

Dealing with Sprawl: the case of the Belgian Core Area

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Abstract

The spatial structure of the Belgian Core Area is characterised by fragmentation and sprawl due to its historical de- concentrated spatial structure dating from the Middle Ages, libertarian policies focussing on de-concentration and social and spatial dynamics after the Second World War. This spatial situation was 'legally frozen' at the end of the seventies by general land-use plans (plans for each district on a 1/25000 scale) set up for the whole country. Through this evolution a kind of 'galaxy' or 'città diffusa' was created, with a dense network of many cities and villages and a mixed area in between in a peripheral condition.

The three Belgian regions, with full competence for spatial planning, are trying to deal with this de-concentrated and mented condition, which is, certainly in the Belgian Core Area (mainly F ders and Brussels), the main spatial characteristic. De-concentrate raling of developments along public transport nodes, the protect pen ace, nature protection, urban development through urban of business areas in mainports c nodes are basic strategies of the present policy. Ar trategy, not yet a general policy, deals with the open condition. Starting from the efine an appropriate balance between acceptance of this agreented open space: the protection of nature and 'habitat' function. In this paper I will its roots, and the policy for the Flemish Region

The institutional and spatial context

Owing to Belgium's federal structure, each of the federal regions (Flanders, Wallonia, Brussels) has full political and legal competence in matters such as spatial planning, housing, infrastructure including growth management, urbanisation, mobility and the environment. For this reason, since 'regionalisation', the three regions have had different laws and instruments in the field of spatial planning, housing, infrastructure, etc., in fact in connection with most of the 'spatial' issues. In the 'Special Bulletin', elaborated for the 43rd International ISOCARP Congress in Antwerp the three systems are described and compared (Van den Broeck, 2007).

The Belgian Core Area (about 4000 sq. km), belonging to two regions (Flanders and Brussels), is a dense 'galaxy' (1100 inh./ sq. km), a 'città diffusa', with three main cities Brussels (the European Capital), Antwerp and Ghent, many smaller cities and villages and about 4 million inhabita ts. We can call it an 'urban region' comparable with other polycentric regions such as the Ruhr area and Rhine-Mainz in Germany, the Randstach Jokand and Lille-Roubaix-Kortrijk, a cross-border region in France and Rulgium. Possibly we can also include the northern part of the Walloon region in this usban core region, which means that within the Belgian Core. (Co.) all three gions have the competence to develop their own spatial policy. As yet there is neither an integrated vision for the urban region nor an integrating corena to deal with it, but in terms of content the policies of the regions of the regions of the region of the second content the policies of the regions of the region of the region of the region of the regions of the regions



Figure 1: The Belgian Core Area - a dense conglomerate

Spatial characteristics: de-concentration, sprawl and fragmentation

Travelling through Belgium, particularly in the central and northern part, one gains an unattractive impression of pronounced spatial fragmentation and splintering without a high quality of landscape (fig.2 a,b).

A glance at a picture (fig.2, 3) is not sufficient to understand the fragmented and splintered character of the Belgian Core Area and especially Flanders, a tight patchwork of smaller and larger settlements, villages, towns and cities and their connecting built-up strip developments. The present form and image of the area is a result of different factors:

(1) the historic structure, dating from the Middle Ages, showing a deconcentrated dense network of many smaller towns and villages at short distances (cities each 20 km) from each other of a dense road network in between;

(2) the libertarian attitude of the Belgians and the spatial policy, supported by the



Figure 2: Fragmentation and splintering of the landscape

church and based on de-concentration, from the founding of the State in 1830 up to the seventies.

The dense medieval structure of centres and roads was supplemented in the 18th and 19th centuries with a network of main roads, called 'stone-ways' ('steenwegen') because they were constructed with cobble stones. In the

second half of the 19th century, a regional tramway network appeared (fig. 4). Both of these radial networks, which were installed in parallel, connected towns and cities with one another and the rural areas with the centre.

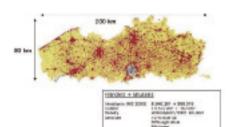


Figure 3: Built-up areas in Flanders / Belgium

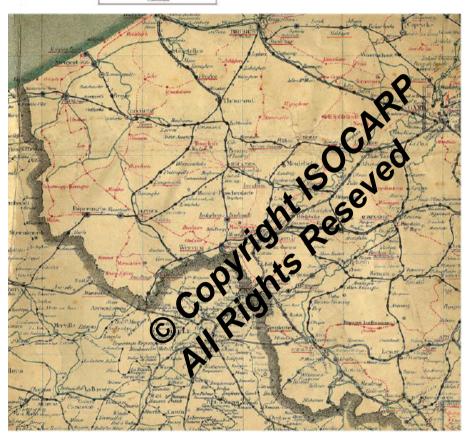


Figure 4: A dense tramway network along the roads connecting cities and rural areas. In the fifties of last century, the system was demolished in order to enlarge the roads.

Church and state encouraged this de-concentrated pattern. They preferred 'life in a family setting' in small towns and villages, one of the goals being to create a 'stable' community, over urban development in bigger cities, which was referred to as a 'focus of depravity'. This policy was accompanied by encouraging property acquisition, subsidising 'little houses with little gardens' and organising cheap public transport (an extensive rail and tram network to central (working) locations) (Van den Broeck, 1994, 2003, 2007). The landscape continued to be characterised by a clear distinction between town and countryside and a natural structure that was also still clear. Only

in the second half of the 20th century did sprawl and fragmentation arise. This took place in a relatively short period, mainly under pressure from housing demand after the Second World War and the changes caused by the increase in the number of cars. Agricultural land and large rural estates belonging to the aristocracy, wherever they were located, were divided up into plots of building land, and the rise of the car led to the emergence of the phenomenon of 'ribbon development' in Belgium along all possible traffic routes.

Until the early seventies, there was no spatial policy framework whatsoever for orienting this growth, and strangely, the Spatial and Urban Planning Law of 1962 stimulated this development, characterised by de-concentration, sprawl, fragmentation and a kind of peripheral condition with little regard for spatial coherence (De Meulder et al, 1999) (Kesteloot, 2001) (Van den Broeck, 1994, et al 2007).

The 1962 Spatial Planning Law

The need for a spatial framework development specialists in t s by special interest groups such as the Farmers' Union ps, which called for agricultural land and natural areas and social sectors which called for a regional zoni property speculation, based on the also demands from the administrative reater legal certainty in order to prevent entilism, which were rife. The result of this and Urban Planning Law, approved in 1962. ruments very rationally provided for the creation n, regional plans, district plans, municipal land-use plans, ans and building plans. The system was deliberately designed in a highly hierarchical, centralised manner as a reaction against the high degree of municipal autonomy, which was curtailed by the system. A national plan failed to materialise. At regional level, progress did not extend further than regional studies which - though very interesting - did not achieve political status. It was the district plans and subdivision schemes that started to determine spatial developments and constituted the key policy instruments

The district plans, drawn up by the central government, were, as part of the endeavour to achieve legal certainty, conceived of as land-use plans elaborated on a scale of 1/10000 and published on a scale of 1/25000 (fig.5). They were intended to serve as a framework for assessing subdivision and building applications, the main concern of the government.

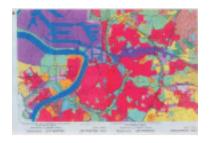


Figure 5: District plans elaborated on the scale of 1/25000 for the whole of Belgium and accepted by parliament between 1976 and 1979, serving as a juridical framework for assessing subdivision and building plans. In fact by these plans "sprawl" was "frozen". Up to now, they serve also as a main criteria to fix the price of land.

A second key spatial instrument was the subdivision plan (fig. 6 a, b), which created the possibility for private individuals to subdivide land into building plots. This was a very simple way of creating new building land in agricultural areas and green areas at very low cost, as was immediately understood by large-scale landowners and developers. As it took around 15 years the district plans to be compiled and approved, during this period the evas no





Figure 6 a, b: Subdivisions everywhere, a motor for sprawl and fragmentation

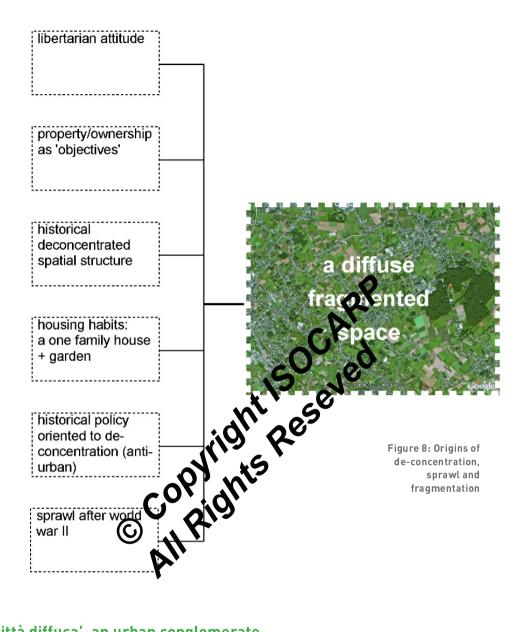
subdivisions, this ribbon development reinforced the impression of sprawl and fragmentation, especially as this way of building disrupted the natural and topographical structure. The growing suburbanisation of both city-dwellers and industry in the direction of the countryside encouraged this development towards a 'città diffusa', emerging as a result firstly of the de-concentrated structure and policy and secondly of the lack of any spatial framework combined with speculation in the sixties and seventies.

The lengthy development and approval process meant that district plans were unable to put a stop to this development. The plans gave existing sprawl and fragmentation a legal basis, but were not in vain: once they were approved, they blocked the sprawl phenomenon and safeguarded remaining natural areas and open spaces. Moreover, the development process created



Figure 7 a, b, c: Ribbon development along roads and suburbanisation of urban functions: another motor for sprawl and fragmentation

widespread awareness with regard to spatial planning, the environment and government responsibilities in these areas. The 'planning debate' commenced, stimulated by numerous action groups, the government bodies involved, universities and political think-tank's.



A 'città diffusa', an urban conglomerate

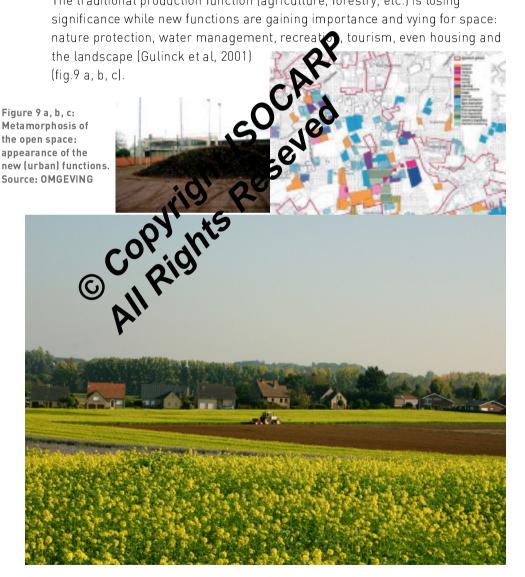
As in many places, of course, a number of global trends and dynamics have also influenced this sprawl and fragmentation: changes in transport modes and attitudes, the growing network society, the footloose economy, changing factors governing choice of location, changing lifestyles influencing housing conditions and choice of housing location, and last but not least the metamorphosis of the countryside (Gulinck et al, 2001) (Meert, 2002) (Borret, 2002) (Ryckewaert, 2002).

Growing individual mobility has influenced the structure and functioning of urban areas, multiplying people's personal activity range by a factor of a hundred. The historical hierarchical relationship between central places (Christaller, 1933) is eroding, older central locations are losing importance while new centres with a totally different character, sometimes referred to as urban 'fragments' with urban functions, are developing spontaneously at alternative locations related to infrastructure networks: close to motorways. main access roads, airports, etc. Increased mobility has meant greater freedom in decisions about the location of dwellings and business areas. resulting in a kind of 'nomadic' lifestyle (Mitchell, 2001).

The rural areas are also undergoing a fundamental transformation. The traditional production function (agriculture, forestry, etc.) is losing significance while new functions are gaining importance and vying for space: nature protection, water management, recreation, tourism, even housing and

the landscape (Gulinck et al. 2001)

(fig.9 a, b, c).



The housing market, mostly dominated by the private sector, is strengthening this evolution which is possible because 'sprawl' was legalised by the district plans..

Certainly in urban regions such as the Belgian Core Area the following phenomena are found (Spatial Structure Plan Flanders, 1997:36-45, Studiegroep Omgeving, 1994):

- high demand for detached housing outside cities,
- sprawling car-oriented economic activities along the main roads,
- the displacement of urban activities to the periphery,
- the degradation of open space and nature,
- the development of 'non-places' and undefined left-over spaces without identity,
- the formation of new types of settlement, new types of 'cities': linear cities along highways and waterways, grid cities in former agricultural areas, peripheral areas which develop a high set of autonomy and their own 'rural' urban quality.

The spatial structure in this conglomerate is characterised by the marked fragmentation of space. New extensions arise as loose fingments but develop into powerful cores with their own identity and form. The traditional historical 'compact and complete' city is disappearing and being replaced by a network – a grid or carpet – of fragments, new types of cettlement with a diverse character which extends over a large space which is pred in a 'criss-cross' or 'nomadic' fashion. Such spaces haven somewhat chaotic appearance and little visible morphological or functions coherence.

The three regions have developed their own collicies in this regard, which, however, are comparable in terms of the Content. Here we focus on the Flemish policy, as most on the Belgias Core Area lies within Flanders. The development of a policy took a considerable length of time and was only possible by means of new legislation.

The Urban Planning Law in Flanders and the Flemish Spatial Structure Plan (RSV: Ruimtelijk Structuurplan Vlaanderen)

Even before the district plans found political backing in the second half of the seventies, there were pleas for a process-oriented approach in urban planning circles: planning should take future actions and policies into account, since a static system of spatial zoning cannot cope with typically urban problems in inner cities, the mobility problem, nature protection and development, the need for business areas, etc... One key criticism was the fact that the planning instruments based on zoning were not action- and development-led, but intended purely to control development and create legal certainty.

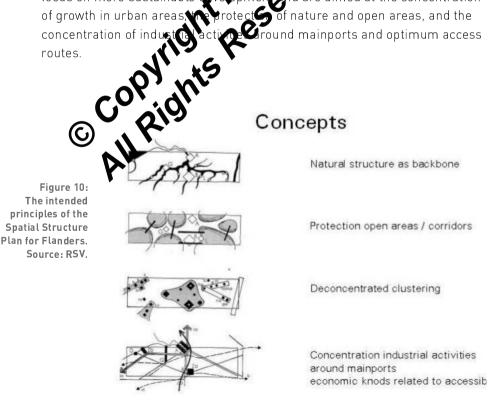
The new system needed to be an integrated, flexible and open one which

was based upon a societal vision and action-oriented. It was not until 1992, however, that the project of drafting an RSV - Spatial Plan for Flanders - was launched. The Flemish law on planning, providing for a new spatial planning system, was adopted only in 1996 and adapted in 1999.

This Flemish law on the new planning system is based on four principles:

- the introduction of two new planning forms: the spatial structure plan and the spatial implementation plan (RUP or Ruimtelijk Uitvoeringsplan),
- a plan with an information and guidance part as well as a binding part,
- planning and plans on three political and planning levels,
- subsidiarity.

In 1997 a Spatial Structure Plan (RSV) for Flanders was enacted (Albrechts 1999). It was a reaction against the degradation of space characterised by sprawl and fragmentation caused by the uncorn lled spatial dynamics. The existing land-use plans (1/25 000) had prove an dequate to stop the sprawl and fragmentation because sprawl was av accepted as explained before (Van den Broeck, 2003) (Spatial Str cture Plan, 1997). The RSV is a plan which formulates guideline p ies and also contains a part which is binding for all author inciples of the RSV (fig. 10) focus on more sustainable develo are aimed at the concentration of growth in urban area nature and open areas, and the concentration of ind round mainports and optimum access routes.



One important reason for introducing the new planning system, which also included a policy at Flemish and provincial level, was that in the early nineties there was an awareness that a number of issues of importance to society could only be tackled at these levels: sprawl and fragmentation. environmental deterioration, the disappearance of nature, traffic congestion and rising crime, polarisation between sectors...As a result, planning became acceptable in a country whose natural inclinations are opposed to government planning. The objectives of the RSV seem obvious: sustainable spatial development and quality around the basic concept 'Flanders: open and urban'. This metaphor seemed acceptable to everyone as a startingpoint, perhaps because it is general and open to multiple interpretations. The catchphrase refers to the dichotomies of urban versus rural and nature versus agriculture without really taking a position. Ecologists regard their objectives as expressed by it, especially the protection of nature and the environment, while others see it as expressing a focus on living environment and others still regard it as containing poss development. More specific objectives are as follows:

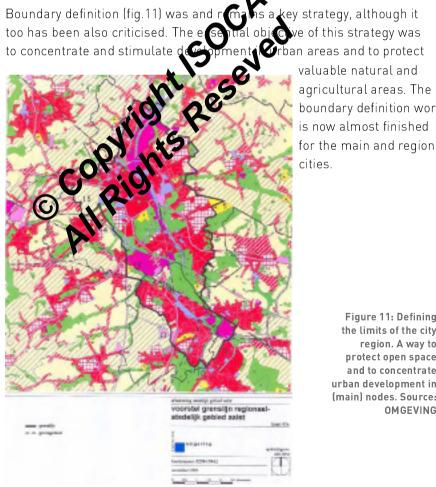
- the de-concentrated bundling of development in sele ted urban areas building further on the de-concentrated, 'nebular' spatial structure of Flanders. This concept is based on the actual so return of Flanders, which is de-concentrated. The existing structure is characterised by numerous settlements, cities and villaries, and a 6-y dense road network.
- the protection of open space, in view of the fundamental metamorphosis that this space is undergoing, in which agricultural uses are giving way to more urban functions;
- concentration of economic activities to viitable locations
- a focus on the development of public transport, which must be regarded as the main criterion or the coation of developments;
- the reinforcement of the placeal system, based on the valleys of rivers and streams, as the backbone for spatial development and the ecological network; historically, the physical system has been the basis of the settlement structure, something receiving renewed emphasis in the plan.

De-concentrated bundling, task-setting and boundary definition

The Spatial Structure Plan for Flanders is a legal document that tries to put forward an integrated vision of spatial development and that deals with housing needs and the desirable location of developments. The Plan espouses the provision of housing and business areas at 'sustainable' locations. It aims to achieve this through the implementation of the different

strategies mentioned in the title of this section. However, the Plan lacks an implementation strategy which is related to budgets and financial means. De-concentrated bundling means in practice that the SSP indicates the settlements where development can be stimulated within a certain boundary. As mentioned above the list was criticised and in practice the Flemish government decided to adapt the RSV and offer more possibilities for plot creation in almost every existing settlement. This contradicts the 'tasksetting' for settlements which is also a strategy of the RSV. It means that each settlement, depending on its category (main, regional, small city or main village), should build a specific number of dwellings during the period 1992-2007. The bigger cities were unable to realise this objective because to build in urban areas is more complex than in open rural or peri-urban locations even if land is available. This is because many actors are needed to develop an urban project, and often a 'NIMBY' reaction against concentration and densification appears. All this is a reason for a pre pragmatic policy: the creation of plots in the rural villages and smale cities.

Boundary definition (fig.11) was and r makes key strategy, although it



boundary definition work for the main and regional

Figure 11: Defining the limits of the city region. A way to protect open space and to concentrate urban development in (main) nodes. Source: **OMGEVING**

The project mode

A promising strategy for realising the 'deconcentrated bundling' concept is the 'Urban Policy' at Flemish level, which has been in place for some years (Loeckx, 2007). The policy objectives fit in with the Spatial Structure Plan and envisage the development of mixed, multifunctional and integrated urban projects, mainly on brownfield sites, abandoned railway yards (urban voids), neglected urban neighbourhoods, etc. The strategy, which is backed by sound scientific research, appears to have a major influence on urban planning policies. The strategy is also in line with Federal policy and the EU Urban programme, which have the same objectives.

A white paper (Boudry, et al, 2003) gives a conceptual framework for this urban policy, as well as for decision-making and research. It is meant 'to give a direction to a broad palette of actors and activities' (Uitermark, 2004.61). Within the scope of this policy the Flemith government has set up various groups if expects to guide thirteen cities in their effort to reacte complex urban projects. Another initiatives the administration in charge (The organisation of two series of September 1).

administration in charge the organisation of two series of master classes (September-December 2064, and a second one in spring 2008) bringing all administrations involved together with the project managers of the chosen projects in the different cities. The European Urban programme has a long tradition already and can present concrete results, for instance in the city of Antwerp (fig.12).

Another type of project deals with the dynamics and transformations in the peri-urban area where 'agriculture tends either to retreat or to intensify and diversify' on the one hand and the need for recreation in bigger cities on the other. In these areas we find the same phenomena: the transformation and reduction of agricultural activity, considerable pressure from urbanisation, resistance to environmental deterioration, consciousness of water-related issues, etc. Different sectors are developing their own policy there and claiming parts of the space, leading to extensive fragmentation and a chaotic

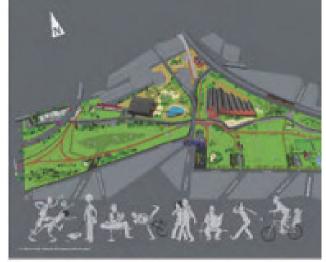












Figure 12: Antwerp, Spoor Noord. regeneration of a railway yard (Design B. Secchi, P. Vigano). Source: City of Antwerp.

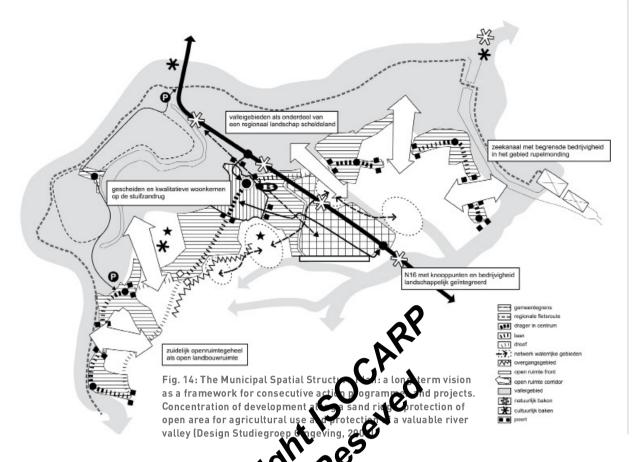
100) states that 'any project in the territory should alling into question the apparent legitimacy of the agreed limits for an open tick, by refusing to allow the landscape to become fragmented into multip cocations for action each of which is blind to the others'. A real 'neo-rural' integrated vision and comprehensive programme have not yet been developed in Flanders but there is an interesting concept (Gulinck, et al, 1997, 2001) and a limited action programme. The concept is based on the acceptance of the transformations in the open space and the fact that Flanders is now a kind of grid city with many nodes, big and small, connected with a dense road network and open spaces in between. The concept makes a distinction between three possible functions in these open spaces: a protection function (agriculture and nature), a recreational function and a limited 'habitat' function. All three can be present in various combinations and hybrid relationships within these open 'meshes'. Such a programme gives the opportunity to create 'city park landscapes' where these functions are present in an integrated way (fig. 13) (Allaert, Leinfelder, 2005).



Scheldt valley. Today, the municipality forms part of this wider area which has developed into a new type of 'city', a grid-city with peripheral characteristics. It is a municipality which perhaps represents an exception to the rule in Belgium, as planning is a tradition that goes back many years there, and is a good illustration of the desired policy based on the principles listed earlier. The policy is set out in the Municipal Spatial Structure Plan, which was compiled on the basis of the current legislation framework (fig. 14).

Since the early eighties, the municipality has had an 'unofficial' structure plan which has been regularly updated. The plan contains a spatial vision for long-term development and a related action programme. Because of the link to the municipal budget and the support from the community which has been

Figure 13: A 'City Park Landscape' near Ghent: new integrated functions for 'neo-rural' open space (Design OMGEVING, 2001)



generated through intended consultation, the various actions and projects have been turned into reality.

Over 25 years where have been few changes to the basic vision: the protection of open space and have tural structure and quality, and improvements to the quality of life of local people – i.e. the quality of housing and the creation of 'modern employment opportunities. The emphases in the successive action programmes and the way in which projects have been carried out have changed, however. The first period included, in addition to the protection of open space, the renewal of village centres (fig. 15), using available Flemish subsidies and creating estates for new 'cleaner' businesses.

The emphasis was also on the development of cultural facilities in village centres. A mixed housing stock was then created in various residential settings and with various types of social and other housing (fig.15) in different forms of subdivision. The next focus was sporting facilities, all kinds of recreation projects and the renewal of public space (fig.16, 17). Regrettably, attention has only been paid to the architectural quality of projects during the last decade. During these 25 years, the municipality has changed from being an agricultural village to an area with urban care facilities in a green setting.

Conclusions and lessons

Belgium has a complicated structure consisting of a federal level, three regions with many competencies, three communities- a Dutch, French and a small German-speaking community each with their own cultural competencies - provinces and municipalities. All three Regions are present within the Belgian Core Area which makes it very difficult to develop a coherent vision and policy for this urban region, especially as there is no discussion platform between them dealing with spatial planning. Nor must we forget the European Union, which has growing influence in different fields, even spatial planning, despite the fact that this is not a power and little impact on the field. In practice, the EU has become a key actor in the (spatial) field through its sectoral policy relating to mobility nature protection and rural development and through integrated urban, regional and those borded development programmes. Within this implex context the principle of subsidiarity a development substance. The tasks and correct evel are the real European competence. The European Spatial level are the object of a commuous and in Belgium between the different levels. In some fields tasks and competencies regulated by law. The 1996/1999 Flemish law on spatial planning, for instance, is based on the subsidiarity principle and tries to define the competencies of the three levels: region, province and municipality. In practice we can see some friction between the levels mostly due to a lack of negotiating capacity at the municipal level and a persistent 'we know best' attitude at the provincial and regional level.

An important characteristic of the law is the fact that it distinguishes between a 'policy plan' (the structure plan) expressing a vision for the future and a programme and the 'implementation plan'.



A vision attempts to offer an understanding of long-term trends – uncertain though they are – and a glimpse of future possibilities. It outlines a picture of a dynamic future, thereby creating a coherent framework for locations. The need to formulate such a vision in the structure plan has occasioned debates in many cities and municipalities. The visioning process brings the actors together, as well as giving rise to fundamental debates at other policy levels. Indeed, visioning may be the most important step in a planning process, the one which ultimately yields the most results.

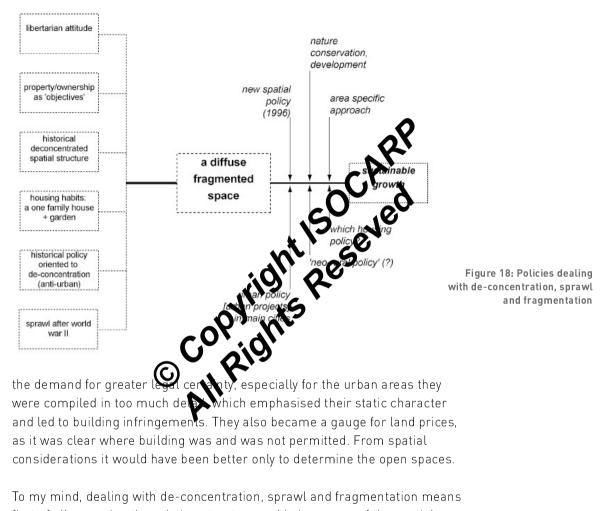
Figures 16, 17: Recreation facilities fishing, biking, eating... It is too early to assess the performance of the law and the plan at Flemish level, although certain results have been achieved. The general principles are accepted and more or less implemented; all provinces have a structure plan as well as many municipalities; cities are being stimulated to develop strategic urban projects; natural and open areas are receiving better protection through the definition of urban reas' boundaries; and a classification system better defines the role ch road in the very dense be a feasible strategy, although network. The 'city region boundaries' see the concept has been criticised. This based on the diffuse spatial structure of Flanders and the inter Another criticism is related d choice of 'city regions': at present, the 'city classificat cept and policy, with some (fundamental) mainly for the protection of open and servation of land for specific functions. nterest groups are already calling for changes or Plan; some of these calls are motivated by a desire for ter response to the need for more housing and industrial areas and more flexibility in the choice for locations, as the policy is based on concentration of development in urban areas and densification. Others however are motivated by more speculative tendencies and neo-liberal attitudes towards private initiatives and the old laissez-faire.

Figure 15: Housing renewal in the inner village - a divers housing programme (houses, apartments)

According to an expert meeting last year the principles of the RSV can be kept, although revisions of the intended spatial structure are needed to take account of new knowledge about the 'new' spatial structure and although the plans should be much more action- and development-oriented. The 'urban policy', standing for an integrated approach, is also a good model for sustainable development. In fact I suggest that a better relationship is needed between the different policies of different sectors (fig. 18) aiming at the

development of a sustainable space, a better relationship between the spatial policy, too much oriented towards the 'control' of the development instead of towards real development, and urban and rural policy. I would also plead for a more selective and strategic generic policy related to an action- and projectoriented specific policy.

The role of the general land-use plans (fig. 5), elaborated in the seventies should not be underestimated. Their main result was to put a stop to further sprawl and protect the open space, agricultural land and nature. Because of



especially for the urban areas they which emphasised their static character and led to building infringements. They also became a gauge for land prices, as it was clear where building was and was not permitted. From spatial considerations it would have been better only to determine the open spaces.

To my mind, dealing with de-concentration, sprawl and fragmentation means first of all accepting the existing structure and being aware of the spatial dynamics, for instance in open space but also concerning mobility, business and housing. It also means finding strategies to deal with these dynamics in a sustainable way: concentration but not over concentration, the creation of a variety of housing environments, the development of public transport in line with development, the protection and development of natural areas, sustainable energy production and use and landscaping as a way to structure and shape space. Last but not least, sustainable planning and development

is a relational activity, a 'trialogue', between vision and action, between long term and short term, between all kinds of people and hence a democratic activity which seeks to involve people and gain their input in order to transform space and society.

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