INDUSTRIAL LAND RESTRUCTURING IN WALLONIA AT THE LIGHT OF THE ENGLISH CASE: A (TOO) STRONG COMPETITION BETWEEN GREENFIELD DEVELOPMENT AND BROWNFIELD RE-DEVELOPMENT

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1. Introduction

Belgium is officially divided into three regions: Brussels, Flanders and Wallonia. With a surface area of ± 16'844 km², Wallonia (formally the Walloon Region) represents more than 55% of the Belgian territory and about a third of its population (3 498 384 people in 2010). Nearly half of the Walloon population is concentrated in a narrow strip, known as the "Walloon axis", or the "sillon industriel" in French. The Walloon axis follows the Meuse from Liege to Namur, and then continues to the West along the Sambre to Charleroi. Upstream from Charleroi, it is extended towards Haine Valley by the Centre region ¹ and Mons-Borinage (Figure 1). Although a large fraction of the Walloon territory is relatively sparsely populated, Wallonia owes its image of industrial and urban region to this axis, which has structured its geography since the ninetieth century, when it became the industrial backbone of Belgium and, before the Ruhr, the first modern industrial basin on the European continent (Fraser and Maréchal, 2003).

The "Walloon axis" corresponds approximately to a concave geological structure, where carboniferous grounds with layers of coal escaped erosion. When Belgium gained its independence in 1830, the industrialised conurbations of the Walloon axis were hardly noticeable. They would grow later in the ninetieth century, as the industrial revolution took hold on the region's coal deposits. Strong urbanisation would ensue as a result of the steel industry and metal works, the engines of economic growth at the time (Mérenne-Schoumaker and Vandermotten, 1992). Given the technical conditions in the ninetieth century, this heavy industry could only be located near the coal resources. This brought the region wealth, and by the outbreak of the First World War, Wallonia was at the forefront of technological development and one of the most flourishing European regions.

¹Region located between Mons and Charleroi which includes the city of La Louvière.

The main developments in industries would take place around Liege and Charleroi, the two main Walloon urban regions, as well as in the Centre region (La Louvière) and in the region of Mons-Borinage. Namur, the administrative capital of the Walloon Region, did not undergo massive industrialisation because of the absence of local coal resources.

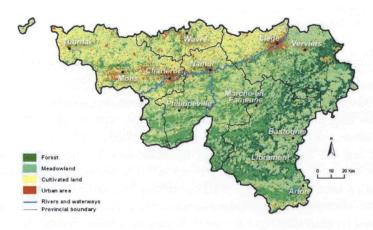


Fig. 1: Land-use (Source: Cellule État de l'environnement wallon: Environmental Outlook for Wallonia 2008, SPW-DGARNE(DGO3)-DEMNA-DEE)

Between the late fifties and the mid-eighties, as in many other regions of traditional industries, Wallonia has been hard hit by industrial crises. Industrial activities experienced a long process of decline, leaving many towns with an important legacy of derelict industrial sites. The aim of this paper is to understand why, despite four decennia of government interest in brownfield re-development, the problem of industrial land restructuring remains a difficult topic for the Walloon authorities. To achieve this aim, I will take a particular interest in the relationships between the issue of city extension and the difficult task of brownfield regeneration. Although it is hard to be unequivocal on such issue, I will support the argument that, for the Walloon case, major difficulties in brownfield re-development occur because new investors are hard to find due to the competition of greenfield developments. Of course, compared to greenfield sites, brownfield sites are often affected by a range of development obstacle (fragmentation of ownership, the high number of stakeholders involved, the demolition of existing buildings, soil contamination and so on...).

The remaining sections of the paper are structured as follows. In section 2, I provide a general overview on the issue of industrial land restructuring in Wallonia. In section 3, I develop the theme of the competition between greenfield development and brownfield re-development, in the light of an international comparison with a particular interest in England. The English case represents an attractive topic for our investigation. Indeed, although England and Wallonia have much in common as regards their industrial heritage, English planners give the impression to have achieved a higher level of success than their Walloon counterparts with respect to brownfield regeneration (Adams et al., 2009; Catney et al., 2006; Dixon, 2007).

2. A general overview on the issue of industrial land restructuring in Wallonia

During the second half of the twentieth century, the Walloon economy has been hard hit by several industrial crises. Since the early 50's, the textile industries has been in decline. In 1957-1958, it was then the beginning of a major crisis in the coal mining sector, which lasted until 1984, when the last coal mine had to be closed (le Roton in Farciennes, near Charleroi). Since 1975, it is the steel industry which is in severe restructuring. In Wallonia, the need to clean up abandoned industrial sites has appeared in the late sixties, with the coal crisis and the massive abandonment of mining sites in several regions. A policy based on public grants and dedicated to the regeneration of disused coal sites was consequently developed in 1967. Despite this ancient planning concern, many former coalfield sites are still waiting to be regenerated. For instance, an inventory from 2002 showed that 141 mining sites representing 2000 hectares were still waiting a proper regeneration (Dachouffe, Pierard and Rasumny, 2003). At the regional level, the disused mining sites are mostly located in the regions of Charleroi and Mons-Borinage. At the local level, they are frequently located in the centre of the localities they lead to develop, therefore representing an important matter for the revitalisation of those agglomerations.

After being hit by the coal crisis, the Walloon economy was severely affected by the economic recessions of the seventies and eighties. Due to intense deindustrialization, the brownfield policy was then not limited any longer to coalfields. A law was voted in 1978 to help in the regeneration of "SAED" (Site d'Activité Economique Désaffecté).

A SAED was then defined as "a vacant site, previously dedicated to any industrial or tertiary activities, where the current condition is contrary to "efficient land use"". The SAED instrument, in order to achieve regeneration, allowed the use of public funds to cover the purchase costs or the costs incurred in cleaning and remediation.

Since the law voted in 1978, the legislation has been changed several times. In 1997, the notion of SIR (*Site d'Intérêt Régional*) was introduced in the Regional Planning Act (CWATUPE ²). Compared to the SAED procedure, the SIR procedure was more limited and focused on a "visual cleaning-up". The creation of this tool was justified by the fact that, in the absence of concrete regeneration projects, the visual nuisance from some industrial wastelands has to be suppressed to restore the local living conditions and improve the local image. It was mostly demolition and greening works that could be subsidized through the SIR device. The legislation was again modified in 2005, when the terminology SIR was changed into SRPE (*Site de Réhabilitation Paysagèreet Environnementale*). In 2006, the terminology SAED was also changed, into SAR (*Site À Réhabiliter*), in order to suppress the word "Désaffecté" (disaffected) and therefore reinforce the pro-active dimension of the procedure.

As in many other regions (Cabernet, 2006), Wallonia is characterised by limited data on the true extent of the brownfield problem. For the whole of the region, the most recent published inventory dates from 2004 (Dachouffe and Rasumny, 2005). It was realised at the initiative of the Planning Department of the Walloon Region and based on the official definition of a SAED. To be listed, the sites had to be:

- previously dedicated to any industrial or tertiary activities;
- with a current condition contrary to "efficient land use";
- not fully regenerated.

Following this definition, 1503 sites were officially considered as SAED. Those sites represent 5942 hectares (0,353% of the regional territory), including 4300 hectares still to be regenerated. Half of these sites (759) are located in the province of Hainaut, with a strong concentration in the regions of Charleroi, La Louvière and Mons-Borinage (*Figure 2*).

²Code Wallon de l'Aménagement du Territoire, de l'Urbanisme, du Patrimoine et de l'Energie. In Belgium, the three regions have responsibility for planning matters and regional assemblies share legislative power equally with the federal level.

In the province of Hainault, the ratio between the SAED surface area and the provincial surface area reaches 1,075%. The province of Liege, with 379 sites, also represents a significant proportion of the Walloon SAED (25%). The 2004 inventory also lead to differentiate two main issues:

- an important number of small sites, representing limited surface areas but usually located in central urban fabrics;
- a limited number of large sites, representing important surface areas but usually located in peripheral areas.

The evaluation of the SAED procedure by Mérenne-Schoumaker and Devillet (1999) at the end of the nineties has pinpointed several problems, including the length of the procedure and the limited available budgets. This analysis also showed that most of the regenerations financed via the SAED tool were related to small sites dedicated to cultural or social uses (e.g. museums or social housing). By contrast, huge industrial wastelands were still waiting to be revitalised. Another issue is the limited implication of private developers. Due to the complexity of the SAED procedure, private regenerations are usually achieved without using the official procedure. Eleven years after the work of Mérenne-Schoumaker and Devillet, there is no doubt that the low implication of private developers remains accurate.

Following the evaluation of Mérenne-Schoumaker and Devillet (1999), some key conclusions can also be raised on the conditions to achieve success in brownfield regeneration. Those authors, of course, stressed the issue of land contamination, in relation to the absence of a clear legal regulation related to soil pollution and risk assessment (Cabernet, 2003). Mérenne-Schoumaker and Devillet also observed that some kinds of buildings are neglected by developers and investors, especially the edifices with many floors or when a large plot is not directly available to organise parking spaces. Those authors also stressed the idea that spontaneous regenerations (i.e. without the intervention of public authorities) usually occur rapidly after the vacancy: more than two years of vacancy strongly limits the chances of reuses. Another important conclusion is the fact that the regeneration dynamic is highly dependent on the level of regional development. For instance, due to the high demand induced by the development of Brussels into one of the main European metropolitan regions, industrial brownfields located in the province of Walloon Brabant can easily find investors.

By contrast, a location in regions of traditional industries (i.e. along the "Walloon axis") is a strong obstacle. In such a context, the demand is weak and the supply-demand balance is not driving property professionals towards brownfield sites or, more generally, towards traditional urban fabrics (Halleux and Lambotte, 2008).

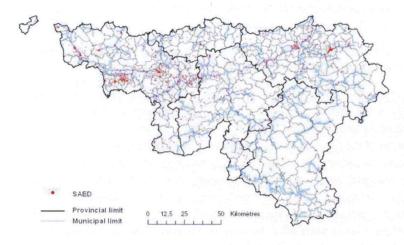


Fig. 2: Sites listed as SAED in 2002 (Source: http://mrw.wallonie.be/DGATLP/DGATLP/Pages/DAU/Pages/PouvPubl/SAEDInventaire.ap)

3. Urban sprawl at the expense of brownfield regeneration

North-west European states differ significantly in the spatial extension of their agglomerations. Following the literature on this topic, it is appropriate to make a distinction between countries like the Netherlands or the United Kingdom, the historical leaders in urban containment (Sellers, 2004) and, on the other hand, countries like France or Belgium, where the control of urban sprawl is a more recent concern. Recent European researches on the relative size of artificial surfaces confirm that urban sprawl is very intense in Belgium. Indeed, when data on artificial surfaces for settlements and infrastructures are compared to GDP size or to population size, the Belgian situation illustrates a very high amount of land consumption (Bengs and Schmidt-Thomé, 2006, Maps. 3.16 and 3.20).

In this section, we develop the argument that such an important consumption of land inevitably leads to a strong competition between greenfield development and brownfield re-development.

Detailing this issue will lead us to consider how planning practices interfere with both, the location of residential developments and the location of economic activities.

As mentioned in the general introduction, our analysis is realised in the light of an international comparison with a particular interest on the English case.

3.1 A cultural attitude prone to intense residential peri-urbanisation

The cultural attitude towards land resource is an important factor to explain the disparities between European states about the control on urban sprawl. On this subject, it is well known that, for the Belgian context, in Wallonia as well as in Flanders, one finds a cultural environment with a very negative attitude towards land use regulation (Albrechts, 1999). For instance, when French analysts turn their attention to Belgium, they find surprising that the land resource is not considered as a rare resource to use with parsimony but, on the contrary, as "an abundant consumable commodity" (Acosta, 1994, p. 43). An explanation for this Belgian attitude towards land is that the country is not affected by the fragility of his physical environment, unlike, for example, the Netherlands, the Belgium's northern neighbour. In parallel, despite the enhancement of the rural (or suburban) lifestyle, Belgium does not characterize either, unlike England or Switzerland, by the aesthetic desire to preserve traditional landscape territories.

On this last point, it is interesting to follow the development of Adams and his colleagues (2009) when they observe that, in England, "there has been a clear correlation between government interest in brownfield re-development and the extent of public and political concern about environmental matters and, specifically, about the likely scale of prospective greenfield development" (pp. 13-14). For Adams et al., the influence of environmental groups such as CPRE (Campaign for the Protection of Rural England) is a key factor to explain why the spectre of new houses spreading across the English countryside has leaded to an ambitious national target where 60% of the proportion of new homes should be built on previously developed land. In their paper, Adams et al. also show that, since 2000, this target has been achieved every year! Seen from Wallonia, this achievement is definitely very impressive.

For P. Catney et al. (2006), the situation in the United Kingdom actually illustrates an approach of "Development Managerialism", where high land and property prices are at the heart of planning strategies, in order to simultaneously achieve the limitation of urban sprawl on greenfield land and the recycling of traditional urban areas on brownfield land. By severely limiting peripheral extensions and by increasing the minimum densities, British planners increase land values and therefore allow private developers to cover their costs in a setting of previously-developed land. In doing so, planners achieve good results in attracting investments in traditional urban fabric, where property professionals find the only development opportunities, but also good profit margins.

Compared to the situation on the other side of the Channel, Belgian decision-makers have never defined measures to increase the proportion of building sites on previously developed land. By contrast, in Belgium, we find land-use plans (called sector plans) with abundant greenfield sites available for the construction of new housings. For the whole of Belgium, 48 sector plans implemented between 1964 and 1987 establish the difference between *aedificandi* land and *non aedificandi* land. Concerning aedificandi land, this is land that lies within the official "residential zones" that can accommodate housing projects. When it comes to accounting for the way large "residential zones" were drawn, one finds the intermingling of many explanatory factors, with notably the speculative behaviour of many land owners in a context of strong respect of private property (Halleux, 2008). In parallel, it has also been noted that there was a fear that "too great a fall in the offer of building-sites would cause a price rise for these sites, making housing for families more difficult" (Schoonbrodt, 1975, p. 19). As a consequence, in many residential basins, "residential zones" are oversized in relation to demographic needs (Halleux, 2009). In such situation, it is therefore a very difficult task for urban planners to attract housing investments towards brownfield sites, where re-development is a costly and a risky affair.

4. The suburbanisation of economic activities

As it was just discussed, the realisation of the sector plans has leaded to delineate excessive surfaces for housing developments, therefore allowing residential sprawl to prosper. With such a situation of generous land-supply, there have not yet been any strong pressures to extend the initial "residential zones" drawn in the 70's and 80's.

By contrast, "economic zones" that can officially accommodate economic estates have been largely extended since the last three decades (Lambotte, 2009). Besides the peri-urbanisation of new housings, we therefore also observe a strong tendency towards the suburbanisation of economic activities. Of course, this spatial tendency limits the possibility to locate new economic activities on former industrial sites. In Wallonia, the strong suburbanisation of economic activities is related to the general opinion that the availability of cheap land is an important factor of economic development. This approach to economic development and employment growth is explained, at least in part, by a spatial context where, due to the high congestion costs in different neighbouring regions (Brussels, Flanders, the Netherlands, Rhineland North-Westphalia, Luxembourg), supplying cheap and abundant land can most likely help in the attraction of foreign investments. The importance given to this factor of economic competitiveness also results from the position of Wallonia in continental Europe. Due to its undeniable strategic position, along the European backbone that runs from England to Italy, less than 300 kilometres from the main metropolitan areas of North-West Europe, the region is indeed particularly attractive for land-intensive sectors such as distribution and logistics (Cushman and Wakefield, 2009).

In Wallonia, the vast majority of economic estates are produced by public sector institutions called inter-communal development agencies (IDA) ³. The IDA are able to use the legal power to modify land-use plans (sector plans) to transform *non aedificandi* land into "economic zones". The conjunction of this possibility with the need for the IDA to balance their budgets through the sale of building land leads to a situation where most of new economic estates and business parks are developed on former agricultural land. Such a mechanism, where public agencies limit their investments on "difficult" brownfield sites, tend to accentuate urban decline as it leads many firms to choose a location in an out-of-town estate (Lambotte, 2009). For instance, different researches have shown that a proportion of 15 to 20% of the jobs located in peripheral economic estates are actually related to firms with a location profile suitable to an urban setting (i.e. non-polluting firms with a high ratio of jobs per surface area) (Deloitte &Touche et al., 2002, p. 20).

³ Eight IDA are active on Wallonia. See: http://www.wallonie-developpement.be/

By contrast to the situation in continental Europe, where economic estates are usually developed by public agencies (for instance inter-communal agencies in Belgium or municipal agencies in the Netherlands), most industrial developments in the UK are privately driven (Jones, 2004; Henneberry and Halleux, 2008). The discharge of public authorities' functions relating to the development of land for economic activities indicates that, by contrast to Wallonia, the availability of land is not as much considered as a vital factor of economic competitiveness. A recent comparison between development strategies in the two towns of Liege and Sheffield clearly confirmed this idea (Guilliams, 2007; Guilliams and Halleux, 2009). In Sheffield, planning officials and decision-makers state that the significant economic recovery of the last fifteen years could have taken place without mobilizing important land resources for the extension of economic estates. For Sheffield stakeholders, compared to key factors like a strong entrepreneurial environment or a strong culture of innovation, the availability of land is not vital to insure economic growth.

In Sheffield, when it relates to the relationships between planning and economic development, the quality of places (natural surroundings, cultural amenities, safety...) is considered to be more significant than the availability of land. This perspective, which contrasts with the Walloon approach, explains why this city of traditional industries is working very hard to change its image of "steel city". Since the nineties, Sheffield has indeed set up an elaborated marketing strategy, notably based on its strength as "the greenest city of the UK" (Beer, 2005). Complementarily, a vast regeneration programme of the downtown area was carried out, this one being considered as the first vector of the regional image. Inspired by the thesis of Richard Florida (2002) on the creative class, these actions clearly aim at changing the city image, so as to attract new inhabitants as well as new students and new economic developments.

5. Conclusion

Despite four decennia of public and political concern about the regeneration of brownfield land, many derelict industrial sites located in Wallonia are still waiting to be regenerated. In this paper, this situation was related to the competition between greenfield development and brownfield re-development, through an international comparison on planning practices in Wallonia and England.

The strong differences between the two investigated contexts briefly presented on this paper confirm that an effective intervention on the restructuring of industrial land requires to control the land supply-demand balance at the regional level. Our results therefore correlates with the analyses of Cabernet ⁴ (2003, p. 5) where it is observes that, in Wallonia, "reusing brownfield properties is not effective after cleaning up or decontamination... major difficulties occur when having to find new investors".

Among these differences between planning practices in England and Wallonia, one finds in Great Britain a much firmer will than in Belgium to preserve the land resource and to contain urban extensions. As a consequence, investments in new projects are more significantly oriented towards brownfield land and traditional urban fabrics. For British planners, containment policies are mostly justified by environmental reasons and by the preservation of open spaces. Although, as illustrated by the case of Sheffield, containment measures also seem to be related to economic reasons, with the emphasis put on the relationship between economic development and the quality of urban spaces. By contrast to the situation in Wallonia, where promoting regional development specifically implies the provision of cheap land, it is primarily the need to improve the quality of urban spaces which is taken into account when English planners are mobilized to economically regenerate regions and cities of traditional industries.

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⁴ Concerted Action on Brownfield and Economic Regeneration NETwork

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