the factory grounds,

#### V.03 P.031 Víctor Muñoz Sanz

which were also in close proximity to the sports and recreation facilities (Figure 2). Contrary to being just a diagram, as Howard's Garden City, Bata's standardized city had a specific formal outcome. These series of towns were, in the end, modernist in disguise, universal products with a strong formal identity, still with little consideration to the natural features of the site.

Le Corbusier's projects for Bata<sup>12</sup> and Soviet planning heavily influenced the next planning model. Architect Jiří Voženílek developed in 1940 a distinct version based on the idea of assembly-line urbanism. A green buffer separated the factory from a series of parallel programmatic bands accommodating civic infrastructure, dormitories, apartments, schools, family housing, and recreational facilities. In contrast to Gahura's plans, here the belt city is understood as a self-contained unit. With the advent of the War, Voženílek ideas radicalized leaning towards 'disurbanization', proposing a precise articulation of relationships among industry, transportation networks, high and low-density settlement units, agriculture, and regional landscape. Voženílek's ideal town served just as an inspirational diagram, and the finished plan adapted to the actual landscape conditions, dissolving the urban figure in nature (Figure 3). These units were self-sufficient and after reaching their maximum population it was better to create a new, parallel town, creating regional patterns that bring to mind some of Hilberseimer's explorations in suburban decentralization.

Over the course of the 1930's and 1940's, planning ideas and debates overlapped, and sometimes there was a succession of alternative plans for the same town, even when construction had already begun. At the same time that the satellites were fulfilling the pressing and practical needs of the company, for their designers, the fast pace of their construction and immediate tangible results became an unusual opportunity to experiment and test in real time with urban and architectural prototypes.

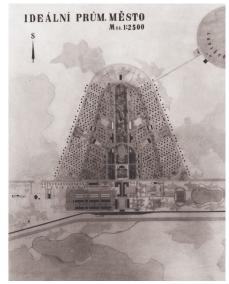


FIGURE 2 Ideal industrial city for 10.000 people, R. Podzemný 1939

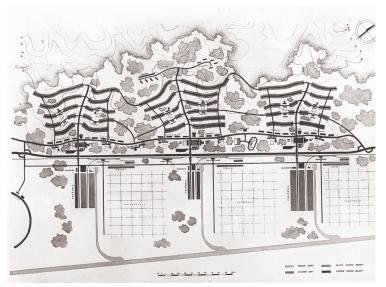


FIGURE 3 Plan of an industrial town in the Moravian River valley, J. Voženílek 1942.

#### V.03 P.032 Víctor Muñoz Sanz

## **BAT'A TOWNS IN THE POST-WAR**

The events in the Second World War would change the course of Baťa's business, including the lives of its urban offspring. With the threat of the war, the planning of foreign units continued, to both secure surplus capital, and to anticipate an eventual transfer of control of the entire concern to a new Zlín in the case of its occupation. With an unclear leadership in Zlín, the work of the architects, and the planning and construction of new settlements continued at a slower pace, while some of the existing ones were trapped amidst warfare and violent occupation. The liberation of the occupied towns was an ephemeral relief for the directors in exile, as the ascension to power of Communist governments would bring the nationalization and loss of ownership and control of many of its factories and towns, including Zlín.

The biggest obstacle for the self-sustained continuity of the Bata towns laid at the core of what defines a company town: the dependency of jobs and economic activity on a single industry. In the towns in the western block, the restructuring of the company hampered post-war development. As Crawford<sup>13</sup> well noted, the consolidation of the welfare states made accessible public social infrastructure that relieved companies of such responsibilities. Instead of that, wages raised and workers incorporated into the consumer market. The subsequent access to car and home ownership changed also the mentality of the company regarding housing provision, and it got rid of its real estate stock by selling land or homes to workers or other entities. When manufacturing shifted to cheaper countries, competitiveness was lost, and factories ended up closing. With no other economic engine and in a relative isolation, the settlements became dormitory towns or suburban enclaves.

In the Communist block, the centralized control of production as well as the existence of safe markets for their products, mainly the USSR, made the towns thrive. The existing housing stock became cooperative or public property. Socialist programs put into service the existing Bata social infrastructure and promoted the construction of new buildings. The need for more housing caused the introduction of new typologies, mainly prefabricated housing blocks. Progress and population growth—beyond the numbers they had been planned for—affected greatly the urban landscape and suburban feeling of the towns. After the fall of the iron curtain, the companies manufacturing shoes barely managed to survive the fierce competition in the capitalist global markets. This has forced the municipal and regional governments to employ active policies to bring back economic development by attracting new employers.

# TŘEBÍČ-BOROVINA: BROWNFIELD REGENERATION

After decades of uninterrupted manufacturing, in the year 2002, the industrial site of Borovina entered in a process of property liquidation. The ruined firm, named BOPO, had been formed in 1991 from the assets of the national company formed after Bata's nationalization in 1945. BOPO struggled to sustain a firm employing 5,000 employees after the fall of communism. After its bankruptcy, Borovina became an "investment opportunity"<sup>14</sup>, an industrial brownfield available to the highest bidder.

It was not until the second half of 2006 that the buildings and the land in the BOPO passed to a handful of new owners, all local entrepreneurs. Under the leadership of Richard Horky, founder and CEO of TTS, four companies commissioned a project for the revitalization of the site and submitted it to the municipal planning office with the aim of forcing a change of land-use for the area in the new zoning plan of Třebíč<sup>15</sup>.

In the following months, the project was developed in collaboration with the municipality. To begin with, the BOPO area was renamed as SOHO Třebíč. SOHO Třebíč was set out as a mixed-use campus that would keep the industrial character of the architecture of the site. The plan basically contemplated the reuse of existing structures for construction of almost four hundred apartments, a shoe museum tannery, and an entertainment and shopping center, while preserving some light manufacturing<sup>16</sup>.

V.03 P.033 Víctor Muñoz Sanz

BEYOND THE COMPANY: INTENDED AND UNINTENDED LEGACIES OF MODERN INDUSTRIAL URBAN PLANNING AND DESIGN -THE CASE OF THE BATA SHOE COMPANY SATELLITE TOWNS (1929-2015) DOI: http://dx.doi.org/10.7480/iphs.2016.3.1251



FIGURE 4 Rendering of the revitalization of Borovina, Ateliér M&P Architekti, 2011.

Ultimately, the city would embrace the project of revitalization of the SOHO Třebíč. On the one hand, it would acknowledge the need for a zoning change as the necessary condition for successful revitalization. On the other, it also urged for the improvement of physical infrastructure in the site. In the mind of the city officials, the investment was worth, hoping that introducing new functions in the city would create new employment opportunities.

As construction on SOHO Třebíč was underway, the site developers decided to fully rebrand it. The project was re-launched with improved three-dimensional visualizations and the new name of Borovina in February 2011<sup>17</sup> (Figure 4). On the one hand, the change was explained under the argument that recovering the name of Borovina was more appropriate. On the other, abandoning SOHO and rooting the new Borovina in Třebíč was a sign that TTS would scale down its ambitions. In fact, Borovina had to adapt to the conditions of the real estate market after the crisis and rethink its building program. For example, the plans for the two standard Bata buildings changed; instead of housing, they will be used for light manufacturing, office space, and an educational institution.Regardless of the slow-down in the redevelopment plans, TTS, and its partners have shown a strong determination in developing public engagement with the project. Starting 2011, a yearly festival has been organized in the summer months. Further, in summer 2015, an interactive eco-technical museum opened in an old boiler. In parallel, the city government also continued its commitment to the project. To begin with, the municipality invested further in the improvement of the public spaces, lighting, and landscaping. In addition, the city moved there the so-called House of the Children and Youth<sup>18</sup>.

All in all, it could be said that rebooting Borovina as a more realistic, context-based, and low profile project may have ended up benefiting all the parts. To begin with, the effort in connecting to the identity of the site, by preserving the architecture, giving value to its history as a Bata site, and organizing free activities on the former industrial grounds, increased the public acceptance of the project. Finally, bringing in public facilities, and quickly adapting to the post-financial crisis market prevented that Borovina became a ghost district full of empty housing. Extending the spirit of regeneration to the neighbouring former Bata colony would guarantee greater success, however, the current mix of residential, light manufacturing, offices, public and educational facilities make of Borovina a promising case to look at in its future development.

#### V.03 P.034 Víctor Muñoz Sanz



FIGURE 5 Batawa Homecoming Plan, 2007. (source: BCD)

FIGURE 6 Continuities and emerging types on the site of Batanagar.

## **BATAWA: NEW URBANISM**

The decline of Batawa was caused by the accumulation of a series of corporate decisions and economic shifts. First of all, in the early 1960s, the Bata Shoe Organization began plans to move the post-Zlin London headquarters to Toronto<sup>19</sup>. Secondly, back in the Batawa factory, labour relations became difficult in the late 1970s<sup>20</sup>. Furthermore, in the 1980s, Bata changed its view on vertical integration and quit non-shoe manufacturing activities<sup>21</sup>. Finally, increasing competition from emerging markets would lead to a downsizing of operations and eventual closure of the factory that gave a meaning to Batawa<sup>22</sup>. The town never became being the new Zlín in the years after the war. However, it became a definitive home for a small and tight community of Canadians, Czechs, and other Europeans.

In 2005, the properties of Bata Limited in Batawa changed ownership and, subsequently, new plans to revamp the former company town emerged. Sonja Bata, the wife of Tomas Bata Jr., purchased the land from the Canadian company as a personal investment and formed the Batawa Development Corporation (BDC) to manage and develop the properties<sup>23</sup>. Although Mrs. Bata agreed with the decision of closing the factory, she had been worried for the community since then: Batawa was for her husband and her more than just and buildings, it had been their home.

Instead of a sprawling development of individual homesteads, future Batawa would be based—in Mrs. Bata's words— "on the old values and systems" of a community<sup>24</sup> and sustainability. Those ecological and community ideals would be translated into physical form by following the guidelines of the Leadership in Energy & Environmental Design for Neighbourhood Development (LEED-ND) certification<sup>25</sup>; LEED-ND has at its core the ideas of New Urbanism and Smart Growth for sustainable community development. Thus, in late summer 2007, after intense consultation with the community, the BDC submitted a proposal (Figure 5) based on these principles and eventually a Special Policy Area for Batawa was created<sup>26</sup>.

However, if the first objective, getting the municipality on board, was eventually a somewhat easy process, finding actual business partners and investors proved to be much more challenging. With the real estate market hit by the recession, and very strict regulations concerning sustainability and design, developers "shied away"<sup>27</sup> from Batawa.

#### V.03 P.035 Víctor Muñoz Sanz

Despite the obstacles, the BDC and Sonja Bata have shown an unyielding tenacity in keeping alive and reactivating the project after the financial crisis. To begin with, by investing on the ski hill, one of the main community assets in its property<sup>28</sup>, supporting grassroots initiatives, and programming numerous family oriented activities, Batawa has positioned itself as a local family destination.

Nonetheless, the strongest evidence of the BSC and Sonja Bata's commitment to the town was the impulse given in the recent years to the restoration of the factory building and its transformation into an apartment building. The Bata factory was alike other Bata factories in Europe, although its looks were altered in the 1970s when its facade was covered by insulating aluminium panels<sup>29</sup>. Initially, the plan was to tear down the old plant since it was a symbol of the company's control over the town. Nonetheless, Mrs. Bata retracted after the local community cried for the conservation of an "iconic"<sup>30</sup> and meaningful place for them during a town meeting. Subsequently, the BDC changed its proposal and embraced the factory building as one of the icons of the new development<sup>31</sup>. The 1939 structure is on its way to being transformed into a mixed-use condominium building. Reportedly, the "adaptive reuse" of the buildings would "reconfigure" the interior while "restoring" the exterior it to its original architecture<sup>32</sup>.

## **BATANAGAR: NEW TOWN**

In spite of the new socio-political scene brought by independence and partition, economic ups and downs, everincreasing trouble with worker's unions, long lockouts and strikes, the Batanagar factory managed to remain in operation with relative success. Nonetheless, economic liberalization in the 1990s and a failed marketing strategy put the company in red for the first time. The Bata Shoe Organization took control of its Indian branch and began the radical financial turnaround of Bata India<sup>33</sup>. After a long negotiation with the union, the Bata management decided in 2000 that the operating expenses of Batanagar were unacceptable for the company. New austerity measures included the phasing out of management subsidies, canteen facilities, electricity, health care, and township maintenance<sup>34</sup>.

In 2005, Bata India Limited formed a joint venture with Calcutta Metropolitan Group to redevelop the site as an integrated new town named Calcutta Riverside. As Gavin Shatkin has noted<sup>35</sup>, Riverside is an instructive model illustrating the planning of "urban integrated mega-projects" in Asia. In fact, when it was announced, Riverside had the typical elements of an upscale new town development in Asia, all for a population of 30,000. In the project website, Riverside is defined as "a city in itself, a self-sufficient development that offers quality life with all the modern comforts and amenities, with utmost priority being given to convenience and safety." Besides housing developments of high-rise condominiums and villas, the new town will have numerous amenities. These include an international school, a shopping mall, a sports club, a golf course, a "world-class" hospital, a riverfront promenade, a multipurpose maidan, and even a film studio.

The entire building program in Riverside was designed by some big names of Indian architecture and landscape design<sup>36</sup>. Its build form was organized along the structuring axes of old Batanagar, since still operational electrical, water, and sanitation infrastructure run below those roads<sup>37</sup>. Furthermore, its design was heavily determined by the existing 'nature', when in fact topography and landscape were totally altered during the construction of the town by the Bata architects. As Nouman Malik, an architect working for Hiland Group, detailed during an interview on February 21, 2012, environmental laws in Kolkata enforce the conservation or transplantation of trees on the site, as well as the preservation of the current water bodies.

However, the project presented differences with other developments of new towns in India. On the one hand, as Bata India owned all of the land, there was no need of contested legal mechanisms as eminent domain to build the new development. On the other, the project deliberately sought the consent of the existing and surrounding

#### V.03 P.036 Víctor Muñoz Sanz

population by the relocation of street vendors in a transportation hub by the rail station, the provision and access to some public spaces for community use and festivals, and the preservation of the Bata schools and temples. In sum, whereas the old housing stock is being slowly demolished, part of the and environmental legacy of the modern town will be preserved (Figure 6).

What is more, Riverside does not mean the total disappearance of working-class Batanagar, or at least, it presents a new version of it. That is, since the Bata factory is still in operation, housing for the workers is part of the program of the town. More specifically, Bata employees were rehoused free of cost in a more compact medium and high-rise development on the site.

## CONCLUSIONS

The legacy of Bata is uneven and somewhat problematic. The contemplation of its transformation inevitably causes nostalgia. However, this destiny is consistent with Bata's modernism. Modernist architecture's functional specificity, standardized methods, and materiality were thought for quick construction, not for lasting. However, the work of the architects and planners of Bata left several intended or unintended legacies that still are still shaping the contemporary form and future development of the towns.

The most obvious one is the inherent flexibility of the industrial structures, and also their iconicity. As it was shown, production in Batanagar continues in the factories built in the 1940s. Besides, both the redevelopment projects of Borovina and Batawa have found alternative functions that, while keeping their identity, will allow the manufacturing halls to be part of a post-industrial economy.

However, the scope of Bata's project and its intended legacy was not really based on the permanence of architecture. Mostly, it entailed the construction of a vision through tangible and intangible infrastructures that considered people and community making as the main asset of the company. Those communities are probably the greatest legacy of Bata, and, to the extent of their capabilities, the safeguards of both its heritage and future life.

On top of all that, in its extreme nature, the case of Batanagar adds to the discussion the idea of planning future legacies and expands the notion of what legacy means. As it was shown, a speculative large-scale project was in the end conditioned by some of the pre-existences of the Bata project, in particular, social and physical infrastructure, landform, and landscape. Whereas the old housing estate is being demolished, the high-modern transformation of the land and water bodies, its vegetation, and the social networks and programs will remain in some form.

In "Preservation is overtaking us," Rem Koolhaas<sup>38</sup> argued for considering preservation as a prospective activity, one that must anticipate what will be built for posterity or not—as Bata proposed. If that is the way to follow, in the context of rapid change and continuous transformation of an urbanizing world, could all this mean that our work as planners of urban environments is condemned to fast consumption, replacement, and oblivion? The Bata case shows that there is room for agency. Shifting from the univocal understanding of heritage as preserved physical remains to a more fertile discussion about the multiplicity of forms—community, landscape, or infrastructure—in which planning legacies can prevail, and coexist with alternative futures in a successive palimpsest, is a lesson that opens a new field of action and relevance for designers and policy makers.

V.03 P.037 Víctor Muñoz Sanz

#### Acknowledgements

The author wishes to thank: Dáša Moláková, Department of Development and Planning in Třebíč; Filip Slezák, architect at the Urban Design Division in Třebíč; Ivo Krčmář, GIS manager in Třebíč, and his wife Vera; Emanuele Lepri and Suzanne McLean, Bata Shoe Museum, Heather Candler and Jeff Leavitt, Batawa Development Corporation; Darren Lobb, Batawa Ski Hill; Serge and Shirley Folsch, residents of Batawa; Brian Gibbs, Libuse Peichl, and Sonja Bata, Bata Shoe Organization; Nouman Malik, architect and photographer based in Kolkata; Mr Sumit Dabriwala and Mr Nayan Basu, Hiland Group, Kolkata, India; Bata India Ltd.; Rahul Mehrotra, Harvard Graduate School of Design, Cambridge, MA; Luis Fernández-Galiano, ETSAM; and Han Meyer, TU Delft.

In addition, the author wishes to acknowledge the two main sources of funding for this research. First, the Druker Traveling Fellowship, a bursary awarded by the Department of Urban Planning and Design at the Harvard Graduate School of Design, supported the fieldwork. Second, a fellow-ship from the Fundación La Caixa covered a research stay in the Faculty of Architecture and the Built Environment, Delft University of Technology, The Netherlands.

#### **Disclosure Statement**

No potential conflict of interest was reported by the author.

#### Notes on contributor

Dr. Víctor Muñoz Sanz is Guest Researcher at the Faculty of Architecture of TU Delft, and Emerging Curator 2015-16 at the Canadian Centre for Architecture. Sanz holds the degree of Architect from the School of Architecture of Madrid (ETSAM), a Master of Architecture in Urban Design, with distinction, from Harvard University, and a Ph.D. in architecture, cum laude, from ETSAM. He has received fellowships from Fundación Caja Madrid and Fundación La Caixa, and Harvard University. Prior to TU Delft, Sanz taught at the School of Architecture San Pablo CEU and was Research Associate at the Department of Urban Planning and Design at Harvard.

#### Endnotes

- 1 This paper is based on the author's Ph.D. dissertation (defended in February 2016 and still unpublished): Víctor Muñoz Sanz, "Utopía En Red: Arquitectura Y Urbanismo de Las Ciudades Satélite de La Bata Shoe Company, 1930 Al Presente" (Universidad Politécnica de Madrid, 2016).
- 2 For a general overview on the urban history of Zlín and also of the company's history, see: Architekturmuseum der Technischen Universität München in der Pinakothek der Moderne., Zlin: Modellstadt Der Moderne (Berlin: Jovis, 2009); Katrin Klingan and Kerstin Gust, eds., A Utopia of Modernity: Zlin: Revisiting Bata's Functional City (Berlin: Jovis, 2009).
- 3 Between 1945 and 1948, Bata's companies in Czechoslovakia, Poland, Yugoslavia, and Hungary were nationalized by the newly formed socialist governments in those countries.
- 4 Ladislava Horňáková and Ludvík Ševeček, eds., Satelity funkcionalistického Zlína: projekty a realizace ideálních průmyslových měst továrních celků firmy Baťa [Satellites of the functionalist Zlín: projects and construction of ideal industrial towns Baťa company's factory complexes and resident] (Zlín: Státní galerie, 1998); Republished and slightly updated in: Ladislava Horňáková, "Brief Characteristics of Selected Satellite Towns," in The Bata Phenomenon: Zlin Architecture 1910-1960, ed. Ladislava Horňáková (Zlín: Regional Gallery of Fine Arts, 2009), 137–47; Ladislava Horňáková, "Baťa Satellite Towns Around the World," in A Utopia of Modernity: Zlin: Revisiting Bata's Functional City, ed. Katrin Klingan and Kerstin Gust (Berlin: Jovis, 2009), 117–36.
- 5 Štefan Šlachta et al., eds., Future of Towns with Monofunctional Industry. Examples of Bata Towns. Proceedings of the International Scientific Conference. (Bratislava: Spolok Architektov Slovenska, 2006).
- 6 Ondřej Ševeček and Martin Jemelka, Company Towns of the Bat'a Concern: History, Cases, Architecture, Economic History (Stuttgart: Franz Steiner Verlag, 2013).
- 7 The creation on satellites adds a new layer to the resemblance of Baťa's project with Toni Garnier's Cité Industrielle, since as Dora Wiebenson has stated 'the Cité was to represent one of a federation of cities, among which a bond would be created through emphasis on communication and the exchange of goods' (1969, p.18).
- 8 Gahura's references were compiled in: Gahura, F.L. (1937). "Literature and articles", in Plan for an ideal industrial town, Moravský zemský archiv v Brně, Státní okresní archiv Zlín, fond Baťa, a.s., Zlín, sign XV, inv. c. 126, fol. 124; Gahura, F.L. (1937). "Overview of the Development of the Industrial Garden City", in Plan for an ideal industrial town, Moravský zemský archiv v Brně, Státní okresní archiv Zlín, fond Baťa, a.s., Zlín , sign XV, inv. c. 126, fol. 124; Gahura, F.L. (1937). "Overview of the Development of the Industrial Garden City", in Plan for an ideal industrial town, Moravský zemský archiv v Brně, Státní okresní archiv Zlín, fond Baťa, a.s., Zlín , sign XV, inv. c. 126, fol. 126-128.
- 9 Mario Labò, "Colonie Bat'a All'estero," Casabella, no. 9 (1936): 28–47.
- 10 Examples of this attitude toward the natural conditions of the site can be seen in the depictions of the construction process of Bat'ov in Czechoslovakia, and Batanagar in India. In both sites, heavy ground works and water engineering projects had to be made to get the site ready for the modernist plan.
- 11 Labò, "Colonie Bat'a All'estero." 28.
- 12 For an account of Le Corbusier's projects for Bata: Jean-Louis Cohen, "Nostro Cliente E Il Nostro Padrone: Le Corbusier E Bat'a," Rassegna, no. 3 (1980): 47–60.
- 13 Margaret Crawford, Building the Workingman's Paradise: The Design of American Company Towns, Haymarket Series (New York: Verso, 1995).
- 14 "Investment Opportunities in the Vysočina Region: Industrial Zones Brownfields" (Kraj Vysočina, 2006), 1, http://extranet.kr-vysocina.cz/download/pdf/edice/REGIONALNI\_INVESTICE\_m.pdf.
- 15 "Borovinska Tovarna Z Pohledu Blizke Budoucnosti," Třebíčský Internetový Zpravodaj, September 2007, http://www.trebicsky-zpravodaj.cz/ borovinska-tovarna-z-pohledu-blizke-budoucnosti\_85.html; EKOBIOENERGO, "Kdo to Platí? [Who Pays for It?]," Borovina, 2015, http://borovinazivadodnes.cz/.
- 16 "Borovinska Tovarna Z Pohledu Blizke Budoucnosti."
- 17 TTS Development, "Borovina ...živá Dodnes," 2011, http://www.jma.as/cze/getfile.php?FileID=2983.

#### V.03 P.038 Víctor Muñoz Sanz

- 18 Hana Jakubcová, "Žádné Referendum Nebude. Třebíč Postaví Nový Dům Dětí ve Staré Továrně [There Will Be No Referendum. Třebíč Build a New House for Children in Old Factory]," iDNES.cz, March 25, 2014, http://jihlava.idnes.cz/trebic-vybuduje-novy-dum-deti-ve-stare-tovarnena-obuv-referendum-nebude-14i-/jihlava-zpravy.aspx?c=A140322\_2048395\_jihlava-zpravy\_mkk.
- 19 Thomas J. Bata, Bata, Shoemaker to the World (Toronto: Stoddart, 1990).
- 20 Ibid.; Ashley Barrons and Nancy File, "A History of Batawa," Coursework for Business Administration Program (Belleville, ON: Loyalist College, April 21, 2006).
- 21 Ibid.
- 22 "Bata Closing Factory in Batawa," CBC News Canada, October 19, 1999, http://www.cbc.ca/news/canada/bata-closing-factory-in-batawa-1.174256; "Bata Announces Reorganization of North American Operations: Batawa, Ontario Plant to Be Consolidated with Belcamp, Maryland Facility," PR Newswire, October 18, 1999, http://www.prnewswire.com/news-releases/bata-announces-reorganization-of-north-american-operations-batawa-ontario-plant-to-be-consolidated-with-belcamp-maryland-facility-76695197.html.
- 23 Gordon Pitts, "Mrs Bata Cobbles a New Town," The Globe and Mail, August 18, 2006.
- 24 Personal Communication with Sonja Bata.
- 25 Katie Alton, "Local Village a Model for the World," The Pioneer, December 1, 2007; RFA Planning Consultant Inc., "A Model for Sustainable Development In the Community of Batawa. Planning Report for the Batawa Special Policy Area" (Belleville, ON: Batawa Development Corporation, August 17, 2007), http://www.batawa.ca/photos/custom/New%20Batawa%20Secondary%20Plan%20August%202007.pdf.
- 26 Ibid.
- 27 Gordon Pitts, "The Gutsy Plan to Bring Batawa back to Life," The Globe and Mail, June 23, 2009, http://www.theglobeandmail.com/globe-investor/the-gutsy-plan-to-bring-batawa-back-to-life/article4194521/.
- 28 Víctor Muñoz Sanz, "In the Image and Likeness. Batawa: Notes on an Exported Blueprint in Southern Ontario," On Site Review, no. 27 (2012): 32–33.
- 29 Shannon Ricketts, "Batawa. An Experiment in International Standardization, 18:3/4 (1992) 86," Bulletin. Society for the Study of Architecture in Canada 18, no. 3+4 (December 1992): 80–87.
- 30 Alton, "Local Village a Model for the World."
- 31 RFA Planning Consultant Inc., "A Model for Sustainable Development In the Community of Batawa. Planning Report for the Batawa Special Policy Area."
- 32 Ibid. 15-16
- 33 "Stepping out," Economic and Political Weekly 34, no. 26 (July 26, 1996): 1652–53.; "Reestructuring Programme," Economic and Political Weekly 31, no. 27 (July 6, 1996): 1721–22.
- 34 "Bata Mazdoor Union Signs 3-Yr Wage Pact," The Hindu Business Line, January 7, 2000, http://www.thehindubusinessline.com/2000/01/07/stories/020718c2.htm.
- 35 Gavin Shatkin, "Planning Privatopolis," in Worlding Cities: Asian Experiments and the Art of Being Global, ed. Ananya Roy and Aihwa Ong, Studies in Urban and Social Change (Malden, MA: Wiley-Blackwell, 2011), 77–94.
- 36 "About Us," Calcutta Riverside, 2015, http://calcuttariverside.com/about.asp.
- 37 Víctor Muñoz Sanz, "Unfolding a Modern Palimpsest. Batanagar, 1934-2013," Domus [India], no. April (2013): 100-105.
- 38 Rem Koolhaas, "Preservation Is Overtaking Us," Future Anterior 1, no. 2 (Fall 2004): 1-4.

#### **Bibliography**

About Us." Calcutta Riverside, 2015. http://calcuttariverside.com/about.asp.

Alton, Katie. "Local Village a Model for the World." The Pioneer, December 1, 2007.

Architekturmuseum der Technischen Universität München in der Pinakothek der Moderne. Zlin: Modellstadt Der Moderne. Berlin: Jovis, 2009. Barrons, Ashley, and Nancy File. "A History of Batawa." Coursework for Business Administration Program. Belleville, ON: Loyalist College, April 21, 2006.

- "Bata Announces Reorganization of North American Operations: Batawa, Ontario Plant to Be Consolidated with Belcamp, Maryland Facility." PR Newswire, October 18, 1999. http://www.prnewswire.com/news-releases/bata-announces-reorganization-of-north-american-operations-batawa-ontario-plant-to-be-consolidated-with-belcamp-maryland-facility-76695197.html.
- "Bata Closing Factory in Batawa." CBC News Canada, October 19, 1999. http://www.cbc.ca/news/canada/bata-closing-factory-in-batawa-1.174256.
  "Bata Mazdoor Union Signs 3-Yr Wage Pact." The Hindu Business Line, January 7, 2000. http://www.thehindubusinessline.com/2000/01/07/sto-ries/020718c2.htm.
- Bata, Thomas J. Bata, Shoemaker to the World. Toronto: Stoddart, 1990.
- "Borovinska Tovarna Z Pohledu Blizke Budoucnosti." Třebíčský Internetový Zpravodaj. September 2007. http://www.trebicsky-zpravodaj.cz/borovinska-tovarna-z-pohledu-blizke-budoucnosti\_85.html.
- Cohen, Jean-Louis. "Nostro Cliente E Il Nostro Padrone: Le Corbusier E Bat'a." Rassegna, no. 3 (1980): 47-60.

Crawford, Margaret. Building the Workingman's Paradise: The Design of American Company Towns. Haymarket Series. New York: Verso, 1995. EKOBIOENERGO. "Kdo to Platí? [Who Pays for It?]." Borovina, 2015. http://borovinazivadodnes.cz/.

Horňáková, Ladislava. "Baťa Satellite Towns Around the World." In A Utopia of Modernity: Zlin: Revisiting Bata's Functional City, edited by Katrin Klingan and Kerstin Gust, 117–36. Berlin: Jovis, 2009.

- ——. "Brief Characteristics of Selected Satellite Towns." In The Bata Phenomenon: Zlin Architecture 1910-1960, edited by Ladislava Horňáková, 137–47. Zlín: Regional Gallery of Fine Arts, 2009.
- Horňáková, Ladislava, and Ludvík Ševeček, eds. Satelity funkcionalistického Zlína: projekty a realizace ideálních průmyslových měst továrních celků firmy Baťa [Satellites of the functionalist Zlín: projects and construction of ideal industrial towns Baťa company's factory complexes and resident]. Zlín: Státní galerie, 1998. http://digilib.k.utb.cz//handle/10563/27018.
- "Investment Opportunities in the Vysočina Region: Industrial Zones Brownfields." Kraj Vysočina, 2006. http://extranet.kr-vysocina.cz/download/ pdf/edice/REGIONALNI\_INVESTICE\_m.pdf.

#### V.03 P.039 Víctor Muñoz Sanz

17th IPHS Conference, Delft 2016 | **HISTORY - URBANISM - RESILIENCE** | VOLUME 03 Change and Responsive Planning | Ports, Industry and Infrastructure | Perspectives on Industry-led Urban Planning and Development

Jakubcová, Hana. "Žádné Referendum Nebude. Třebíč Postaví Nový Dům Dětí ve Staré Továrně [There Will Be No Referendum. Třebíč Build a New House for Children in Old Factory]." iDNES.cz, March 25, 2014. http://jihlava.idnes.cz/trebic-vybuduje-novy-dum-deti-ve-stare-tovarne-na-obuvreferendum-nebude-14i-/jihlava-zpravy.aspx?c=A140322\_2048395\_jihlava-zpravy\_mkk.

Klingan, Katrin, and Kerstin Gust, eds. A Utopia of Modernity: Zlin: Revisiting Bata's Functional City. Berlin: Jovis, 2009.

Koolhaas, Rem. "Preservation Is Overtaking Us." Future Anterior 1, no. 2 (Fall 2004): 1-4.

Labò, Mario. "Colonie Bat'a All'estero." Casabella, no. 9 (1936): 28–47.

Muñoz Sanz, Víctor. "In the Image and Likeness. Batawa: Notes on an Exported Blueprint in Southern Ontario." On Site Review, no. 27 (2012): 32–33. — —. "Unfolding a Modern Palimpsest. Batanagar, 1934-2013." Domus [India], no. April (2013): 100–105.

——. "Utopía En Red: Arquitectura Y Urbanismo de Las Ciudades Satélite de La Bata Shoe Company, 1930 Al Presente." Universidad Politécnica de Madrid, 2016.

Pitts, Gordon. "Mrs Bata Cobbles a New Town." The Globe and Mail, August 18, 2006.

——. "The Gutsy Plan to Bring Batawa back to Life." The Globe and Mail, June 23, 2009. http://www.theglobeandmail.com/globe-investor/the-gutsy-plan-to-bring-batawa-back-to-life/article4194521/.

"Reestructuring Programme." Economic and Political Weekly 31, no. 27 (July 6, 1996): 1721–22.

- RFA Planning Consultant Inc. "A Model for Sustainable Development In the Community of Batawa. Planning Report for the Batawa Special Policy Area." Belleville, ON: Batawa Development Corporation, August 17, 2007. http://www.batawa.ca/photos/custom/New%20Batawa%20Secondary%20Plan%20August%202007.pdf.
- Ricketts, Shannon. "Batawa. An Experiment in International Standardization, 18:3/4 (1992) 86." Bulletin. Society for the Study of Architecture in Canada 18, no. 3+4 (December 1992): 80–87.

Ševeček, Ondřej, and Martin Jemelka. Company Towns of the Bat'a Concern: History, Cases, Architecture. Economic History. Stuttgart: Franz Steiner Verlag, 2013.

Shatkin, Gavin. "Planning Privatopolis." In Worlding Cities: Asian Experiments and the Art of Being Global, edited by Ananya Roy and Aihwa Ong, 77–94. Studies in Urban and Social Change. Malden, MA: Wiley-Blackwell, 2011.

Šlachta, Štefan, Silvan, Katarína Kusová, Alena Kubova, František Kyselica, and Ján Podmanický, eds. Future of Towns with Monofunctional Industry. Examples of Bata Towns. Proceedings of the International Scientific Conference. Bratislava: Spolok Architektov Slovenska, 2006. "Stepping out." Economic and Political Weekly 34, no. 26 (July 26, 1996): 1652–53.

TTS Development. "Borovina ...živá Dodnes," 2011. http://www.jma.as/cze/getfile.php?FileID=2983.

#### **Image Sources**

Figure 1: Moravský zemský archiv v Brně, Státní okresní archiv Zlín, fond Baťa, a.s., Zlín, sign XV, img. 228a.

Figure 2: Moravský zemský archiv v Brně, Státní okresní archiv Zlín, fond Baťa, a.s., Zlín, sign XV, kart 1672, inv. č. 19, fol. 1.

Figure 3: Moravský zemský archiv v Brně, Státní okresní archiv Zlín, fond Baťa, a.s., Zlín, sign XV, img. 1139b.

Figure 4: TTS Development. "Borovina ...živá dodnes!, 2015." http://festival.borovinazivadodnes.cz/5-fotogalerie.html

Figure 5: Courtesy of Batawa Development Corporation.

Figure 6: Víctor Muñoz Sanz, based on digital files provided by Hiland Ltd.