

SYLWIA KACZMAREK

UNIVERSITY OF ŁÓDŹ

## POST-INDUSTRIAL AREAS IN MODERN CITIES

**ABSTRACT.** The presence of depopulated, non-operating and unused post-industrial (i.e. deindustrialised) areas is a relatively new phenomenon that has considerable impact upon cities throughout the world. The article presents the new aspect of the formation of urban space referred to as revitalisation with the analysis of the process, which creates a new type of morphological unit. The main objective is to define the characteristics of post-industrial area revitalisation and to describe the two types of it: implantation and integration as well as to assess the impact of this process upon spatial organisation, social structure and economic recovery of derelict areas. This will help to identify the future development of post-industrial city.

**KEY WORDS:** Post-industrial urban areas, revitalisation, spatial organisation.

As of 1960s industry has been slowly but systematically withdrawn from the internal parts of modern cities. Tendencies in global economy after the World War II gradually reduced the importance of the industrial function for economic and social profile of cities in highly industrialised European and North American countries. Changing relations between the cost of production and obtained profit, mainly due to different cost of labour in the European countries and in the US when compared to Asia, in particular the Far East, stimulated the transformation. It also favoured the reallocation of production to places where similar outlays generated higher profit. Thus, in many cities of highly developed countries in Europe and America mining industry shrunk significantly together with metallurgy, metal industry, shipbuilding, textiles and the production was largely shifted to Asian countries. Another form of reallocation that eliminated industrial areas was the transfer of companies and plants, which expanded and

needed more space to operate properly to the urban outskirts and peripheries. The rapid development of road transport, building of ring-roads around cities allowed for smooth supplies of raw materials and distribution of finished goods while the availability of cars as the means of transport facilitated the travels of workers. Reallocation to external areas became a general tendency and, as a result, modified the spatial organisation and functional as well as social structure of central urban areas.

The new situation significantly changed industrial cities of Europe and North America. Suddenly there appeared areas, in which the primary industrial function ceased to exist and which suffered from economic and spatial problems intensified with social conflicts. Such areas may be referred to as the post-industrial urban fallow, using the analogy to the stages formulated in Conzen's theory (Kaczmarek, 2001). The emergence of post-industrial fallows is very important for the space organisation of the entire city. Its functional, spatial and social structure changes as the crisis of the up-till-now economic activity is usually accompanied by unemployment, poverty, social pathologies in local community and gradual but successive destruction of the existing material assets no longer used for purposes for which they were intended. Former industrial areas degraded in functional terms lost their leading position in the hierarchy of urban space. Post-industrial urban fallows are permanent phenomenon since both the allocation and elimination of some sectors from internal city areas were irreversible (Keating, 1988; Kidd, 1993; Ogden, 1991; Paris, 1991; Rose, 1992; Schwach et al.; 1998, Gasidło; 1998, Kaczmarek, 2000; 2001).

The decline of post-industrial areas situated in the internal parts of the city firstly becomes visible in highly developed countries, i.e. those that experienced industrialisation the earliest. West European countries and the United States of America where the phenomenon was noted in 1960s and 1970s and increased in 1980 form the leading group. Polish cities experienced the problem of post-industrial urban fallows at a larger scale relatively recently, in 1990s. It was a direct outcome of economic and social changes in the country after 1989, i.e. after the transformation of the system from a centrally planned to the market oriented economy. The latter forced industrial companies to adjust to new economic conditions. Many examples could be quoted of cities tackled with the decline and, then, elimination of traditional but unprofitable sectors (like ship-building, textiles or the liquidation of earlier re-loading ports) in the UK (e.g. London, Glasgow, Manchester, Bradford, Liverpool and other cities), in Ireland (e.g. Dublin) but also in Germany (the Ruhr), in France (Lille, St. Etienne), Spain (Barcelona, Bilbao), and Poland (Łódź, Upper Silesia region).

When a country reaches the level of economic development referred to, as the post-industrial, services and the so-called high-tech industry are the main drivers of its economic prosperity. Traditional sectors of industry lose their importance and are reallocated or sometimes even eliminated (e.g. hard-coal

mining in the UK and France). Cities in post-industrial countries focus mainly around services of the fourth sector (finances, education, culture) and again become the area of exchange, this time, of information and knowledge and, to a much lesser extent, of goods and material products.

The analysis of transformations in industrial function in cities of highly industrialised countries in Europe and North America shows that post-industrial urban fallows are an inevitable accompanying element of the post-industrial economy. Due to their common presence and, undoubtedly, negative impact upon social and spatial structure of a city, they always call for immediate interference. Remedies adopted by various countries usually take the form of a process distributed in time. However, they differ in terms of the scale of exercised transformations and mechanisms that steer them. The process always consists in the introduction of new functions into the degraded areas and simultaneous transformation of the existing spatial form. New buildings appear, some ex-industrial facilities are modernised and adapted to the new requirements. The functions that are introduced belong to either the third or the fourth sector: education, administration, banking, finances, and insurance, culture. In the parts of cities that underwent such changes, modern architectural arrangements resulted in new, different aesthetics of urban space and in its new organisation.

Functional and spatial transformation of post-industrial urban fallows is referred to as **revitalisation**. The term includes a sequence of planned activities with a view to economically revive degraded areas of a city and to change their spatial and functional structure (Kaczmarek, 1998; 2001). With respect to urban space, revitalisation gives it new value and is conducted as a planned scheme to stimulate growth and revival of the area after crisis, collapse, and degradation. The term is broader than the often used "transformation" as revitalisation assumes a planned and monitored procedure at each stage to change the functional structure, significant improvement of living conditions of inhabitants and the reference of the area value to the quality of public space. The analysis of revitalisation implemented in many cities around the world allows us to distinguish its two types of implantation and integration nature (Kaczmarek, 2001).

**Implantation-type revitalisation** consists in the introduction of new functions (by means of adaptation and modernisation of the existing buildings and building of new ones) into a clearly spatially identified part of a city. The areas differ from single, closed down factories via groups of buildings, former enclaves of industrial function to large former harbours. The introduction (or rather implantation) of new spatial functions and forms takes place in a selected and defined part of a city, where the earlier function – industry was degraded. Usually the activity focuses in areas, which used to be intensively utilised, of high density of buildings and population, economically important for the city. New functions should restore its lost significance for economic structures in the city by the creation of new jobs.

Implantation-type revitalisation, as demonstrated by experiences of countries where it was implemented, is achieved by virtue of decisions taken outside of the area in question, at a higher level of spatial management (at regional or national scale, rarely only at the local level). The decision is also taken on the way of „improving quality” of the degraded area and its future shape. The assumption to give the improved area, better in qualitative terms, to the newcomers while local people already living there will indirectly benefit from changes and new services offered to them or from the fact that they live in better and more interesting place represents an important characteristics of implantation-type revitalisation.

Another proposal to solve the problem of post-industrial urban fallows is **integration-type revitalisation** (Kaczmarek, 1998; 2001), which in its mechanism is analogous to implantation. The main difference being the inclusion of local communities in functional and spatial transformations is means of activities that directly improve the quality of living. The introduction of new functions and new investment projects should also create new jobs for the existing residents, allow them to acquire new skills to be able to resume professional activities. Also in the spatial context the new structures should provide the so-called spatial and architectural continuum to blur sharp borders separating the old from the new. Here revitalisation is a process as much social as economic and, as such, much more complex. It requires the historic tradition to be considered and maintained by unchanged identity together with the cultural heritage of the place.

The so far experience of revitalisation of post-industrial urban fallows in various cities around the world indicates that in most cases we deal with implantation type of revitalisation (Kaczmarek, 1998; 2000; 2001). The following areas belong to the group – subject of field studies of the Author: London Docklands, port in Salford and the city centre in Manchester, Espace Furiel district in Saint-Etienne. Unfortunately, the cases of integration-type revitalisation like the Lagan river in Belfast and the district of former port in Dublin are among much less numerous in the Author’s studies (Kaczmarek, 2000; 2001; 2002).

Both types of revitalisation of post-industrial urban fallows create a new morphological unit of a new functional, spatial and social structure. The impact of revitalisation is visible in the following spheres: organisation of urban space and the hierarchy of its elements, architecture and urban composition, economic base, i.e. economic activities of the city, the structure of urban community and their living standard and also the image of the city and its position in the settlement network. Actions undertaken within revitalisation of a post-industrial urban fallow, no matter where it is situated geographically (country, region), always form a sequence of the same planned activities. Revitalisation process is a repeatable procedure composed of several stages implemented one after the other according to an earlier adopted programme. Six stages can be distinguished: decision to regenerate based on the appropriate assessment of the area’s poten-

tial, establishing of an institution to co-ordinate the process, a detailed revitalisation plan consulted with the public, infrastructure works in the area to prepare it for future purposes, implementation of the plan in stages and monitoring of effects or, if necessary, modifications.

Selection of appropriate criteria to assess the efficiency of such a multidimensional process seems to be the key issue. The outcome of revitalisation, which takes the form of a new urban and architectural composition, is the most visible and the easiest to grasp. Since changes to the material forms of space are permanent in their nature, they should be carefully thought over, in particular in the context of the neighbouring parts of the city. Modern structures, mostly extremely unusual in their design, intended for new functions, in many cases created by eminent architects, when combined with former industrial buildings adapted in an original way provide a very distinctive part of the city, unique in its new aesthetic value. The same could be said about an urban composition, which joins in its substance the regenerated post-industrial urban area in a consistent unit with the remaining part of the city. Original character of such an area transformed by revitalisation is additionally highlighted by new functions, which bring the area back to the public urban space, available to everybody, easy to penetrate, inviting to visit it and stay within it. Architectural form and urban composition are closely linked with cultural and civilisation significance of the area in question and with the tradition, following which urban space is organised. After revitalisation, the part of the city subject to it sends out a kind of new "message". It represents an example of modern space utilisation, functional and technological changes, economic transformation and, at the same time, gives an evidence of local cultural heritage and historical industrial stage in the history of the city. Former industrial premises used for new functions document the previous stage of development of the area dating back to the times when industry was the main factor decisive for the economic prosperity of the city. They acquire the role of monuments of previous epochs like medieval cathedrals or Renaissance fortresses.

The change of functionality relating to the introduction of the 3rd and 4th sector specifically revives the area. The latter becomes the centre of urban life, a public space available to everybody and visited by tourists. This is definitely true for functions like culture, entertainment, trade, administration, education and urban tourism in broad terms (cognitive, business and cultural). The introduction of services of the higher level, mostly those of the 4th sector, expands the scope of influence of egzogenic functions, which effects the position of the city in the hierarchy of the settlement network. As a result, the city becomes a needed centre; important and willingly visited as these functions reach beyond a region and sometimes even beyond a country.

The question of social consequences of revitalisation must not be neglected. And here the assessment of the process impact becomes much more complex. The main task of revitalisation, i.e. the restoration of economic viability of an

area is achieved by the creation of new jobs, which replace the ones that ceased to exist together with the decline of industry. Although in cities where revitalisation projects have been implemented the jobs that were lost got almost 100% recreated in terms of their number, we cannot speak of a complete success. New jobs, brought into being by revitalisation, relate to the 3rd and 4th sector where the skills required are much higher than those sufficient for the former industrial production. Most of organisations that move into the regenerated area represent banking, finances, education and administration and require higher education and the readiness to constantly improve one's skills and knowledge. Unfortunately, usually these requirements are evidently in conflict with the skills possessed by those who used to work in industry and lost their jobs because either the company got reallocated or bankrupted and was eliminated. By introducing new functions to the area, revitalisation offers jobs not to them, who need help with this respect. Also a rather limited group of the local population is able to acquire the knowledge and skills necessary to find jobs in newly established organisations. The latter attract new people to the area; they start working and some of them, encouraged by attractive space arrangements created as a result of revitalisation, decide to live near where they work. In the social dimension of revitalisation we can distinguish two social groups in the area in question, the group of „newcomers” dominated by young people with high skills, well educated and affluent and the group of „locals” who do not represent any of these assets. They form a part of a lower class, often the class of unemployed, poor, uneducated workers who used to work in local industry. The co-existence of the two groups within the area naturally leads to segregation and deep social divisions, which may be perceived as a negative outcome of revitalisation.

The above mentioned characteristics of revitalisation clearly confirm its multidimensional aspect, conditioned by various circumstances and factors of key importance to its success. Thus, the choice of parameters against which the efficiency of changes is assessed becomes even more difficult. On the one hand, we are dealing here with management, which changes the arrangement of urban space and its functional structure, on the other hand, however, there are transformations that concern local people who live and work there. Depending on where the participants to the process are, their assessment and the hierarchy of importance of the processes in the area may differ. In order to come to the most objective assessment of the process, not questioned by any of the actors involved, we must divide the assessment criteria into two groups. The first includes measurable, quantitative parameters that can be compared directly, such as the balance of lost and newly created jobs, the cost of one created job, amount and type of taxes relating to new economic activities in the area, the number of new apartments and the population who moved into, and the comparison of investment expenditure with achieved results (repayment of loans, private capital and public funds investment ratio), changes in the price of land.

The second group of parameters represents the consequences of revitalisation in qualitative terms, which are difficult or impossible to quantify. These are: the change of the image of the area and the creation of positive associations, improved prestige of the city resulting from intensified metropolitan functions, the introduction of organisations not existing there before, such as universities, new aesthetic dimension of the part of the city provided by specific architecture and unusual urban arrangement, and increased interest of visitors when the regenerated area has become a part of the city tourist product.

The parameters listed above allow assessing revitalisation only to a certain extent, as it is hard to suggest logical criteria that would allow prioritising these parameters based on their significance. Revitalisation is a repeated process, typical one, which can be replicated many times in different cities but, at the same time, each implementation is unique in its kind like each area where it takes place is unique.

There are no two identical, the same cities in the world and there are no two identical examples of revitalisation processes despite similarities in types of post-industrial areas subject to it. This is why when assessing the efficiency and grounds of each case of revitalisation we have to consider the specificity and circumstances of a given site.

The future of a post-industrial city is connected with a successive and unavoidable elimination of industry from its internal, central parts and the increased role of services, mainly those of the 4th sector. These functions are decisive for the progress and growth in modern cities and co-create the exchange area traditional for cities. Effective exchange needs integrated space organisation, in architectural and urban terms but also in terms of economy and the society. In this context revitalisation, mainly the integration-type one should become an efficient and smooth management tool of space organisation in modern city.

## REFERENCES

- Gasidło, K.** 1998: Problemy przekształceń terenów przemysłowych. *Zeszyty naukowe Politechniki Śląskiej, Architektura* z. 37. Gliwice: Politechnika Śląska.
- Kaczmarek, S.** 1998: Social and spatial revitalisation of industrial areas in British and Polish cities. In Wódz, K., editor, *Social Aspects of Reconstruction of Old Industrial Regions in Europe*. Katowice: Wydawnictwo Uniwersytetu Śląskiego.
- Kaczmarek, S.** 2000: Rewitalizacja jako proces przekształcania terenów przemysłowych w miastach. *Zwarta przebudowa polskich miast? Zarządzanie rozwojem miasta poprzez strategiczne gospodarowanie terenami, Zeszyty KIN, seria: Przebudowa miasta*. Kraków: Krakowski Instytut Nieruchomości.
- Kaczmarek, S.** 2001: *Rewitalizacja terenów przemysłowych. Nowy wymiar w rozwoju miast*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.

- Kaczmarek, S.** 2002: Belfast. Podzielone miasto. Podzielona przestrzeń. In: Orłowska E., editor, *Kultura jako przedmiot badań geograficznych. Studia teoretyczne i regionalne*. Wrocław: Uniwersytet Wrocławski, Oddział Wrocławski PTG.
- Keating, M.** 1988: *The city that refused to die. Glasgow: the policy of urban revitalisation*. Aberdeen: University Press.
- Kidd, A.** 1993: *Manchester*. Ryburn Publishing.
- Ogden, P.** 1992: *London Docklands. The Challenge of Development*. Cambridge: Cambridge University Press.
- Paris, D.** 1993: *La mutation inachevée: Mutation économique et changement spatiale dans le Nord-Pas-de-Calais*, L'Harmattan.
- Rose, G.** 1992: Local residence to the LDDC: community attitudes and action. In: Ogden, P., editor, Cambridge: *London Docklands the Challenge of Development*.
- Schwach, P. and others** 1998: *Reconstruire la ville sur la ville*. Paris: ADEF.

**CORRESPONDENCE TO:**

Sylwia Kaczmarek  
Department of Urban Geography and Tourism  
Faculty of Geographical Sciences, University of Łódź, Kopcińskiego 31  
90-142 Łódź, Poland  
[e-mail: skaczmar@geo.uni.lodz.pl]