

## Urban Restructuring in Former Industrial Cities: Urban Planning Strategies

*Le renouvellement urbain des villes industrielles. Stratégies d'aménagement*

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## Introduction

- 1 Global dynamics such as economic transformations and reorganizations of production led to the crisis of many former industrial cities in Europe and the U.S in the last decades of the 20th century. Most of them have suffered or are still suffering from urban decay and shrinkage. The severity and persistence of some of these processes have called into question both the future of these cities and the ability of urban planning to deal with decline.
- 2 When Philipp Oswalt asked, referring to shrinking cities, "Can planning even help?" (Oswalt, 2005: 15), he reflected on the role of urban planning in a process of decline, strongly determined by external dynamics, decisions and circumstances. The trajectory of some industrial cities, whose crisis has persisted despite local efforts to confront it, could lead to regard decline as an irreversible process and to accept the impossibility of urban planning to intervene in it.
- 3 Nevertheless, the gradual restructuring of some European industrial cities in recent years, seem to point toward the relevance of local response to global dynamics. Different paths of development may only be explained from the distinctiveness of each territory, specific local decisions and successive strategies to tackle decay. These processes of revitalization seem to reveal the importance of local action and the possibility of guiding and easing decline. Even more, they point out to the crucial role of planning.

- 4 The integration of the research on industrial cities' decay on the debate of shrinking cities has indeed provided an opportunity to examine and compare diverse local strategies adapted to different forms of shrinkage (Oswalt, 2005; Pallagst et Al, 2009; Martinez-Fernandez, Audirac, Fol and Cunningham-Sabot, 2012; Wiechmann y Pallagst, 2012). It has also allowed shifting the research's focus from the analysis of the social, spatial and economic consequences of decline towards the study of diverse and localized approaches to overcome it. The revitalization of some European industrial regions has shown different ways to tackle decay. Nevertheless, it has also revealed a profound transformation of the traditional role of planning, its aims and tools (Oswalt, 2005; Turok and Mykhnenko, 2008; Wiechmann, 2008; Wiechmann and Pallagst, 2012). This paper aims to explore the role of certain planning strategies on guiding the futures of industrial regions.

## 1. Planning industrial cities in decline. New challenges and strategies

- 5 Decay has most frequently been away from the debate of urban theory and practice, which, on the contrary, has usually been committed to growth and expansion. In 1976, Harvey Molotch affirmed "the city is, for those who count, a growth machine" (Molotch, 1976: 310). This statement revealed a specific way of understanding urban development, which has determined for years forms of government and spatial decisions in many cities. The political model, focused on economic increase, defined the main path of urban planning discipline, which geared towards spatializing growth (Lynch, 1990; Wiechmann, 2008; Ruiz, 2012, Wiechmann and Pallagst, 2012). The vision of the city as a "growth machine" involved both the belief that expansion was a requirement for urban development and a conviction on unlimited growth. Implicitly, decline and shrinkage were seen as anomalous processes (Lynch, 1990: 15). Decay should indeed be avoided or removed to return to what was considered the legitimate mode of development: growth.
- 6 However, today it is becoming increasingly evident that growth is no longer a possible (or even desirable) future for all cities (Oswalt, 2005; Turok and Mykhnenko, 2007; Wiechmann and Pallagst, 2012). Even more, some areas' prosperity and expansion (suburbs or service industry cities) is usually achieved at the expense of others (city centers or industrial cities). Since growing and shrinking are not symmetric processes, it seems that we should find appropriate ways to meet these new challenges. In 2005, Oswalt suggested the concept of "weak planning" and the use of "soft tools" (Oswalt, 2005: 16). Flexibility is also becoming a recurrent approach to deal with the complex and long-term problems of shrinking cities (Wiechmann, 2008; Pallagst et Al, 2009). Some authors have already pleaded for a "paradigm shift in planning" (Wiechmann and Pallagst, 2012: 262), realizing that growth-oriented strategies intensify the consequences of decay.
- 7 Nevertheless, before examining some new approaches through several case studies, we should try to better comprehend the specific problems and trajectories of industrial cities in decline.
- 8 Kevin Lynch suggested that urban decay is usually linked to the city's specialization in a single economic activity (Lynch, 1990). The gradual reduction of industrial cities' economic diversity increased their vulnerability to the dominant sector's crises (Friedrichs, 1993:909). However, on the long-term, it may also have lessened their

capacity to recover when the dominant industry ceased or moved. So that decline may be understood a lack of ability to adapt to new circumstances, reducing alternative outcomes.

- 9 Nevertheless, our research has pointed out so far not only the unquestionable importance of global dynamics on the development of industrial regions but also the relevance of local action (Fernández Águeda, 2009; 2010; 2012). Political and spatial local decision-making seem to have helped transform complex and resilient industrial cities in highly specialized and remarkably fragile spatial structures designed to optimize production. However, the intended rise in efficiency also resulted in an increment of the city's rigidity. This narrowed structure seems to have contributed to exclude over time, the city's possibilities to evolve except the one initially envisaged (Rullani, 2002; Ruiz, 2012). The concentration of resources on economic growth and spatial expansion, led to disinvestment and the abandonment of built areas. Gradually, the city's historic values and the traces of urban memory may have forgotten to plan the optimum urban model for the dominant mode of production. When the economic paradigm changed, cities designed for centralized industrial labor started their decline.
- 10 Therefore, in many industrial cities, local decisions supported global dynamics during the growth period and progressively shaped their development. These models, along with the subsequent ways of facing decay, may have contributed to determine the path and impact of decline in each city. The city's model, focused on urban expansion would subsequently shape the fitness of urban structures to adapt and accept decline. Two relevant conclusions have been revealed by this research. First of all, it indicates the importance of comprehending decline in time, of revealing the consequences of the growth model on the subsequent decline. Through this approach, we will be able to understand decay and shrinkage as a stage in city evolution and not as its last state. Secondly, it has pointed out to the relevance of local response. Spatial planning and urban action thus become essential to guide and ease urban decline (Fernández Águeda, 2009; 2010; 2012).
- 11 That's why industrial cities in decay offer both an opportunity and a challenge: the possibility of planning the city's future in terms of quality, a development in density and complexity. Several authors have pointed out that growth-oriented strategies intensify the consequences of urban decay (Wiechmann, 2009; Martinez-Fernandez et al, 2012; Wiechmann and Pallagst, 2012). So we are faced to the challenge of planning a city that will keep a territorial and environmental balance, revitalize the abandoned and deteriorated areas and reconnect the social, productive and spatial ties destroyed by decay. In consequence, the challenge is not to return to growth but to restore the futures of industrial cities, ameliorating the citizen's quality of life and realizing the potentials of shrinkage.

## 2. Industrial cities and revitalization strategies

- 12 The gradual restructuring of some European industrial regions in recent years seem to point toward the ability of planning to guide decline. Nevertheless, they also show a deep transformation of its role and tools (Oswalt, 2005; Turok and Mykhnenko, 2008; Wiechmann, 2008; Wiechmann and Pallagst, 2012). We will try, through the analysis of three case studies, to compare different strategies to deal with decline and infer the tools employed by planning in each occasion. Nevertheless, since one of the starting points of our research is that industrial cities in decline constitute a plural world, the goal is not to

provide a general method to tackle decay. On the contrary, assert the singularity of each city implies assuming the relevance of a localized response to specific problems. So that, even if we are able to identify common elements, their use will highly depend on local conditions.

## 2.1. Criteria for case study selection

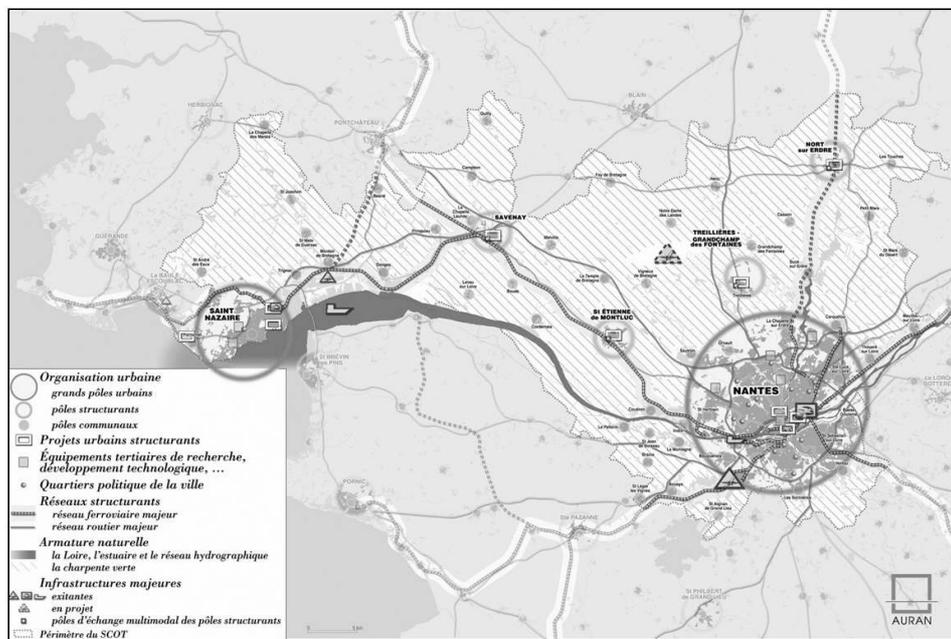
- 13 The three examples have been selected first of all, because of the relevance of these regions' industrial past. Industry molded both spatial development and social configurations. At first, they were complex territories, with a number of different industries, types of firms and work processes developing together with the dominant sector. Nevertheless, their economic base was progressively narrowed and these cities became increasingly specialized: Turin on automobile industry, the Ruhr area on mining and steel industry and Nantes – Saint-Nazaire on shipbuilding industry.
- 14 Secondly, our purpose was to focus on medium-size cities. Capital cities, like London, Paris or New York have been able to recover from decline by taking an important position at a global scale. However, there are many intermediate cities for which this trajectory is not viable and revitalization is even harder. The third criterion was to choose cities whose decline was mainly linked to deindustrialization, eluding thus overlapping problems as shrinkage due to political restructuring (East Germany and Eastern Europe). Finally, the aim was to concentrate the research on comprehensive restructuring strategies, leaving behind those cities whose resurgence has been linked to singular projects or iconic buildings.
- 15 Therefore, the method of research included an in-depth analysis of the evolution of these regions, seeking to understand their specific trajectories and the study of their restructuring strategies both from primary sources (planning documents) and secondary ones. The aim of this paper is to progress in the research of local strategies to deal with decay through the study of several examples. We also intend to show that these profoundly different ways of tackling decline have, however, some common characteristics. Maybe from them we will be able to extract some conclusions.

## 3. Urban restructuring in european industrial regions

- 16 While all these three experiences show the ability of planning to guide urban dynamics, including decline, they also reveal deep transformations of its traditional role. First of all, the analysis has revealed strong links between growth and shrinkage at a regional level. As long as we understand, complete labor processes (including transformation and distribution) have a territorial component. Therefore, in industrial cities decay is not only related to the built environment but to the whole territory molded by industry practices. In consequence, a regional strategy seems a suitable approach to revitalize these territories in decline. The case study has indeed pointed out the importance of comprehending the industrial city in its region, recovering the territorial bonds revealed by Geddes (Geddes, 1915: 25-45). These examples not only introduced new ways of planning, but also a change of the scale for tackling decay: from urban renewal programs restricted to the most deteriorated areas to regional strategies to revitalize the territory shaped by industrial work processes.

- 17 All the cases are based on comprehensive and long-term restructuring strategies at a regional scale which constitute the framework for a number of projects, policies, plans and interventions. However, these regional plans do not only cope with spatial aspects. On the contrary, they constitute broad strategies for regional development through socioeconomic and territorial revitalization. Their main objectives are usually associated to restore balance to a weakened region, to revitalize abandoned or degraded areas, to regain social and territorial cohesion and region's economic base and to preserve a deteriorated natural and cultural heritage.
- 18 The Schéma de Cohérence Territoriale (SCOT) of Nantes Saint-Nazaire, the IBA Emscher Park plan and the Piano Regolatore of Turin have been able to plan alternative futures for their regions, based on their own potential, taking advantages of synergies and creating a true, sustainable and long-term restructuring that is improving citizens' quality of life and living standards.

Figure 1. Nantes – Saint Nazaire region. SCOT Métropole Plan

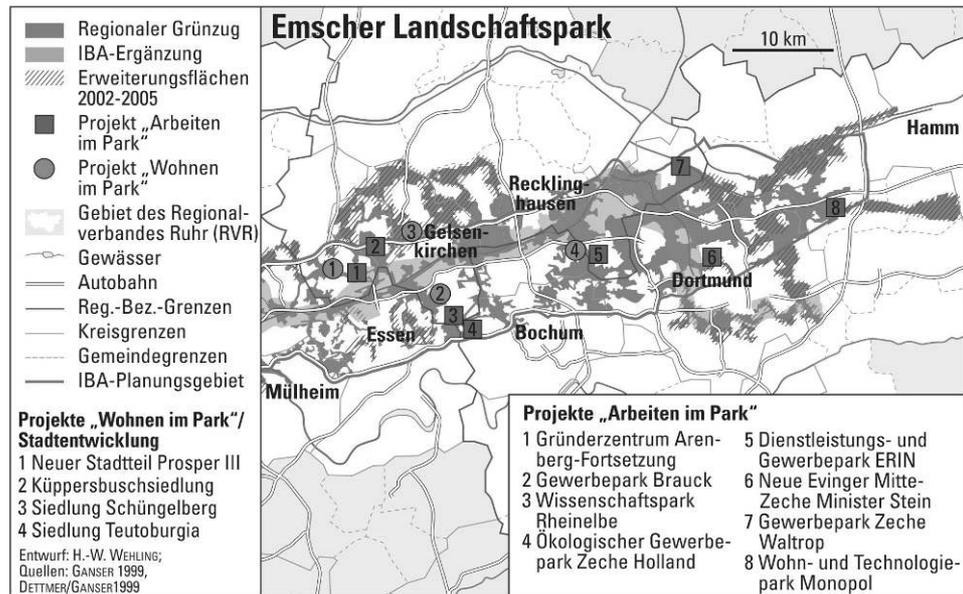


. Source : Syndicat Mixte du SCOT (2007). <http://www.scot-metropole-nantes-saint-nazaire.fr/web/accueil.do>

- 19 All the strategies share some common features which seem to be the foundations of the revitalization process. First of all, the relevance of public urban action must be highlighted. Confronted to such a complex and large crisis, public authorities' leadership and commitment seem essential to assure equity and maintain the project over time. Nevertheless, public action no longer aims to control the process or its actors completely, but, on the contrary, to create the conditions for collective action and mobilize resources. Regional development is no longer based on growth and expansion but on the identification of regional differentiation potentials and the enhancement of local networks. One of the principal goals is to engage all actors in a joint strategy for the future. So that both community involvement and public-private partnerships have been crucial for these regions.

- 20 The second important factor is time. All the restructuring strategies are referred to long-term processes (Turin plan started in 1995, IBA Emscher Park Plan and Nantes strategy in 1989). So that the ability to adapt and integrate new dynamics, potentials and actors during the restructuring process has become the essential feature that enabled planning to guide regional development over time. In that respect, these cases resemble other shrinking cities revitalization plans in which “strategic flexibility has become more important than the strategy itself” (Wiechmann, 2008: 443).

Figure 2. IBA Emscher Park Plan.



Source : <http://www.mai-nrw.de>

- 21 Secondly, guiding long-term dynamics not only have required a program of action but also a progressive approach to planning. Spina Centrale Plan (Turin), the urban projects (projets urbains) of Nantes and the different plans and programs of the IBA Emscher Park plan are arranged in a flexible sequence and developed “in progress”.
- 22 Finally, all the plans share one common characteristic: the past, traced in the territory, is no longer representing a set of constraints, but it has become a potential for the region’s future. Industrial past is considered an opportunity for regional development, so these strategies include programs to restore lost or forgotten industrial culture through the renovation and reuse of remarkable industrial buildings and elements. The aim is to retrieve the place and industrial memory, to recover the traces that have been hidden by decay. This will, in turn, set the foundations for the future.
- 23 Spatially, the three plans are based on polycentric urban systems. They develop the potentials of existing towns, settlements and revitalize brownfields and deteriorated neighborhoods. This urban model of poles at different scales is accompanied by social and economic policies to enhance social cohesion and revitalize the region’s economy.
- 24 As it has been mentioned, these regional strategies constitute the framework for urban projects (projets urbains) or specific plans policies and actions that also show common subjects in the three cases.

### 3.1. Public transport

- 25 The first one is public transport. To improve and develop its patronage and to decrease the use of private car has become a significant goal. Public transport network structures the region and connects the intended projects. Nevertheless, these plans are linked both to the decision of developing a durable model and to the understanding that access to services and working places will enhance social cohesion. Finally, public transport systems are employed to connect deteriorated neighborhoods or abandoned industrial areas to the rest of the city and let them become new poles of development.
- 26 In Turin an old railroad line crossed the city from north to south and divided it in two. The plan Spina Centrale planned to bury it underground and regain the area for the city. It also connects several rehabilitation projects situated on old industrial sites (renovation and reuse of iron and steel plants of Cimimontubi and those of Michelin, Lingotto, Paracchi, Fiat Nole e Ingest).

Figure 3. Turin. Spina Centrale Project



[HTTP://WWW.TORINO-INTERNAZIONALE.ORG](http://www.torino-internazionale.org)

- 27 The IBA Emscher Park plan recuperated the old railroad line that joined the mines of Emscher River, connecting the old industrial sites that have been recuperated as landscape parks, cultural poles and working centers.
- 28 In the city of Nantes, the construction of a new tramway system has allowed connecting the revitalized center of the city to 1960's isolated and deteriorated neighborhoods (grands ensembles). The objective of the new tramway network is not only to improve mobility but it is also used as a tool to increase inhabitants' opportunities, rising access to jobs and services.

- 29 In the Nantes-Saint Nazaire region, the improvement of the public transport network has been crucial to the development of a polycentric region. The upgrading of the existing railroad system and its reuse for local trains has been the basis of SCOT plan. This network connects existing towns and villages which are envisaged as new poles and central and deteriorated areas of the cities which are seen as new centralities linked to the renovation of the old train stations.

### 3.2. Industrial heritage

- 30 All the strategies include projects to recover industrial culture and the memory of work through the restoration and reuse of significant elements of industrial heritage. In all the cases we can identify two kinds of projects: firstly, those linked to the restoration of important industrial buildings for public uses. Usually, the major industrial sites are reused for tourist activities but other buildings are rehabilitated for community services. The Zollverein mine (the largest and most productive mine in the world on the first half of 20th century) has been reused as the Ruhr Museum in Essen. The construction of Inland Navigation Museum and the Floodgate Park project in Walltrop or the restoration of an old gasometer in Oberhausen are other examples. In Nantes, the former shipbuilding premises house today Les machines de l'île, a major tourist pole. On the contrary, the former État railway station, located in the Island of Nantes, has been reused as the maison des syndicats (House of the Unions) and the old Biscuiterie Nantaise factory as the central post office.

Figure 4. Zollverein mine. Source : Beatriz Fernández Águeda



- 31 Secondly, large landscape projects have been developed on brownfields to retrieve the sites to the community through its reuse as parks or recreational areas. These projects have been an opportunity to link landscape architecture, environmental restoration of deteriorated or polluted industrial sites and increase of open spaces in congested cities.

They all intend to highlight the region's industrial past through the conservation of the most significant traces. Some of these examples are Emscher Park and Duisburg Nord Park in IBA Emscher Park Plan, Parco Dora in Turin or Parc des Chantiers in the Island of Nantes.

- 32 Precisely, maybe the most singular case is that of Île de Nantes. This urban project has enlarged the concept of industrial heritage preservation, considering the whole island as a heritage which must be inscribed in the future of the city. From the industrial rails inserted on the pavement to industrial buildings or local flora, the rule is "faire avec ce qui existe" (Chemetoff, 2010: 70-71). Actually, the Island of Nantes constituted a real transformation in the way industrial heritage was perceived in the city. Industrial heritage was no longer a set of constraints, but it became a source to promote. Former industrial elements should not only be preserved or reused but integrated on the city's futures.
- 33 « Là, on est entré dans une nouvelle logique de la préservation du patrimoine, pas seulement pour en faire des lieux de mémoire ni des musées ou des monuments qu'on visite, mais des lieux qui peuvent trouver une nouvelle vie (...) Il ne s'agit pas de conserver pour conserver (...) Il ne suffit pas de conserver les pierres. Encore faut-il les mettre en valeur et puis surtout leur donner un sens, une signification qui pourrait aider à la compréhension de la ville » (AYRAULT, 2002 : 78)

Figure 5. Plan-guide île de Nantes



Source: SAMOA.

### 3.3. Regional economic development

- 34 All three strategies include programs and projects of regional economic revitalization. Two significant characteristics are shared by all of them. First of all, they are directed to strengthen the region's economic base. However, their objective is not only to attract external investors, enterprises or tourism, but, on the contrary, to enhance local activities. They are based on the idea that a strengthened local economy attached to the territory and its social and productive structures will build a favorable environment which will, in turn, attract other activities. Unlike previous attempts to recover the economic base of cities in decline, these plans are not directed towards a complete renewal of local economy, to attract service industry or business and leave behind the region's industrial past. On the contrary, they aim to recover productive and social networks and to build a local economy as diversified as possible.

- 35 On many occasions new working places are associated to the recuperation and reuse of old industrial sites. Maybe one of the most interesting programs is that of Le quartier de la création in the Island of Nantes on the former site of a shipyard (Alstom). In the first place, it was thought as a new biotechnologies' pole. However, these activities did not develop, mainly because there was no tradition or local bonds. The industrial site was abandoned for almost a decade but when some local medias asked to the city hall for new premises, they decided to reuse temporarily former Alstom buildings. The proximity of the School of Architecture attracted local designers and artisans in the following years. These initiatives succeeded and attracted new entrepreneurs. Based on these foundations, le quartier de la création was launched and will continue its development in the following years.
- 36 In IBA Emscher Park Plan, the initiative 'working in the park' planned the recuperation of former industrial sites and their renovation as working centers. The projects associate environmental restoration of deteriorated mine industry sites to their redevelopment as technology parks, innovation and scientific poles and business incubators. That would be the example of the Industrial Park created on the former Holland mine, Westpark on a steelwork in Bochum, the redevelopment of Arenberg mine in Bottrop as a company incubator, the commercial, industrial and landscape park on the former Erin mine in Castrop – Rauxel or the Eving tech center on Minister Stein mine in Dortmund.
- 37 Some policies have been directed to support local initiatives and recuperate traditional activities linked to these territories in decline. In Essen, several abandoned areas at the Zollverein site have been redeveloped through 'Citizen Park' project, a plan to enhance traditional activities tied to craft building industry. Others are targeted towards training industrial workers for new jobs.
- 38 In line with promoting industrial activities, other programs are directed towards the diversification of the economic base, through the construction of business or scientific poles. In Turin, one of the sites of Spina Centrale Plan (Spina 3), basically formed by former industrial sites and brownfields (Michelin, Fiat Ferriere, Savigliano and Paracchi), is being redeveloped as a mixed area with commercial and artisanal activities, advanced industrial production and service industry, called Vitalipark. EnviPark is an environmentally friendly technological park located on a former industrial site, the metal sheets factory Teksid, owned by Fiat.
- 39 Nantes has developed a program to enhance technological and scientific poles linked to university research (Tripode). Instead of concentrating these activities on a single location, they have decided to decentralize in three sites to extend the potentials of these activities throughout the city.

### 3.4. Mixed-use areas

- 40 Former industrial cities usually have to deal with highly deteriorated neighborhoods. These areas were originally planned for industry workers and the consequences of unemployment and poverty were severe. Gradually, sensitive and underprivileged populations concentrated in those districts. Vast brownfields pose another problem for industrial cities in decline.
- 41 One of the main issues of the analyzed strategies is the gradual redevelopment of these areas as mixed-use neighborhoods, where residential uses, economic activities and

services for the community coexist, unlike the previously specialized residential and industrial areas. Density, mix and public transport access have become main concerns in all cases.

- 42 These rehabilitated neighborhoods have as a first objective to maintain existing inhabitants but also to attract new population. That's why they try to confront gentrification risks by assuring high proportions of social housing in these areas (for example, in Nantes over a 20% of HLM).
- 43 IBA Emscher Park Plan comprised a whole program that envisaged the renovation and reuse of old mine industry Siedlung (late 19th century and early 20th century garden cities), as Welheim mine Siedlung in Bottrop, CEAG Siedlung in Dortmund, Hugo mine Schüngelberg Siedlung in Gelsenkirchen or Teutoburgia mine Siedlung in Herne.
- 44 In Turin, the plan Spina 3 was developed on industrial brownfields. Along with the economic activities previously described, the plan also included housing developments. The aim was to create a mixed-use area integrating working places, residential areas, leisure activities, recreational areas and community services. This mixed-use district comprises a high percentage of social housing to assure social cohesion and to avoid gentrification.
- 45 In Nantes, a number of projets urbains are being developed on HLM districts. Malakoff has been integrated in a Grand Projet de Ville project opening the isolated neighborhood to the city and through a program that includes both restoration and demolition is intended to achieve a social mix and integrate new uses. Other HLM districts, like Dervallières, have been first connected to the center of Nantes by the tram and then they are being gradually redeveloped.
- 46 The projets urbains directed towards extending Nantes' centrality (Madeleine-Champ de Mars and the Island of Nantes) comprised deteriorated neighborhoods with aged and working-class populations. Nevertheless, the principle of faire avec is also based on maintaining the inhabitants.

## CONCLUSIONS

- 47 Examining these strategies has allowed not only confirming their differences but also recognizing common characteristics. We have mainly identified some shared tools that are in each adapted to specific local conditions.
- 48 They would be:
- Comprehensive strategy at a regional scale. It entails a change of scale in tackling decay: from urban renewal programs to a territorial strategy which comprehends the whole industrial region. It sets the foundations for the revitalization regional restructuring and constitutes the framework for different projects, plans and policies.
  - Projects related to a certain aspect of the regeneration process which are comprised in the regional plan. Usually, they are linked to four subjects:
    - Transportation Plans. Not only understood as infrastructure improvement programs, but as the structure of a new polycentric urban model. Usually, they comprise the upgrading of abandoned networks (railroad, rivers...) and their integration into the public transportation system. This decision lies both on the attempt of developing a durable model and to the understanding that access to services and working places will enhance social cohesion.

- Industrial Culture and Working Memory Retrieval Programs. Linked to the restoration and reuse of major elements of industrial heritage. Usually, most significant industrial sites and buildings are recuperated for tourism, cultural uses and recreational areas but, in most cases, renovation is tied to new community services and parks. These programs are the base to encourage cultural tourism and improve equity through the recuperation of regional industrial heritage for citizens.
  - Regional Economic development programs. They try to strengthen the region's economic base by enhancing local activities. They are aimed to create a diversified economy in order to reduce vulnerability to sectorial crises. They usually associate new working places to the renovation of old industrial sites. They are linked to three kind of programs: new activity poles (business centers, tertiary poles or most times technology parks, company incubators and research centers tied to new technologies), policies to encourage local initiatives and finally the recuperation of traditional activities.
  - Housing developments. They are developed on brownfields and deteriorated neighborhoods and their aim is to recuperate them as mixed-use districts. The recuperation of these sites is based on the conviction of the need to reduce urban expansion and revitalize abandoned areas.
- 49 The evolution of these regions in the last few years seems to suggest that it is possible to guide urban dynamics, including decay. They also show the capacity of planning to intervene in industrial cities in decline. Nevertheless, they have pointed out to the importance of local response adapted to the region's specific conditions.
- 50 One of the most significant findings is, maybe, that all the experiences are based on comprehensive strategies at a regional scale. Unlike urban renewal programs which were concentrated on the most deteriorated areas, these strategies comprehend the whole territory in decline. Thus, it is possible to distribute decline burden and growth benefits on a regional scale.
- 51 Industrial cities revitalization may have to do with redefining or reinventing the future, which these cities apparently lack. Restructuring is thus, linked to a new model that comprises city and territory as a whole. This urban model may allow cities in decay to become complex urban regions by recovering their ability to adapt to new circumstances.
- 52 These experiences seem to show the importance of linking the city's futures to its industrial past. The relation between memory and evolution is the key to the restructuring process. To restore the memory of the industrial city is to retrieve its ability to recall its past, to affirm the multiple futures for industrial cities.

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#### ABSTRACTS

Global dynamics such as economic transformations and reorganizations of production led to the crisis of many former industrial cities in Europe and the U.S in the last decades of the 20th century. Most of them have suffered or are still suffering from urban decay and shrinkage. The severity and persistence of some of these processes have called into question both the future of these cities and the ability of urban planning to deal with decline. The trajectory of some industrial cities, whose crisis has persisted despite local efforts to confront it, could lead to regard decline as an irreversible process and to accept the impossibility of urban planning to intervene in it. Nevertheless, the gradual restructuring of some European industrial cities in recent years, seem to point toward the relevance of local response to global dynamics. Different paths of development may only be explained from the distinctiveness of each territory, specific local decisions and successive strategies to tackle decay. These processes of revitalization seem to reveal the importance of local action and the possibility of guiding and easing decline. Even more, they point out to the crucial role of planning.

These experiences show different ways to tackle decay. This paper aims to explore the role of certain planning strategies on guiding the futures of industrial regions.

Les transformations économiques globales et la réorganisation de la production des dernières décennies du XX<sup>ème</sup> siècle ont mené de nombreuses villes industrielles en Europe et aux États-Unis à la crise. La portée et la persistance de ces processus du déclin introduisent autant la question du futur des villes industrielles en déclin que celle de la capacité d'intervention de l'aménagement urbain.

L'évolution de beaucoup de villes industrielles dans lesquelles la crise s'est prolongée jusqu'à aujourd'hui, malgré les efforts locaux pour l'empêcher, pourrait nous amener à penser que le déclin urbain est un procès irréversible. Cependant, la récupération progressive de certaines villes industrielles européennes dans les dernières années signale des possibilités locales de réaction face aux dynamiques globales. Les trajectoires divergentes des villes industrielles peuvent seulement être comprises en se référant à la singularité de chaque territoire. Ces processus de renouvellement ont dévoilé l'importance de l'action locale et la possibilité de

maîtriser le déclin. Ils révèlent aussi le rôle de l'aménagement et des politiques urbaines locales. Cet article analyse certaines stratégies de renouvellement des villes industrielles en Europe.

## INDEX

**Mots-clés:** aménagement urbain, déclin, ville industrielle, stratégie urbaine, renouvellement, Europe

**Keywords:** decline, urban planning, industrial city, shrinking city

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