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Behind the Pinocchio's Story: Urban Representation as a Techno-

1. Introduction

Fairytale

Following the rhythm of the fast-moving life the contemporary cities have been trying to create and maintain a progressive architectural landscape, with all its demanded features. Therefore, each global node goes along the 'successful pathway' already used by (self)proclaimed role-models, simultaneously incorporating various nets of multicultural, multilateral and diversified relations. Reinvented urban spaces - materialized by architecture and urban planning - continuously upgrade their morphology, dynamism and symbolism, producing a new living environment for our media-focused society.

Tradition and technology, computer-generated spaces and preserved entities, efficiency, sustainability and identity - work together on countless levels and scales enabling a global competition of cities in which winners and losers could easily switch their places in a second. Consequently, urban space acquires new dimensions which transmit messages of neo-liberal order, global culture and preferred social, political and economic objectives. Balancing between reality and illusion, exaggerated qualities and diminished obstacles urban representation opens a new chapter of city promotion, based upon global and local myths, politically correct tradition and progressive future.

However, all these ingredients for a successful urban story need a magic touch of advanced technology which should glue together pieces of our urban puzzle. Used as armature, tool, catalyst, generator, light-motif or simply - a label, technology shapes a different comprehension of space and time, inserts history into new framework and enables endless manipulation with space, information and people¹.

2. City and Technology

The existing technology, with its various applications and implications, becomes a vital element of urban culture but, simultaneously, the specific urban situation has an important influence on design of technology and its performances. Obviously, the interaction of city, society and technology is intensive and it often causes, stimulates and promotes urban and technological innovations.

Analyzing the role of obduracy/inflexibility in urban socio-technical change, Anique Hommels² presents three different models used in urban and technology studies, which are dealing with this problem - concept of frames, embeddedness and persistent traditions. According to Hommels, the model of frames could be applied when architectural, planning and technology experts, as well as users, are limited by the rigid ways of thinking and interacting. Therefore, this concept is used in urban planning and (re)design, when actors and their needs are identified and included in planning process. Simultaneously, their interactions are developed and conducted within a specific technological frame which directly and indirectly causes their problems and goals. The same frame affects the

professionals, shaping their theories, strategies, procedures and methods which should offer acceptable solutions and solve identified problems.

The concept of embeddedness explains tight relation between technology networks and socio-technical systems, actor-networks and socio-technical ensembles. It could be applied as a framework for various kinds of urban analyses - stressing the importance of interlinked social and technical elements which create a well known tension between stability of built environment, transportation, water/waste networks and mobility of people, information and capital. The model explains the heterogeneous nature of a city and its networks, taking into consideration the technological inflexibility of urban systems or their elements.

The model of persistent traditions emphasises the role of shared cultural context, its values and traditions in the process of technological (and urban) development. The concept also explains the dynamics of technological change clarifying the relation between technological determinism and social constructivism within the urban system. It takes into account categories such as 'shared visions' and 'archetypes' focusing our attention on structural, cultural and symbolic factors which influence the inflexibility of urban structure and its technological background.

In spite of numerous benefits, new technology always brings uncertainty. However, its role in the contemporary city is undeniable since it instigates a chain reaction which should lead and support further development and regeneration. It therefore comes as no surprise

that various initiatives and programs oriented towards urban transformation, regeneration and new modes of representation reveal the crucial position of technology.

3. Shaping the Wishful Scenery?

The contemporary cities, exposed to the strong and often uncontrolled currents of economic, political, cultural and media globalization, have gradually developed a new spatial response which includes the latest 'urban menu'. It is adjusted to new requirements, providing the globally 'approved' set of preferable/feasible activities - finances and business, command, control, culture, creativity, knowledge, media, tourism and new technologies. They complement each other and generate numerous combinations in diverse spatial formations, creating trans-urban and trans-national systems.

The global architectural landscape becomes almost unified, revealing the similar combinations of symbols incorporated in polished urban settings and entangled into multiplying networks. The new visual language created by famous architects or overwhelming global brands is accepted as a necessity and backed by the logic and tools of modern technology. However, the process of urban regeneration is also recognized as one possible method for the reinvention of urban identity and improvement of living conditions. Usually, it is oriented towards declining and neglected quarters, outdated harbour areas, ex-industrial sites and former nodes of transportation infrastructure which should be transformed into attractive generators of 'vibrancy', driven by culture, tourism, business, education and technology. Unfortunately, a large number of these interventions

represent just a side effect of large-scale projects or simply a political marketing, without proper long-term strategies and goals.

Urban regeneration is usually defined by a selected theme or focused on some recognizable landmark. Therefore, the most popular seems to be the so-called 'cultural regeneration', which should support inherited (or preferred) urban identity. However, the regeneration should be thoroughly planned and based on numerous analyses, evaluations and estimations which should insure its sustainability and prevent further degradation and segregation of urban tissue and local community. As a result, it is possible to distinguish two main approaches to urban regeneration - radical and moderate - which create completely different surroundings. In both cases technology plays an important role, connecting the multiple spheres of urban life and converting the inherited physical patterns into interrelated digital units. Simultaneously, the modern technology is embraced as a perfect tool for sustainability, energy efficiency and ecological balance of the final solution and a powerful (visible or invisible) ingredient of its architecture and open spaces.

In spite of all proclaimed ideas and visions, the real effect of urban regeneration is usually an uneven and highly accelerated development which represents recycling of already used models, scenarios and themes. However, some cases, like the project RESTART³, are very successful and promising. Promoted by the European Commission and coordinated by RESET (Renewable Energy Strategies for European Towns), project RESTART (Renewable Energy Strategies and Technology Applications for Regenerating Towns)

initiated eight large-scale building programs in Barcelona, Glasgow, Lyon, Turin, Rotterdam, Copenhagen, Porto and Dublin, designed to solve problems of low energy efficiency and pollution in selected historical, derelict or abandoned areas of cities.

Unquestionably, the technology (re)shapes the past as well as the future while urban landscape becomes a kaleidoscope of infinite possibilities and challenges. However, the high expectations generated by globalization sometimes impose complicated aims and unrealistic visions. In that case, the power of technology becomes just a cover, an excuse or a mirage, without real justification. Therefore, it is still difficult to estimate the final result of the synergy between cities, technology and society which - one way or another - keeps the contemporary urban environment between fairytale and nightmare.

4. Towards the Acceptable Modernity?

Searching for their reinvented global and local attractiveness cities apply various methods of representation and regeneration. For example, the Lisbon's 1998 EXPO site ('Parque das Nações') was created to host the World Exposition, but one of the main ideas was to improve the condition of the whole area, including five kilometers of the riverfront.

Therefore, the regeneration concept emphasized the link between the city and the river, its modernization and preservation of its essential character. Finally, the new 'globalized' image was achieved revealing exceptional facilities, luxurious residential quarters and conveniently packed corporate activities - all attached to the new infrastructure and supported by the latest technologies. Ten years after the public inauguration, the 'Parque das Nações' represents one of the Lisbon's main attractions, but debates about the viability of

this project cannot be ignored. The new landscape obviously reflects ambitions, improves previous condition, incorporates contemporary technology and brings a new identity of 'the place'. However, financial, environmental and social effects still have to be verified.

The locally oriented approach to regeneration usually takes into consideration urban legacy, (re)using it as a competitive advantage. The old railway area in Antwerp (Spoor Noord) represents one of the good examples of this practice and it promotes ideas related to public interest and environmental improvement. The result of this transformation should be, therefore, mainly focused on leisure and recreational activities placed in an urban landscape park. Additionally, the regeneration program also includes new cultural, educational and commercial activities, a student campus and a monumental footbridge which should connect this part of the city with a new marina - Willemdok. The application of new technologies is inevitable even in this case, but its presence is not so visible and prioritized - history and local community have the leading roles.

Some cities follow another kind of technological stimulation. Like in the case of Barcelona and its Poblenou district⁴, technology becomes the main issue of regeneration, imposing new standards for inherited physical surrounding. In fact, the Poblenou - district 22@bcn used the high-tech stimulus as a generator of urban renewal, which was guided by the basic principles of sustainability and flexibility. The idea was to create a mixture of science, technology, government and business and to support networking, innovation, creativity and cooperation among new actors. Therefore, the main objectives of this plan were focused on successful synergy of complementary urban activities, density growth,

promotion and support of knowledge-intensive activities, flexibility and modernization of infrastructural networks. Consequently, Barcelona promoted a high level of public-private collaboration, added a new 'technological' label and created an urban symbol of innovation. However, the local community does not share the same optimism. Instead, its doubts and arguments are conveniently overlooked by officials and excluded from the marketing campaigns. Obviously, the demands of some groups do not fit into the 'positive' framework of the project but the 'selective' reality, embedded into the media representation, enables further transformation - without too many obstacles.

5. In a Whirl of Transformation

In some cases, regeneration and its representation are guided by the level of (un)development and number of conflicts - between reality and proclaimed (political) objectives, local and global conditions, elite and 'invisible' communities, high demands and limited possibilities. Considering this complex background, cities in the Balkan region are an interesting research phenomenon. Their physical structure was under strong, direct or indirect influence of numerous processes – from economic and political transition and civil wars, to migrations, ethnic/cultural transformations, and globalization. In addition, they also represent a synthesis of various global trends and their physical and technological structure can be perceived by utilizing multidisciplinary filters. Thus, as a result of such events in urban regions, it is possible to distinguish elements of local tradition, post-communist restructuring, global forces, emerging networks, postwar reconstruction and revitalization, and unavoidably, multicultural and multiethnic fusion which fortunately can not be erased by civil wars.

The tools of urban regeneration and renewal do not differ much on the global and local level. However, since different socio-historical factors determine the specificities of individual environments and situations, certain specific characteristics can be distinguished. For instance, the cities of Serbia, like most of the ex-socialist urban nodes, developed in similar way and their appearance and functional structure was directed by similar ideological frames. However, it was fortunate that the politicians often had no interest in investing into radical reconstructions of cities (as was proposed in city-planning documents), and that the central city cores remained untouched in most cases. Nationalization, expropriation and revocation of land ownership resulted in less compact city tissue, mono-functional areas and city centers. All this led to losing streets and squares as social arenas of cities, as well as to unattractiveness and the lack of interest in maintenance.

Today, the process of 'globalized' urban reconstruction in Serbia is not yet in full swing, although it is often emphasized as one of the main aims of national and local governments. A number of planning documents have been initiated and they include the principles of sustainable development, as well as some guidelines for technological development and improvement. However, the implementation of these 'intentions' requires certain changes, especially related to the tools and methods of urban regeneration that would support and conduct more efficient approach to this problem. Therefore, the main steps would be:

- modification of legal regulations, establishment of adequate legal frameworks to support regeneration processes;
- introduction of active methods of protection;
- foundation of a reconstruction agency a link between local authorities and investors through experts (urban planners);
- forming of a codex for the transformation of main city streets by singling out basic elements and by suggesting steps for their future transformation.

The advanced technology could certainly support and facilitate all these steps and improve their interactivity and integration into planning process. For example, similar transformation patterns have been tested in the cases of Pozarevac and Kragujevac, using technology as a tool for various analyzes and modelling, as well as for the active participation of all actors. However, despite loud rhetoric of local politicians and professionals, it is questionable what will be the final output of this experiment and what will be the real measure and level of applied technology in the process of implementation, monitoring, evaluation and - maintenance.

The main goals of urban reconstruction and regeneration in Kragujevac and Pozarevac were related to urban/traffic efficiency, permeability and accesibility of public spaces, active preservation of traditional cultural values, introduction of new technologies and continuity of urban matrix. Therefore, the recommendations for future development were

based on historical analyses, aesthetic qualities and infrastructural improvement that would enable higher quality of urban life. Obviously, the future development of urban matrix should not be based only upon historical models but adjusted to modern social and cultural circumstance, as well as to technical and technological achievements.

6. Conclusion

Today, a city could be perceived as a place with the highest concentration of numerous networks which, all together, should ensure the longevity of its complex organism.

Consequently, the higher level of flexibility and mobility should be achieved and the service sector intensified. This condition instigates, directly or indirectly, transformations in other fields of intricate urban system - from housing, transport, education to social welfare and environmental protection. Numerous projects of urban regeneration follow the similar planning pattern and common design procedure upgrading the existing buildings and urban infrastructure, introducing new, globally imposed and preferred activities, setting up new networks and improving connectivity and accessibility.

However, the effects of these actions, in spite of their high aims, elaborated campaigns and received media attention, still cannot be completely confirmed. In the meantime, the urban fugue which technology creates with history and culture still does not have the appropriate rhythm, harmony and (re)presentation. The motives, strategies and instruments are numerous, but the level of their moral integrity and justification could vary drastically.

Wishful thought, fairytale, intention, lie or truth? It is, probably, impossible to discover the right answer which would adequately describe and explain our recent urban reality.

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¹ Aleksandra Stupar, "Expressing the Power of Technology: Urban Challenge, Global Fashion or Imperative of Sustainability", in *CD Proceedings of 6th Annual IAS-STS Conference "Critical Issues in Science and Technology Studies"* (Graz: Institute for Advanced Studies on Science, Technology and Society, 2007): 1-17.

² Anique Hommels, "Studying Obduracy in the City: Toward a Productive Fusion between Technology Studies and Urban Studies," *Science, Technology and Human Values*, vol. 30/3:(2005): 323 -351.

³ RESTART - Renewable Energy Strategies and Technology Applications for Regenerating Towns (1996), http://www.resetters.org/RESET/r-0-restart.html [15 April 2008].

⁴ Ajuntament de Barcelona, *Urban Renewal in Poblenou District of Activities: 22@bcn* (Barcelona: Ajuntament de Barcelona, 2003).