



THE TENDENCIES OF INDUSTRIAL RESTRUCTURING ON THE EXAMPLE OF LVIV CITY

TENDENCJE W RESTRUKTURYZACJI OBSZARÓW PRZEMYSŁOWYCH NA PRZYKŁADZIE LWOWA

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STRESZCZENIE

Zmiana trybu produkcji na Ukrainie w drugiej połowie XX w. spowodowała przekształcenie obszarów przemysłowych. Część przedsiębiorstw została zmodernizowana, a część (zwłaszcza duże przedsiębiorstwa oraz monopole przemysłowe) znalazła się pod wpływem procesów degradacji. Upadek przemysłu spowodował degradację obszarów, które stopniowo nabierają społecznych cech. Obecnym zadaniem jest przywrócenie do życia tych porzuconych terenów przemysłowych, tak by mogły się stać pełnoprawnym elementem struktury miasta, a także obszarem, na którym powstaną miejsca pracy.

Słowa kluczowe: degradacja, kierunki, modernizacja, obszary przemysłowe, przedsiębiorstwo, restrukturyzacja.

ABSTRACT

The production changes of the second half of the twentieth century in Ukraine have led to the transformation of industrial areas. Some enterprises have been modernized, and some, especially large monopoly industry enterprises – have degraded. The industry decline has caused the degradation of the territories which are gradually acquiring the antisocial traits. Today, the industrial area restructuring is aimed at both: renewing of the working places and reviving of these territories as valuable elements of the city structure.

Key words: degradation, industrial area, modernization, production, restructuring, tendencies.

1. THE CITY OF LVIV STRATEGIC DEVELOPMENT

The radical production and economic changes that have occurred with a gradual transition from industrial to post-industrial society, led us to functional changes of industrial areas or to the termination of many industrial sectors. In the conditions of post-industrial society, cities began to participate in the global competition for investment resources, new technologies and for their residents.

Today Lviv, as the other cities of Ukraine, faces a challenge to develop new proposals for the use of the industrial areas being in a state of stagnation occupying large districts of the city. It was necessary to work out the comprehensive program of industrial areas restructuring because of the irrational and spontaneous use of these territories. Because of the lack of the city lots they still remain the reserve areas for the deployment of residential, recreational, business, scientific and research functions etc.

The industrial development of the Lviv city as a historical, administrative, industrial and commercial city, has its peculiarities. Lviv is the result of the Western concepts and the principles of Soviet cities development combination. The Western doctrine touches mostly the historical buildings and the middle part of the Lviv city. The influence of the Soviet period is traced in the peripheral areas of the city. The concept being developed during the Soviet period is characterized by: planned economy; development of the new territories and resources; the extensive build up of the industrial areas; military tendency of the economy. Today the new Western European urban trends and tendencies are overlaying on the current Ukrainian urban planning structure. It is a transition stage from a planned to a market economy. The extensive area development is replaced by its intensification. Earlier military concept of the production development is replaced by the socially-oriented one. The emphases are shifting to innovative technology production increasing the competitiveness of the city and its balanced development. The industrial areas have become the resource for the further development of new innovative city base by its restructuring and modernization.

Current Ukrainian concept is a synthesis of the Western and Soviet industrial areas development approaches (Fig. 1). Today we still observe the continuous state of the industrial areas degradation which indicates a very slow economic and technological production development.

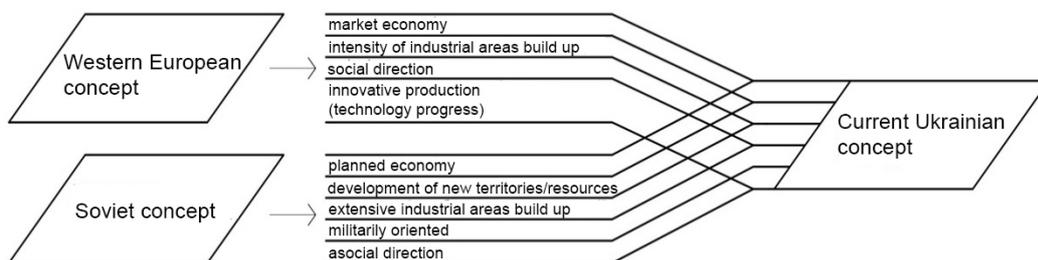


Fig. 1. The transition stage from Soviet to Western concepts of urban development. Source: Y. Senkovska

The city as a socio-economic system is extremely complex and unpredictable, which is reflected in the urban planning. Since 2006, the city has been actively working on the strategic development in which the city is regarded as a tourist, cultural, economic, and a comfortable for life centre. The basic principle of the complex city development strategy for 2012–2025 is to meet the current needs of residents without any deprivations for future generations.

The main issues of the strategic development of the city are the following [1]: high technology and innovation; international collaboration; infrastructure improvement; the improved investors' access to the region; social aspects. It is important to take into account and to combine these two different concepts.

A considerable attention was given to the increase of the level of innovations and to the creation of new business centres using modern architectural concepts according to the strategy development. Lviv is defined as a research, innovative centre and as a city of high-tech industry because of modern light, food, biotechnological, electronic industry development. The city is a leader of Eastern Europe in the field of IT technologies. The city industry is developing exclusively on the principles of the "intellectual economy" [2].

Thus, industrial production involves creating an attractive business environment, which aims at creating a strong economic base of the city growth by providing a high level of employment and welfare of residents.

The document: *Competitiveness Strategy of the Lviv city by 2015* is worth regarding among all proposed strategies.

Competitiveness Strategy of the Lviv city by 2015 aimed at the improving of the competitiveness of the city economy (the main areas being tourism and business services). There is a significant place for the preservation of the city's own production and the transition to the innovative technologies in the strategy of Lviv development.

An important issue of the city direction determination is to improve the quality and competitiveness of Lviv's products, according to the demand and sales of the domestic and foreign markets. Lviv is regarded as an industrial centre based on high-tech and waste-free production.

The areas of bankrupt or partially functioning industrial enterprises could be chosen for innovative production expanding.

The advantages of industrial areas are the following: reserve areas (development of industrial, academic and scientific potential, provided by the strategic development of the city) transport accessibility and existing infrastructure; existing sanitary-protective zone (SPZ project); territory potential; development of the small and medium-sized businesses in industrial areas as well as creation of large complexes; areas with no historical limitations where new architecture can be arised.

It is important to note that the tendency of high technology development and intellectual modes of production have remained from the middle of the 20th century [3].

2. THE EXISTING STATE OF LVIV CITY INDUSTRIAL AREAS

The strategic development of the city sets a necessary course of city evolution. Though analysing the existing state of affairs, one can see some deviations from these trends.

In most cases the current tendency of industrial areas restructuring occurs because of compactness and fragmentation of the territory, particularly in the downtown areas. According to the research results obtained, the vast majority of enterprises have been privatized by individual owners, rented or are idle. These territories have obtained new functions: commercial (warehouses, offices), industrial (small, private industry), services (car services, car washes). In most cases this kind of restructuring is an "occasional" project, far from harmonious fit into the structure of the surroundings and the whole city.

The analysis of these lots shows that despite the change of individual manufacturing plants functions, these areas are much more valuable than economic efficiency of their operation. In addition, the buildings which are occupied by these companies are often disharmonious looking like low quality buildings. Some production facilities are privatized and due to them the small businesses infrastructure is forming in those areas.



Fig. 2. Former factory JSC "Gas Equipment". Source: photo Y. Senkovska



Fig. 3. Former factory JSC "Gas Equipment". Construction of the new shopping centre Forum Lviv. Source: photo Y. Senkovska

In today's market transformations of Ukraine intensive process of renting and selling lots of industrial areas, buildings, separate rooms, alteration to their new economic development is going on. Such processes often cause confusion and contradiction between economic, social, aesthetic, spatial and architectural needs of the city [4]. This process deals with historical facilities located on the downtown territories. There is a real threat for industrial historic buildings and facilities to disappear as an important element of the cultural heritage of the industrial city [5]. As one of the directions provided by the city is tourism strategy, there is a need for preservation of such cultural objects. These tendencies and even the positive results of such a course we can see in European countries, especially in Germany. It is necessary to conduct an integrated research and evaluation of the industrial cultural heritage of the city, develop the relevant state and municipal programs that would provide the strategy management and active enrollment of historic industrial sites and buildings to touristic infrastructure of the city (Fig. 2–4).

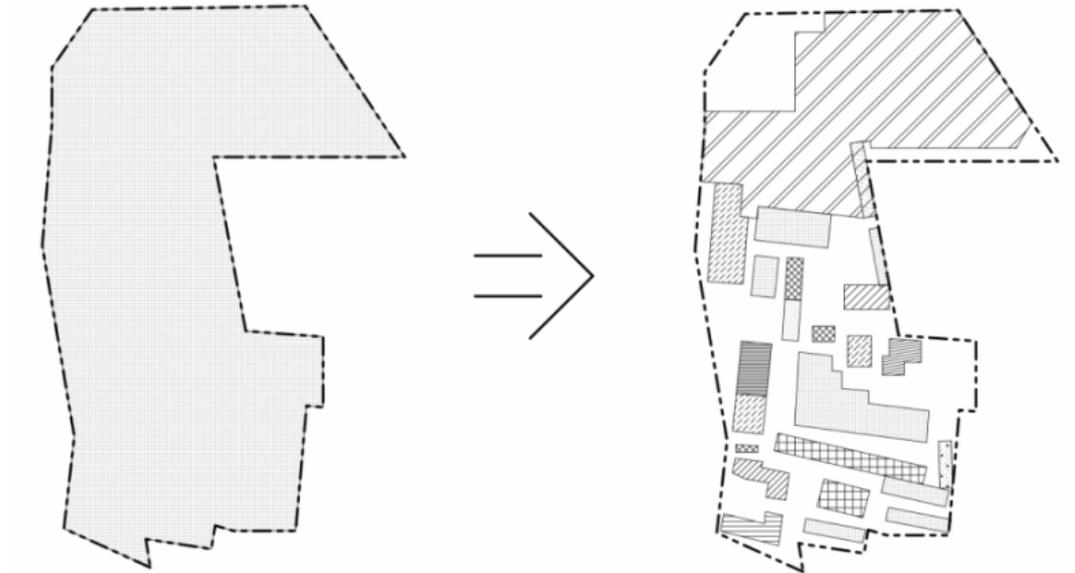


Fig. 4. The fragmentation of the former factory JSC "Gas Equipment" territory. Source: own elaboration according to the Lviv City Council materials of the factory site plan.



Fig. 5. Former factory of State Enterprise «Polyaron». Source: photo Y. Senkovska

Industrial areas have always played a strategic role in the structure of the city. They are characterized by attraction to the transport hubs. Today we can see a number of industrial areas having a good transport access which primarily attract investors. They are aimed at strategic restructuring industrial territories. But the tendency to fragmentation reduces the number of industrial areas where large-scale production can develop, when an appropriate investor appears.

Business as a part of modern life is being actively developed on the territories of former industry. It needs new spaces, because the central part of the city is too dense for its further development. At the same time it cannot exist in the suburbs [6]. Therefore, the combination of modern architecture, business and preservation of the historical part of the city is a possible solution the present problem in Lviv (Fig. 5–9).



Fig. 6. Former factory of State Enterprise «Polyaron». Source: photo Y. Senkovska



Fig. 7. Former factory of State Enterprise «Polyaron» Inner yard. Source: photo Y. Senkovska



Fig. 8. Former factory of State Enterprise Inner yard. Source: photo Y. Senkovska

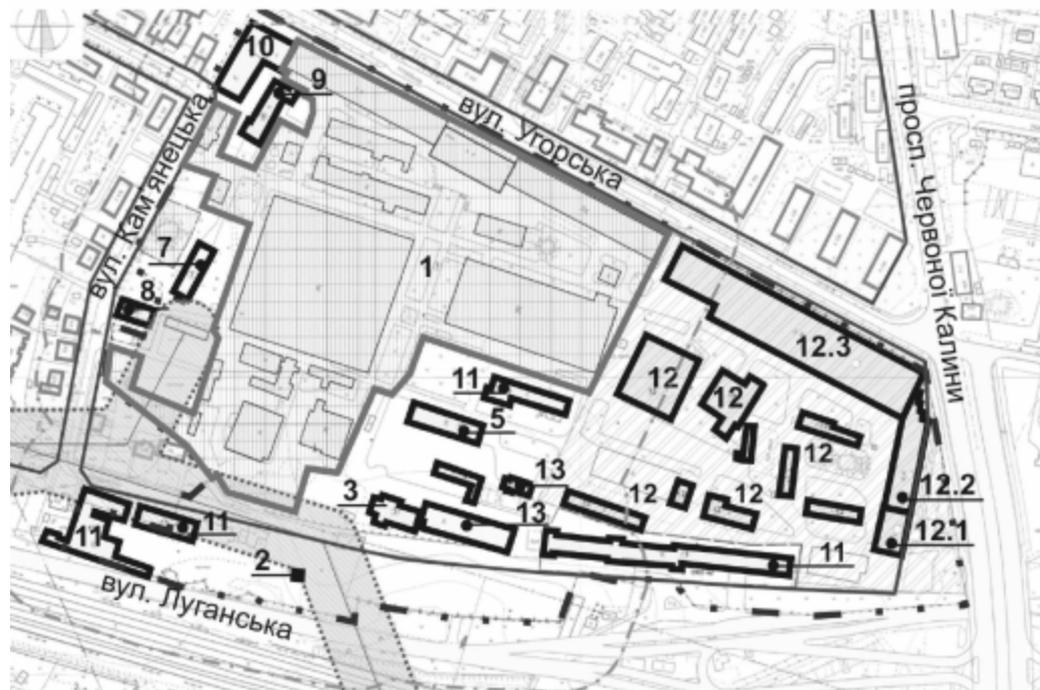


Fig. 9. The fragmentation of the former factory of State Enterprise «Polyaron» territory. Source: own elaboration according to the Lviv City Council materials of the factory site plan.

Today there is a chaotic restructuring of the industrial areas in Lviv (Fig. 10–13). That's why there is a need for comprehensive and long-term restructuring strategies. Such examples we can see in European and American cities. The successful ones have some important features in common i.e. restructuring being a long-term process gains flexibility, industrial territories become a potential for the city's future and the city activities are highlighted for the public [7]. Industrial past is considered as an opportunity for the city development at the territorial, functional and cultural levels.

3. GENERAL TENDENCIES OF INDUSTRIAL AREAS RESTRUCTURING

The study was based on the analysis of the strategic development of the city and existing examples that demonstrate the dominant tendencies of industrial areas restructuring.

According to the analysing the current situation there are the following tendencies:

- *Degradation of large industrial areas* i.e. the "polygons" in the city without a systematic and strategic use are formed there.
- *The problem of target saving for industrial functions* i.e. the city loses the large reserve territories for development of its own safe industrial production, creation of large-scale activities such as IT etc. There is a possibility for further complications of the safe industrial technologies location and their implementation, due to the lack of reserved, appropriate sized and location areas having the existing sanitary-protective zone (SPZ project).
- *Fragmentation of the industrial territory* i.e. the holistic and sustainable management of industrial areas of the city is losing.
- *"Point-like" restructuring* i.e. point revival or transformation of industrial areas without complying with the strategic plans of the city.
- *Instability of investment incomes* i.e. interruption of financial incomes when investments are the only source of industrial areas restructuring.
- *Production base* – loss of production independence and domestic and foreign market opportunities to ensure the necessary production.
- *The environmental quality* i.e. combining a wide range of changes in urban planning, architecture, economics, ecology, sociology, political science excluding strategic development plans.
- *Intensification of the urban environment* i.e. the extrusion of "vulnerable" city functions such as greenery, through intensive construction and changing of the purpose of the industrial areas.
- *Employment* i.e. the change of the production nature resulting in transformation of the industrial production employment place into other non-traditional forms of intellectual activity, business, trade, service.



Fig. 10. Former JSC "Lviv Municipal Equipment factory". Source: photo Y. Senkovska



Fig. 11. Former JSC "Lviv Municipal Equipment factory". Source: photo Y. Senkovska



Fig. 12. Former JSC "Lviv Municipal Equipment factory". Source: photo Y. Senkovska

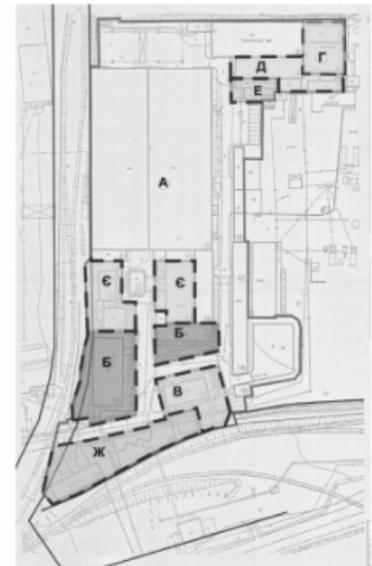
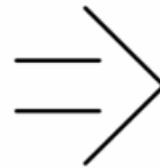


Fig. 13. The fragmentation of the former JSC "Lviv Municipal Equipment factory" territory. Source: own elaboration according to the Lviv City Council materials of the factory site plan.

4. CONCLUSION

According to the analysis performed the current situation of industrial areas restructuring, Lviv has a large potential in its developing as an innovative, educational and business centre of Ukraine. Abandoned industrial areas are perspective from the point of view of the further planned modernization and improvement of the existing industrial base. Today we can see different tendencies and inefficient use of industrial areas, but it is just a transition period and there is a base for future city development. Industrial complex restructuring and extension of different branches of economical activity as well as improvement of the city planning structure should be made by changing the functional use of a number of territories taking into account environmental improvement. Today we witness a transition period including the overlaying of the Western doctrines on the existing urban planning structure.

BIBLIOGRAPHY

- [1] The *complex development strategy of the Lviv city 2012–2025 y.*, http://www.city-institute.org/index.php?option=com_content&view=article&id=227&Itemid=233 dostęp/access 15.06.2015.
- [2] The *complex development strategy of the Lviv city 2012–2025 y.*, [http://www8.city-adm.lviv.ua/inteam/uhvaly.nsf/0/23349f49bc91ba52c225793400489747/\\$FILE/%D0%A1%D0%B5%D1%81%D1%96%D1%8F2.pdf](http://www8.city-adm.lviv.ua/inteam/uhvaly.nsf/0/23349f49bc91ba52c225793400489747/$FILE/%D0%A1%D0%B5%D1%81%D1%96%D1%8F2.pdf), dostęp/access 12.06.2015.
- [3] The Soviet Union scale experiment. The interview with historian Yaroslav Hrycak, <http://forbes.ua/magazine/forbes/1353189-eksperiment-soyuznogo-masshtaba>, dostęp/access 15.06.2015.
- [4] Proskuryakov W.I., Iwanow-Kosteckyy S.O., *The architecture of the historically formed industrial buildings as the potential of the city center modern development (on the example of Lviv city)*. 2008, Lviv National Polytechnic Univesity, Vol. 632, p. 65–71.
- [5] Mazur T.M. *The industrial area restructuring in the conditions of the historically formed city reconstruction (on the example of Lviv city)*. 2002, Lviv National Polytechnic Univesity, Vol. 439, p. 113–121.
- [6] Mazur T.M., Posatskyy B.S., *The industrial function in the space of the large city – the example of Lviv*. 2008, The Urban and territorial planning, Kyiv, Vol. 31, p. 211-222.
- [7] Agueda B.F., *Urban restructuring in former industrial cities: urban planning strategies*, <https://tem.revues.org/2527>, dostęp/access 15.06.2015.

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