

The Architecture of the Conflicts

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ABSTRACT

The environment of the modern city suffers various conflicts, e.g. infrastructural, functional or compositional. In studies on the city's morphology, the types and kinds of hard-to-avoid problem areas are considered. These areas are usually formed in the course of natural structuring caused by unpredicted phenomena and unplanned development. It is extremely difficult to change the functioning of such territories, to overcome functional overlapping, and trace logics in the transport network. The types of problematic territories with a conflict nature have been studied and classified in the field of urban morphology: fringe belts, "joints", fixation lines (H. Luis 1936, M.P. Conzen 2009, J.W.R. Whitehand 2019, T. Ünlü 2014, V. Olivera 2008, 2018), economic reason for their formation; "terrain vague" (failures of urban fabric) (1996); contact zones (Yavein, 1978); buffer zones (Kukina, 2006), etc. The architectural work has gained a considerable experience in mastering these problems. With a radical change in space, form and image of usually marginal territories in the past, the functional structure, traditional processes are preserved and developed, expressing eye-catching images of the modern architecture or the subtlety of balanced solutions.

Keywords: *architecture, environmental conflict, planning, buffing areas, renovation*

I. INTRODUCTION

The establishment of indestructible regime is making the attitudes to harmonizing the environment and rationalizing the structure of a modern city overlap, which is impossible without maintaining the directed dynamics of the natural development of spontaneous processes and phenomena, alongside with its individuality and, to some degree, independence of certain parts. In this regard, it is important to identify what a whole (elemental) in the "construction" of the city is. The older the city is, the more it resembles a palimpsest, the deeper the contrasts of its parts and of the reconstruction issues, and the clearer the need to preserve that morphological diversity of the city's environment. The architectural and urban scope of the "physical" history requires that each realm should be "spatially" defined. In this sense, the understanding that the city has inside borders, formed in a specific way, and the process of their formation can be studied and result in recommendations for improving the structure of modern cities, is becoming more and more acute. The theory of urban development argues the trend of polycentric cities — "connected-and-discrete" — which allows deliberately assessment of the balanced co-development among different, "value-mixed", but

unique territorial entities. It is possible to "connect" and "divide" the realms characterized by different historical eras, functional and technological content when the buffer zones' architectural system is introduced. Put simply, such system scientifically covers all types of frameworks found in the current academic dictionary, supports and shapes a certain structure of an object. It can be considered as a preserving tool for urban historical areas, landscape, architectural object and protected items in the cities, as well as a method of overcoming spatial "segregation". The life in the end of 20th – the early 21st centuries brings a series of spatial conflicts that arise in the cities between certain objects and buildings in around, the old and the new, between the way how the territories are used and their potential, between the housing and transport, individual and public spaces, natural landscape and city life, etc. This way has generated an assumption that for any object, urban structural element or for the entire realms, there must be a buffer that would preserve the object and "match" its existence with other environment. Perhaps, such "coordination" even if would not encourage the preservation of existing and the formation of new ensembles in cities, then at least, it would allow to smooth the conflict situations [6].

On the other hand, it will be quite fair to say, that architectural creativity throughout its entire history has been and will be keen on constructing integral coherent ensembles in populated areas, as well as on harmonious unity of their spatial composition. There are

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architectural ensembles created at a time, following a single plan, and the ones that have been built over the years, by the efforts of many architects, who carefully complemented the composition, so that the new elements have been organically interweaved with the old ones.

Regarding the current typology of the “conflict” territories in the city, we will consider some of the architectural versions of overcoming spatial and functional obstacles.

II. RETHINKING THE SCOPE OF CONFLICT TERRITORIES

Natural transformations have resulted in the fact that the major areas of the cities are found to be occupied by so-called “urban structure gaps”, i.e. heterogeneous territories with different interpretations and a mutual reversed ability to separate and unite certain parts of the city. These territories have been defined differently by the authors. The first international discussion on the problem areas can be called the International Congress of Architecture in Barcelona, 1996, where they shaped a joined typological group of related objects.

In the urban theory, “inter-territories” were defined as far back as between the 1960s and the early 1970s, when the ideas about a monocentric city were displaced with the polycentric ones, and when the evolutionism of uncontrolled development took place. The theory of urban development was enriched by the studies in the field of urban morphological research: “petrification” of the market and social entities, landscape-urban zoning and typology of the urban borders (joints, barriers, outskirts, etc.).

The largest of the “urban structure gaps: are industrial territory. Huge industrial areas were neglected following the replacement of obsolete technologies, often ruined against the clock. A new urbanistic phenomenon (“urban structure gaps”, “unidentified areas”, “inter-territories”, etc.) is in the spotlight due to its expressive capability in the city’s body and usually perceived as a manifestation of something negative, unknown or problematic. When photographing in “unidentified places”, the camera usually captures contrasts: both, “black” and “white”, new and old, planned and suddenly appeared. Such ranges are basically in the focus of large-scale transformations now. When looking carefully at the “urban structure gaps”, it indicates that these realms are what a series of city growth processes can be resulted in. For the cities, there are some types of “gaps” and related restructuring and renovation strategies – “large internal holes”, “outdated industrial equipment and technologies”, “old ports”, “railway stations and service areas”. The international practice can boast about a

hundred of large-scale projects to “fill” neglected “large internal holes” in the development under the umbrella of “re-use”, rehabilitation and space transformation [7].

In the urban planning theory of Russia, the search for such borders has rather “entered the body” of the city. In this context, N.S. Ukhina defines the border zones as specific territories in the city, “where different functional and compositional zones directly contact each other: industrial and residential, historical and modern areas, large tracts of greenery and residential buildings, etc.”. The main border zones are historical borders, coastal zones, industrial and residential border zones and historical and modern areas. The border can be a volume entity or an independent space.

III. ATTITUDES TO THE CITY RENOVATION

That brings us to mention about the change in the city renovation methods. The scale and globalism of the current state suggests that there are two fundamentally different methodological stages in the process of cities reconstruction. The first has been formed since the middle of the 20th century and refers to the reconstruction of cultural heritage and literally affects historical cities and historical centers of dynamically developing industrial cities. This stage is basically marked by the identification of monuments belonging to architecture, history, culture, protected zones, historical environment and cultural heritage preservation in the populated areas.

The second approach, which is peculiar to these days, is first and foremost aimed at the city restructuring basically due to the conversion and naturally arising unplanned transformations. A challenge in this sense is the solution of “contact links” between the memory of the past era within the old logic of the city plan and reconstructed and newly built areas, in the search for integrity, spatial tolerance and non-conflict. Thus, the study of the buffer zones’ logics, morphology and possible typology may lead to a tolerant urban regulation method and strategies for the modern cities restructuring [8].

IV. ARCHITECTURAL SOLUTIONS FOR THE CITY RENOVATION

For urban planners and architects, a reconstructive “embedding” of new objects in the structure of the city means the most complicated task. “Ostozhenka” design bureau used the method of preserving historical parcels for the spatial identification of new construction. Its essence lies in identifying the current functional relations and the boundaries of the territory used for the needs of each building before the reconstruction in the quarter. Such approach is aimed at preserving the proportions and basic relations among the open spaces when replacing or reconstructing the structures. In this

way, the centuries-old physical dimensions of the yards, small areas and lighting (due to the height of buildings is saved) remain unchanged, while the architectural decoration of the interior “designs” of the quarters changes drastically. In this case, an amazing effect is



obtained, i.e. the sensations, perceptions of a picturesque curvature of medieval spaces determined the latest architecture ("Fig. 1"). The historical parcels are emphasized by the landscape architecture.



Fig. 1. Preservation of historical parcel in the renovation of the city. Moscow. Ostozhenka Bureau.

When designing new public buildings in the historical environment, the lack of open spaces becomes quite a specific issue. In “Speech” (3, 2009), there is a discussion about the existence, necessity and possibility of creating small squares in the modern metropolis. According to some Russian designers, the disappearance of these areas is reasoned by the fact that there is no way in creating huge ensembles, and making small squares is “too troublesome”. The construction covers certain sites, and neither a single investor, nor a client agrees to pay for an empty space and create there a public area at their own expense. As a result, the classical square per se fades and gives a way to other forms. In this context, it is likely to be appropriate to recall Kurokawa’s statement that “simulacra” would become the basis of architecture poetics [9]. A different form (not square!) of public, open, equally accessible space would be its simulation — that is the way how a simple pragmatism leads to the modern “poetics” of the Russian city. The architecture of Russia includes intermediate “gray zones”, i.e. the spaces that are neither internal nor external, but median, perceiving the properties of both, belonging to the architectural structure owing to some rational functionalism. For example, when designing the building of the Arbitration Court, the engineers thought of it as of an open democratic court and intended to make a part of the court’s territory accessible to citizens. But the client preferred to enclose the entire territory, and the mini-square turned out to be available for the court’s staff only [10].

In the last quarter of the 20th century, the world practice of urban design met a broad environmental approach. Thus, the territory of Illinois Institute of Technology in Chicago is cut by the underground line.

The road is elevated and does not interfere with the pedestrian traffic, but, at the same time, does not eliminate some sanitary and hygienic issues. At the intersection of footpaths under the railway track on the way from the dorms to education buildings, a decision was made to build a student center. The existing tracks were the ones that Koolhaas invented his plan on. Each of the formed halls of irregular triangular shape has its own function: shopping, entertainment, cafe area, self-study zone, etc. At the crossroads, public areas are organized, accompanied by small isolated gardens. The underground overpass taken in captured by a reinforced-concrete pipe. The unique engineering solution of the center’s structures and railroad railings together create quite a sustainable environment for the student center, resembling a miniature medieval town. Near the center there is another unique building — an office, which coincides with the underground station. It functions as a shield consisting of cuboid glass volumes alternating with the gardens. The shape of the office roof resembles a cut pipe, which follows the student center ("Fig. 2").



Fig. 2. The “pipe” of the metro line lying on the building of the student center. Arch. R. Koolhaas (OMA).

The city’s fringe belt is the one where the urban land is highly used and formed on the border of a settlement during a slowdown or suspension of its territorial development. As the city grows, it crosses its fringe belts and continues to develop beyond its borders, but important urban objects remain right there. Thus, a city with a rich history may contain a few such zones: internal, medium and external. Within Yeniseysk’s development, three fringe belts have been phased out: the internal belt (18th century), the middle (18th and later centuries), and the external, which is a “conditional border” of the city today. The internal fringe belt is located on the periphery of the historical center and contains many cultural heritage sites. In the

17th century these territories had only a man’s monastery and a mint yard. It started to be built with religious, educational and health facilities, estates and shops of the Yenisei merchants. The biggest part of the belt runs along ulitsa Fefelova, a green pedestrian street, which used to be the Skorodum riverbed. In the 18th on the east side of the Spassky Monastery was Sennaya ploshchad’ (square). Currently, there are 30 objects marked as a cultural heritage. Among them, there are 3 religious sites, 20 private estates, 5 public and business buildings, a warehouse, a square where the cultural heritage site of regional significance — a mass grave of 242 active participants in the Yenisei-Maklakov Rebellion — is located. ("Fig. 3")



Fig. 3. Inner fringe belt of the city of Yeniseysk, can be considered as a tourist corridor.



Fig. 4. Fefelova street within the boundaries of the inner fringe belt of the Yeniseysk.

The internal fringe belts of Yeniseysk can be considered as a social and recreational zone, which resembles a single system of public spaces, consisting of small gardens and landscaped areas of various themes. It can additionally accommodate catering facilities, chamber museums and hotels in historical estates. Their lack is particularly seen in the period of the open August Fair and other major city holidays. It is recommended to place thematic gardens throughout the green fringe belts: a terraced pharmacy garden, a garden for the Orthodox cafe with special symbols in the green design, a walking area along ulitsa Fefelova, an embankment of the Melnichnaya River with a special recreation area ("Fig. 4"). In some cases, they will refer to public facilities, emphasize the natural features of the place and serve for educational purposes, introducing visitors to the local flora and fauna. It is likely to put interactive platforms equipped with informational sensory stands and media layouts that introduce on-line historical facts and features of the city's development. There can also be travel routes, crossing through all the territories of the fringe belts, the choice of which can also be thought out personally through a specially designed online form in advance. The availability of modern equipment for the tourist routes will not only attract more guests to the city, but also significantly increase the cashflow to the city budget. One of the tourist routes can pass through the cult points of the city [11].

While in the case of Yeniseysk we are considering an intimate version of how the historical center is "embraced" by the religious and recreational zone with preserving the scale and silhouette of the historical city,

the development of the internal fringe belts of Nicosia, we should note a large-scale intervention due to the construction of a multi-level park of Zaha Hadid Eleftheria. The park is at the final stage of construction — a striking example of digital architecture — is placed on the line of the walls of the Venetian fortress, established by Giulio Savorgnano and Francesco Barbaro in 1567–1570. The project has resolved the problems in this part of the city: the ditch along the fortress' walls were "curtained" with a bizarre concrete, and a parking lot was located at the lower level. The park's levels are connected by extensive ramps of a weird shape, providing an access to people with restricted mobility. The sets of fountains resemble the patterns of Arabic art in their intricacy, obviously paying a tribute to all historical periods of Nicosia. However, the architecture of the park contrasts so much with the preserved structure of the medieval city and the modern Nicosia, on the other hand, that of course makes one think not about the flare of architectural idea, but about its outrageous author ("Fig. 5").



Fig. 5. Eleftheria Park construction, Nicosia. Arch. Zaha Hadid.

V. CONCLUSION

The architectural practice has accumulated a remarkable body of useful solutions to the problems of environmental, spatial and architectural conflicts. With a radical change in space, form and image in the past, often marginal territories, the functional structure, traditional processes are preserved and developed, admiring picturesque images of the modern architecture or subtlety of balanced decisions.

The analysis of the design practice on overcoming different conflicts in the modern cities' environment leads to the conclusion that buffer areas should exist in the city space to preserve the advantages of neighboring areas. Due to the complexity of the local processes and architectural dissimilarity, many structural parts and functional zones of the city are extremely difficult to separate or connect with "soft" transition zones, however, as the international experience shows, it can be possible. To implement the designing of such objects in real, one can use adaptive planning, based on the assumption to introduce flexible urban planning regulations. Urban planning indicators may include mandatory requirements for a multifunctional public territory with a certain freedom to "super-form" these areas, as well as a "consultative" design process with all the involved citizens and organizations capable of expressing their will.

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