

- Figure 3:** *Satellite photo of the Metropolitan Area of São Paulo, with infrastructure highlighted in white (highways) and yellow (railway). Source: Meyer et. al (2004:121).*
- Figure 4:** *Schematic map depicting the Metropolitan Transportation System, with the integration of the underground system (Metrô), metropolitan trains (CPTM) and trolleybus (EMTU). Regular bus lines are mostly operated by municipalities and, due to their number, cannot be represented at this scale. Source: STM (2005)*
- Figure 5:** *Social Vulnerability Map. Darker colours indicate higher vulnerability to poverty, including low literacy, unemployment and violence indexes. Municipalities in white have either no data or very sparse population. Source: SEADE/ PMSP (2004)*
- Figure 6:** *United Nations Human Development Index applied to São Paulo's districts. Various social and economic indicators are used in order to produce the UN IDH, which is generally used to measure the human development of countries. In this case, the same indicators were used in order to compare human development in the various districts of the core municipality. There is clearly an »island of richness« in the south-western vector of the city, which has indicators comparable to those found in European countries. Only 3.46% of the total population lives in these areas. On the other hand, the majority of the population (55, 38%), lives in areas where socio-economic indicators are comparable to those found in Africa. Map by R. Rocco, based on data produced by the Secretary of Development, Labour and Solidarity, Municipality of São Paulo, 2002.*
- Figure 7:** *The »Clandestine City«. Irregular Land Occupation in the City of São Paulo. Data source: PM-SP (2002) and Brazilian Census (IBGE, 2000)*
- Figure 8:** *Lambregts' »alternative paths for the evolution of polycentric urban regions« (Lambregts, 2006: 116, apud Champion, 2001: 665)*
- Figure 9:** *The city of São Paulo is divided in 9 regions, 31 sub-municipalities, 96 districts and hundreds of »bairros« (neighbourhoods), the smallest administrative unit. Source: SEMPLA (2004).*
- Figure 10:** *Network of Attraction Poles and Centralities in the City of São Paulo. Attraction poles refer to large urban infrastructure or urban facilities, like commuting points (inter-modal stations or large bus, underground or train stations) and large shopping centres. »Centralities« refer to business or commercial nodes, either planned or the result of the incorporation of neighbouring cities. Source: SEMPLA (2002).*
- Figure 11:** *The evolution of business centralities in the city of São Paulo, according to the approximate time period of greater dynamism. The most dynamic business centre has made a loop of approximately 14 km towards the South-West, from the old historical core to the banks of River Pinheiros. Map by R. Rocco. Satellite photo source: NASA, 2004.*
- Figure 12:** *Main Areas for Commercial Real Estate Development in the City of São Paulo. Map by R. Rocco, 2006. Source: Bolsa de Imóveis do Estado de São Paulo (2002).*

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Luka MLADENVIČ

Regeneration of the city: The Tobacco factory in Ljubljana

More elaborate preparation, better order, success assured?

1. Introduction

On May 1, 2004, after more than 130 years, the manufacture of tobacco products came to an end at the Tobacco Factory Ljubljana (Tobačna Ljubljana). Thus ended a long period of uncertainty for one of once the most important and for many most characteristic Ljubljana's factories.

The shutdown may be understood as a result of two well-known trends. On the town scale it is a trend of shutting down or moving out industrial facilities from the immediate vicinity of the town centre. The main reasons for this are incompatibility of activities with other urban functions and inflexibility of locations due to the lack of space for further growth. Looking at the bigger picture, it is a trend moving manufacture to the countries with a more low-priced workforce so as to reduce production costs. Such a development comes as no surprise, and it is expected that in the future the few remaining large factories in the town will follow. In the very town centre there has been for years a forlorn abandoned factory »Rog«, which at this time has temporary tenants, but the story of its revival is far from a happy-end. This is why Ljubljana needs an exemplar case of a successful regeneration of an abandoned industrial area, put to general use of urban public and not restricted to but few users.

In 1871 when the Tobacco Factory Ljubljana was established it was situated in the outskirts of the town, strategically positioned alongside the railway. The available surface was large enough to allow the construction of an entire factory complex, a real small town within town, built in the typical industrial architectural style of the second half of the 19th century. An incessant development and numerous technological innovations introduced during its operation were placing the factory at the very top of European industry.

Since the establishment of the factory the town has spread considerably and the factory complex no longer lies in its outskirts. The location of Tobačna has now been described as a part of the inner city as it is less than ten minutes walk away.

2. An opportunity

It wasn't difficult for the town to recognise the exceptional opportunity brought about by the factory shutdown and renewed availability of such a huge surface. In the past few years several industrial complexes all across Europe have been successfully regenerated. With their characteristic design and architecture they represent an important part of towns' past. After an appropriate regeneration their aesthetic qualities have become ever more recognisable.

The buildings themselves with their flexibility and bigness are particularly appropriate for further use as their huge, exposed spaces with relatively great span-widths have the capacity of housing many a new programme.

Nonetheless the question has been raised about how the story of Tobačna will continue. Will anybody know how to take advantage of this opportunity? Will there be an investor able to enter into dialogue with the town in such way to avoid repeating the story of the remaining Ljubljana's abandoned buildings which abound around the town centre vainly expecting regeneration? They have been waiting some other times to continue their lives.

3. Competition by tender

The first step towards revival was made in autumn 2006 when the transformation of the area was put up for tender by the investor IMOS along with ZAPS. The competition by tender will serve as the basis for the municipal planning document. The tender process ended successfully in February 2007 with an exhibition in the presently vacant spaces of the Tobačna.

Considering the prepared tender material the investor deserves praise for his concern shown towards the preservation of architectural heritage and readiness for the regeneration of existent buildings, and for not being exclusively interested in the construction of new buildings. Altogether they would create a new and recognisable urban area in the immediate vicinity of the town centre.

Naturally the investment intended for the regeneration of existent buildings reflects in the immense amount of required surfaces for new buildings.

Therefore all proposals aiming to satisfy the requirements contained in the tender material suggest for the central part of the area which is not listed ranges of rather tall towers, or else a little lower but quite dense built environment in combination with a higher accent.

This, again, brings up the topic of tall buildings in the immediate vicinity of the old urban core. There is no doubt that appropriate locations for this kind of buildings exist in Ljubljana, yet unless the town prepares a clear strategy, the soaring prices of building lots and the pursuit of profit will push every potential investor into building tower-blocks without considering the suitability of the building lot.

Construction of tower-blocks next to the town centre is a particularly sensitive topic for Ljubljana, especially after the failed competition by tender for Kolizej when the professional public unanimously rejected the winning proposal. Besides the illegitimacy of the competition, one of the main arguments to the contrary was the unsuitable height of the building at the location alongside Tivoli and Gospa sveta streets. Its height would block the view of the castle and establish a new balance of power between height accents in the very town centre.

In order to avoid repeating unpleasant situations caused by divergent expectations of investors, town authorities and local professionals, it would be necessary for the town to adopt a clear strategy exposing where tall buildings cannot be erected in town and why not. In addition it should suggest where

tall buildings can be built and where their construction is even desirable, and under what conditions.

An integral part of such a strategy must necessarily be a special treatment of the discussed areas in terms of accessibility with emphasis on the use of urban public transport. Tall buildings in a small urban area produce a concentration of workplaces. A private car can therefore not be envisaged as a primary mode of transportation to work.

Despite desperate attempts to pack as many parking spots as possible in basements of buildings, there's a limit to which it makes sense and is economically justifiable. Rather rigid present regulations concerning the number of parking spots per residential/commercial/office surface could in future be amended by a provision stipulating that some of these parking spots might be replaced by investing in urban public transport passing nearby.

As for accessibility the Tobačna has excellent starting-points. Proximity of the railway line and frequent urban bus services permit unique accessibility by means of public transport. And the already implemented cycle paths enable excellent accessibility by bike throughout most of the year.

4. The winning entry

The first award in the competition was won by architects Dekleva & Gregorič and their vision of the »Nova tobačna« complex. In the proposal concerning the existent listed buildings they envisage public town's programmes. In the northern part of the location which is not listed, they propose a range of two-floor terraces housing public, commercial, business and cultural programmes, and topped by residential towers. As the main height accent they propose the so-called »Kvadrat« (Square) at the corner of Tivoli and Trieste streets, a twenty-floor building housing offices and a hotel, which should become a hallmark of the narrower and wider area.

An individual building is used by a certain, rather limited number of users, while public spaces around it are used by an incomparably greater number of users, by all townspeople so to say, therefore a quality solution from the public point-of-view should analyse first of all the envisaged public spaces. These are given three different identities in the »Nova Tobačna« area.

The first one is a network of small squares and short streets in the northern part of the location. They are formed around the two-floor terraces housing predominantly commercial businesses, which complete the morphology of the shopping centre with residential dwellings in the towers topping the terraces. As a matter of fact dwellings are the only element a classical mall lacks to be rightly called town. Despite successful merging of such programmes we have known from foreign examples, our designers unfortunately do not decide in favour of such a combination.

The inner »Stari trg« (Old square) among the regenerated existent buildings constitutes the second identity. The chief element in this space is a lowered venue for cultural programmes. Humanly measured and surrounded by quality albeit industrial buildings, it mimics a square in the classical sense of the word. As the town does not yet have a square surrounded by industrial heritage, this very element represents a quality contribution to the variety of Ljubljana's public spaces.

The third and perhaps the less felicitous identity is represented by the main square, the so-called »Tobačni trg« (Tobacco square) alongside »Kvadrat« (Square). Because of the undefined surrounding built environment and the high wall of »Kvadrat« at one of its edges it might make an unpleasant impression upon users. Even though this place is described as representative due to the importance of the building, its use will probably remain limited to passing through and will not make people stay.

The winning solution thus offers a wide variety of environments. It is based on existing elements but goes beyond. In a balanced manner it adds new ones that build a fresh and contemporary image of the Nova Tobačna. It will also help build the identity of the broader space of Vič which has no clearly defined centre of activities and now is devoid of characteristics its inhabitants could identify with.

The arrangement of the northern edge of the location bordering on the railway line will require further discussion before implementation. Owing to the activities related to the section of the railway running underground through the town which started only after the conclusion of the competition, it is likely that some changes will occur in the following years impacting essentially on the space in its immediate vicinity. Across Tobačna, over the railway line, there are namely the villas of Rožna dolina. In the competition proposal the transition from twelve-floor towers to the small scale of three-floor villas is abrupt. In the case the railway goes underground and the space at ground level becomes passable, this contrast will be particularly visible and may influence negatively on the characteristic of space at Rožna dolina.

5. Conclusion

For the time being it seems that among all Ljubljana's abandoned complexes Tobačna and its surrounding will be the most fortunate. The investor proved by the competition that he might be considerate towards the heritage preserved at the location. An appropriate treatment may enhance its value and also contribute to the identity and character of new buildings in the immediate vicinity. We can be very satisfied for the time being with the steps made so far towards the location's revival. We can only hope the future ones will match them. With the successful activation of the Nova Tobačna Ljubljana will finally get an exemplar case of how the procedure of revival of an abandoned area can be implemented in our conditions. Now, other locations may follow.

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The dimensions of urban public space in the user's mental image

1. Definition of the research problem

One of the definitions defines the open public urban space as a space amidst built structures which is accessible to all without limitations regardless of their conviction and social or economic status. Space so defined is continuous in the physical sense and flows uninterruptedly amidst the built structures. Physical continuity is clearly shown in the presentations of the morphological structure according to the Gestalt principle, in which the open public space is an unbroken form (a positive) spreading without interruption amidst individual objects (negatives). The Figure below shows an example of urban environment built on octogonal grid with a full parameter blocks (7x7) in which theoretically 16 buildings appear with a single open space. The same holds true for other morphological patterns of compactly settled urban areas.

Our experience with open public spaces tells us that despite their physical continuity they do not appear as uninterrupted spaces in our mental images. Some parts have a stronger presence in our mental image than others, some are not present at all. Users' value judgments about individual parts of a space may diverge, too.

In order for urban design to establish a citywide transparent and clearly structured public space network it is important to know how and according to what principles this space is structured in a user's mental image.

2. Theoretical Foundations

Let us first shed light on the relation between a mental image which is an immaterial category, and space intended here as a material (physical) category enabling the establishment of the former in a variety of ways.

According to Bell et alii (2001) an image about space forms in two ways: through one's own direct experience about a space or indirectly through information acquired from other people. In either case a complex process of acquisition, processing and interpretation of information is involved and there are no clear dividing lines between individual phases. Information acquisition usually occurs through direct sensory experience (sight, hearing, smell, touch) which provides information on the surrounding environment. Another way of information acquisition is through various mediations that are more or less objective. Recordings of space (plans, photographs, audio and video recordings and similar) count among more objective sources of information, while sources reflecting the author's subjective interpretation like narration, paintings, literary depictions and similar are regarded as less objective. (Hudson-Smith, web source).