

who have been directly employed by companies in the industrial estates, and include very little data for subcontracted groups. The very same data that is used as a basis for getting to know the world of people who work in industrial estates can tend to overlook groups of workers such as cleaning services, ETTs (Temp or seasonal employment agencies in Spain) or auxiliary services. And, as I have already said, regardless of the volume of people they may represent, this particular group of people are vulnerable because of the mobility modes they have to use.

To be able to identify the group I call “those absent”, we need to resort to qualitative research methods. Getting to know the nature of the problem, views and concerns surrounding mobility problems generated by the lack of accessibility and the profiles of those absent, are key data that should allow us to draw up proposals to facilitate their inclusion.

Finally, it is necessary to see that newly constructed industrial estates incorporate accessibility needs into their initial stage of conception and include modes of transport that would allow for sustainable, safe and universal access.

- 1 The Pacte Industrial de la Regió Metropolitana de Barcelona is a territorial association made up of local administrations, trade-unions and businesses organisations and a wide variety of bodies related to economic development and the promotion of employment.
- 2 Survey of active industrial estates in Catalonia, 2005-06.
- 3 Institute for Regional and Metropolitan Studies of Barcelona.
- 4 This is a two-years period of professional learning, usually for 16 to 18 years old people.
- 5 Vallès Occidental association of companies, trade unions and local administrations to promote employment.
- 6 In this study the more general plans were used if the municipality did not have specific studies for their industrial areas.
- 7 “ha d'establir-ne el règim d'implantació i el finançament a càrrec de les empreses que hi operen...” (Llei de mobilitat, Disposició adicional tercera).

INSTRUMENTS FOR THE PLANNING, DESIGN AND MANAGEMENT OF NEW AREAS OF ECONOMIC ACTIVITY¹

Margarida Castañer
Antoni Ferran

Introduction

In the month of September 2005, Olot was the venue for the third Workshops on Environmental Evaluation² applied to town and country planning. The workshops were organised by the *Fundació d'Estudis Superiors d'Olot* (Olot Foundation of Higher Studies) and the *Col·legi*

d'Ambientòlegs de Catalunya (Professional Association of Environmental Scientists of Catalonia) and involved the collaboration of the *Generalitat de Catalunya's* departments of Territorial Policy and Public Works, and Environment and Housing³, as well as the *Observatori del Paisatge* (Landscape Observatory) (table 1).

The workshops focused on debating a specific aspect: the implementation of new areas of economic activity in the territory. Three key questions were approached in this respect: where do we locate them? What is installed there? And how are they installed?

1. Conceptual framework

The workshops, which were held in the context of the *new culture of territory*⁴, particularly focused, as a preliminary element of the debate, on the fact that territory should be understood as being a finite, limited and scarce resource⁵, one that is of key importance to all citizens, and which should be understood as a common asset that is not at the free disposition of the urbanisation process. They also considered, as a guiding element, the need to promote a change in the environmental policies that have been observed until now. The aim is to shift from *end of the pipe or corrective policies to preventive policies*⁶.

The new concept of sustainable development and the need for it to occur on a local and regional scale offers an excellent opportunity for the integrated incorporation of the environmental and ecological question into town and country planning⁷.

From an environmental perspective, the inclusion of environmental planning in plans and programmes⁸ is a key part of this process. The idea is to plan ahead for the initial stages of the planning process and even of policies, in order to incorporate the environmental dimension from the outset and guarantee that all of the alternatives and impacts are adequately considered. But what are the tools and instruments available for the planning, design and management of areas of economic activity on the basis of this new conceptual framework?

2. Territorial planning

A primary element for reflection is that referring to the selection of the location for these areas. The choice is a key decision which should consider environmental and landscape criteria as variables that should be present in the decision making process.

But how should the choice of location be dealt with? Does every municipality have to have its own *industrial estate*⁹? There are several reasons why supramunicipal implementations are often necessary. This justification is included, synthetically, in the first conclusion to be drawn from the workshops: “The practice of locating

an area of economic activity in every municipality has led to serious problems of an environmental and territorial nature. Among other effects, we should mention: the indiscriminate use of land, the difficulty of supplying them with water, power, new technologies... Moreover, dispersion generates problems in terms of mobility, both of people and merchandise and many of them are not very competitive”.

Without large-scale planning and coordination, each municipality would have to construct its own estate, becoming obsessed with persuading activities to locate in its municipal district, pursuing the dangerous and imprecise vision of linking such location with richness and employment. It is as if those municipalities that do not manage to establish their own industrial estate would have to be indefectibly condemned to being marginalised in the general process of national growth.

The development model, in this context, must not lack a global territorial vision, either from the physical (accessibility, mobility of people, suitability of the type of soil, orography, environmental impact) or the strategic (exploiting the potentialities of each territory, specialising uses to obtain the maximum synergies, etc.) point of view. This option makes it possible to more efficiently deal, from an environmental perspective, with other aspects such as mobility, public transport access¹⁰, quality supply of water and power, etc, while preventing these areas from being dispersed too much around the territory in order to guarantee that what is already a scarce enough resource is used more functionally and rationally¹¹.

Pluri-municipal industrial estates may be a solution in terms of the rationalisation and optimisation of the processes of territorial occupation, thus leading to a tendency to concentrate rather than disperse. This scenario obviously presents major problems in terms of town and country planning. The beneficial consequences derived from it (table 2) would be sufficient compensation for the major difficulties that would need to be overcome, and which cannot be denied, and the proposal signifies a change of panorama in terms of the urban planning of this country¹².

Territorial planning must assume a highly relevant role in this aspect, both in terms of the promotion and the establishment of these new locations in the territory, and of considering the criteria of functionality, rationality and efficiency. In this sense, the criteria for the development of the *Programa de Planejament Territorial* (Territorial Planning Programme) states:

“Territorial plans (...) must be restrictive in the implantation of industrial estates and business parks that are formally autonomous and separate from urban bodies. It would be useful for these implantations to be limited to those that

are of strategic territorial interest and are big enough to justify their development as a singular or autonomous network with a public transport service"¹³.

So, the implementation of areas of economic activity on a supramunicipal scale cannot happen without considering the sensitivity of municipal authorities¹⁴. In awareness of this, debates of the issue have arisen in different forums. Clear examples of these, among others, are the recent workshops held in Vilafranca del Penedès, promoted by the Alt Penedès County Council, and the debates that have arisen in the county of La Selva, also promoted by the County Council.

In Vilafranca del Penedès it was highlighted that "For several years different voices within the county, and outside of it, have debated the need to find forms of territorial cooperation and compensation that can make the protection and conservation of the Penedès landscape compatible with local councils' needs to find mechanisms and strategies that can help them to promote the growth of their municipalities and provide a service to their citizens".

And in Santa Coloma de Farners it was said that "Municipalities must satisfy their citizens' needs. In this sense, there is an increasing need to find sites for waste disposal, municipal pounds, warehouses, libraries, sports centres, etc. All of this involves the acquisition of land, which has to either be purchased or acquired through the relevant transfer. It is the local administrations' lack of economic resources that has led to the existence of such a high offer of industrial land".

Consequently, there is a need for the local authorities that plan and manage new areas of economic activity of a supramunicipal nature to decide how they will be able to compensate for the advantages and disadvantages of the implantation of new areas of economic activity in consideration of all of the municipalities involved as a whole.

In this sense, the Olot workshops concluded (table 3) that "In order to develop this new strategy for supramunicipal areas of economic activity there is a need to find the right formulas and legal tools to viably distribute the advantages and disadvantages that are generated in relation to the different municipalities implied". This aspect will be commented upon in greater detail further on, when we discuss the management of these spaces.

3. Design

Another element for reflection is what elements should be installed and how they should be installed (table 4). Evidently, this involves a change in the scale of analysis (Plan Parcial or 'Zoning

Plan'). This is the moment when the incorporation of environmental and landscape criteria can determine the final result and, especially, affect the perception that citizens might have of these new areas¹⁵.

At this advanced stage of the decision making process, it is important to make a new effort to try to find what aspects require or could require more detailed work in order to achieve the maximum level of integration of environmental and landscape criteria in the development of the zoning plan. This is not a matter of theoretical considerations or of defining the standard criteria and recommendations in a generic fashion, but rather a matter of looking in finer detail at the location and identifying the aspects of greatest interest and those that could be the most vulnerable. Moreover, there is a need to define the actions that could be effective and efficient in the short term through application of the principle of precaution and prevention that was mentioned earlier.

In this context, the first question to be considered is that referring to the area and content of the obligatory environmental study. Current legislation specifies that this must contain sections that offer a description, an analysis and a justification of the plan. It must also include the specific environmental recommendations and conditioners that will need to be considered in order to neutralise or minimise any impact.

Recently, the *Direcció General d'Arquitectura i Paisatge* (General Management of Architecture and Landscapes), associated to the Generalitat's Department of Territorial Policy and Public Works, drew up a draft regulation bill that develops Law 8/2005, of June 8, for the protection, management and planning of the landscape¹⁶. Chapter II of said project covers the regulation of the landscape integration and impact study and the landscape integration and impact report as innovative instruments in the legislature of Catalan town and country planning. The draft regulation bill itself determines that a landscape integration and impact study will be required, among other situations, when any law, disposition or town and country planning in general establishes such a requirement.

In accordance with the aforementioned project, the study must contain the following:

- a) Description of the state of the landscape: main components, landscape values, visibility and fragility of the landscape.
- b) Characteristics of the project: site and insertion, documents that define the project: elevation, sections, floors, volumes, materials and other relevant aspects.

- c) Criteria and measures of integration: potential impacts, analysis of alternatives, justification of the adopted solution and description of the measures adopted to correct the impacts.

The study must be accompanied by the graphic documents required to visualise the impacts and the proposals for integrating the project in the landscape, as well as information related to the state of the plans in which the action is to be included. Meanwhile, the main objective of the landscape impact and integration report is to evaluate the suitability and sufficiency of the criteria or measures adopted to integrate the required actions, uses, works and activities in the landscape. The issue of this report is the perceptive duty of the *Direcció General d'Arquitectura i Paisatge*, among other requirements, when so determined by territorial zoning plans and territorial directive plans, as well as all other possible situations established by territorial or planning legislation.

Environmental conditioners are covered by legislative decree 1/2005, of July 26, which passes the redrafted text of the *Llei d'Urbanisme de Catalunya* (Urban Planning Law of Catalonia) and establishes, among other matters, what the content of an environmental report should be. Law 9/2006, of April 28 was passed more recently on the evaluation of the effects of certain plans and programmes concerning the environment. In fact, this law provided a response to the pending transposition by central government of Directive 2001/42/CE of the European Parliament and of the Council of June 2001 concerning the evaluation of the effects of given plans and programs on the environment, which establishes guidelines on the basis of which a sustainability report should be produced, in terms of its content and the situations in which one should be made¹⁷.

It should be considered that any proposal for developing a new area of economic activity should be developed on land that has already been qualified as industrial for the purposes of said plans. In relation to the set of variables that may be susceptible to study (such as land occupation, the water cycle, air quality, acoustic, lighting and radio-electric conditions, waste and material management, the conservation of biodiversity and natural heritage and landscape quality), there is a need to identify which are likely to cause the greatest impact and which ones are likely to be affected. Any activities that could be developed at the site need to be defined when regulating the plan.

4. Public promotion of a pluri-municipal site: The new challenge of inter-administrative collaboration

Given the changing scale of urban planning operations, both in physical and strategic

terms, the traditional methodologies for urban development based on the confluence of the actions and interests of the binomial of the town council and the promoter of the land, which until now has enabled municipal requirements and the interests of investors to converge, now appears to have its shortcomings. It now seems that unplanned public and private initiatives find it difficult to develop large-scale actions due to the complexities derived from this new scenario, which affects the shared territory or interests of several municipalities.

The promotion of a site for economic activity on a pluri-municipal scale requires agreement between a group of municipalities in a certain territorial region where a possible location has been identified. These municipalities must agree to act in a coordinated fashion, showing mutual concern and the will to collaborate in achieving these objectives (with or without the help of other administrations or the private sector). The importance of this *new way of working* was explicitly described in the workshop's conclusions, which said of the issue that it is "necessary for municipalities to integrate the *new territorial culture* in their day-to-day activities and to see the advantages they can benefit from by initiating a new strategy on a supra-municipal scale when it comes to defining the sites for new areas of economic activity in Catalonia. A new era has begun in which pacts and agreements between neighbouring municipalities will need to be made in order to be able to undertake common projects"¹⁸.

The objectives that this group of municipalities and collaborating public or private agents will have to share will be specified over time as they observe a series of necessary stages.

- 1) Study the viability of the project.
- 2) Acquire the necessary land.
- 3) Prepare and manage the new urban planning project.
- 4) Urbanise the new site.
- 5) Commercialise and promote the plots of land resulting from the urbanisation process.
- 6) Manage the operations of the site over time.

The principles of approval, collaboration and solidarity must necessarily govern the relations between municipalities. The initiative must be understood to be a joint, decided and sustained management project that supports the development of the new site. This joint project will be specified by a series of major transactions, decisions and investments whose objective is to plan, construct and maintain a business park.

The distribution of advantages and disadvantages between the municipalities and other agents that are directly affected by the new industrial estate must form the basis for relations between them in accordance with the principle of solidarity. All of the participating agents must obtain benefits that correspond to their level of participation in the project, but must also bear any corresponding burdens. This logically implies that in carrying out the project, all effort and management tasks as well as investments should be fairly distributed.

The redistribution of income derived from the implantation of the business park should occur on the basis of two concepts: the sale or lease of sites must be adjudicated to each agent in accordance with the investments they contributed and their participation in active administration, as should be fiscal benefits, as established by agreement (project licence for new buildings, property tax on buildings constructed, business taxes).

Current regulations foresee two formulas for agreed activity between municipalities, both of which involve voluntary association: *mancomunitats* (the joint management of different communities) and consortiums with other administrations (table 5). In order to specify terms, there would be a need to formalise an urban planning agreement involving all of the administrations implied in order to establish the legal framework that will have to be constituted, establishing the essential elements of its statutes as part of the process.

Both situations are primarily governed by their statutes. However, in the case that concerns us, the promotion of industrial estates by local administrations, the consortium makes it possible for other public or private agents to be integrated; agents that are specialised in these kind of projects, and which have the technical and financial capacity to ensure they are carried out successfully¹⁹.

In short, the need to find mechanisms for territorial compensation and cooperation is the challenge that needs to be solved in order to proceed with this new strategy, one which must be able to tackle the new territorial and environmental challenges in our country today. Consensus regarding the need to find new mechanisms for territorial compensation and cooperation is unanimous and proposals have been put forward in several different forums.

There are plenty of formulas and ideas regarding the issue. There are French²⁰, Italian²¹, Basque²² and Catalan²³ experiences. But in fact, as Fernando Nebreda, managing director of Oarsoaldea told us at the end of his talk in Olot, "in any case, the other interpretation we could draw from this experience is that instruments for collaboration on a county level do exist, but they are incomplete or

imperfect. Current legislation does provide us with mechanisms. But putting these into practice requires political desire. And for there to be political desire, we need to deal with a preliminary process of reflection, to convince ourselves that it could be the right instrument for participating not only in the costs, but also in the benefits of a joint promotion of industrial land".

- 1 In writing this article we based our work on the reports presented at the third Workshops on Environmental Evaluation applied to town and country planning. We would like to thank the different speakers for the effort they put into preparing the materials used in the workshops and especially the contributions made by Albert Cortina, Ramon Forcada, Fernando Nebreda and Joan López.
- 2 Previous editions: See the minutes of the I Workshops on the Evaluation of the Environmental Impact of Town and Country Planning, which discussed the technical and political challenges of applying Directive 2001/42/CE. The minutes of the "II Workshops on the Introduction of Strategic Environmental Evaluation in Town and Country Planning: challenges and experiences" are also available. FES. Olot, 2000 and 2002. Càtedra de Geografia i Pensament Territorial. Universitat de Girona.
- 3 For more information see www.fes.org
- 4 See the Declaració de Figueres (Figueres, 2003), Declaració de Tortosa (Tortosa, 2005) and the *Manifesto por una nueva cultura del territorio* (2006); Madrid, Colegio de Geógrafos.
- 5 The European Soil Charter published by the Council of Europe in 1972 said "Soil is a limited resource that is easily destroyed". Later, in 1992, in the Curitiba Declaration, which formed part of the Rio de Janeiro summit and was possibly the first constitutional attempt at specifying the requirements for sustainability on a local scale and in the territorial sphere, says we should "waste the minimum and economize the maximum".
- 6 Antoni Ferran i Mèlich; *La consideració dels aspectes ambientals i paisatgístics en el disseny dels nous polígons*.
- 7 World Charter for Nature. United Nations Resolution of October 28, 1982: The United Nations General Assembly passed the charter for nature which proclaimed such principles as: "In the planning and implementation of social and economic development activities, due account shall be taken of the fact that the conservation of nature is an integral part of those activities".
- 8 Directive 2001/42/CE of the European Parliament and the Council of June 27, 2001, concerning the evaluation of the effects of given plans and programs on the environment, transposed to the Spanish legal framework by Law 9/2006 of April 28 on the evaluation of the effects of certain plans and programs on the environment.
- 9 We speak of an area of economic activity although the term *industrial estate* is often used to refer to the same, which does lead to a certain conceptual and terminological confusion.
- 10 Joan López: "The most outstanding fact is that industrial estates spread all over the territory lead, through their very nature, to mobility that is difficult to satisfy with collective means of transport", Institut d'Estudis Regionals i Metropolitans.
- 11 See footnote number 6.
- 12 Ramon Forcada i Pons (2005); *Actuacions industrials i d'activitat econòmica d'abast plurimunicipal. Projectes de l'Incasòl*.
- 13 Departament de Política Territorial i Obres

Públiques; *Criteris per al desenvolupament del Programa de Planejament Territorial*.

- 14 In the opinion of municipal representatives, the development of new areas of economic activity (industrial, commercial and services) represents a possibility for local financing. The promotion of an industrial estate by private initiative initially involves a set of benefits for local bodies: Short and medium terms income in the form of project licences, long term income in the form of IAE (Impuesto sobre Actividades Económicas - Business Tax) (medium and large companies), the use of the space by municipal services through transfer of the corresponding percentage of land, generation of local employment. However, if the planned occupation of land does not lead to the companies actually being implanted, all that is generated is land in reserve that is subject to speculation in relation to costs, without generating any benefits for the municipality, other than the availability of land for locating municipal services. (Minutes of the meeting of La Selva CSPS [Supramunicipal Council of Sustainable Planning] of June 29, 2006.)
- 15 Antoni Ferran i Mèlich; *La consideració dels aspectes ambientals i paisatgístics en el disseny dels nous polígons*.
- 16 Edict of May 9, 2006 that made public the draft decree to develop Law 8/2005, of June 8, on the protection, management and planning of the landscape.
- 17 For more information see the Generalitat de Catalunya DMAH website.
- 18 Fernando Nebreda Díaz de Espada, managing director of Orasoaidea, spoke along similar lines when opening his talk by saying "I am going to present the most relevant issues of an experience that is based on the existence of the shared political desire of several municipalities to join together and concentrate their strengths and resources in order to promote an industrial site. (...) this desire is more important than a clear legal structure ..."
- 19 Ramon Forcada i Pons (2005); *Actuacions industrials i d'activitat econòmica d'abast plurimunicipal. Projectes de l'Incasòl*.
- 20 For more information see the web.
- 21 Graziella Guaragno; *Strategie territoriali per la pianificazione sostenibile delle aree produttive: le esperienze della Provincia di Bologna*.
- 22 With respect to the way that costs and benefits can be distributed, in presenting the experiences of the county of Orasoaidea (Euskadi), its managing director, Fernando Nebreda, said: "We have seen the fundamental elements of the experience that is taking place in this county of Guipuzcoa. The agreement was signed by the mayors of the municipalities of Errearteria, Lezo, Oiartzun and Pasaia and the president of the Development Agency on February 11, 1998, and it is currently fully operational, and is receiving 50% of the annual IAE of the operations that have been performed. Some might ask whether the reforms to the IAE have affected this agreement. Well, the way we understand it (...) there is no reason why it should have any effect because it is purely a calculation criterion. Even if the IAE were to disappear, the desires expressed in the agreement would require another calculation criterion to be found that would lead to roughly similar amounts".
- 23 Ramon Forcada: "In reference to the management and maintenance of taxation, there would be a need for the statutes to establish that both the costs derived from the maintenance of the industrial estate once it is up and running (provision of public services: electricity, drainage, water, etc.) and income (rates, property tax, business tax, land value added tax, etc.) will be distributed among the members in the right proportions.

The councils may delegate authority to the 'mancomunitat' or consortium in relation to rates and special contributions, as well as fixing public prices. But they cannot be granted the authority to establish taxes, which should be the authority of the relevant councils. Either by agreement or by statute it may be established that the council can transfer to the association a portion of the income obtained by the industrial estate through application of taxes. This management by the 'mancomunitat' or consortium may not obstruct the constitution of an administrative consorciational association", Incasòl.

AREAS OF ECONOMIC ACTIVITY IN TERRITORIAL PLANNING

Juli Esteban i Noguera

1. Principles

Spaces where intensive economic activities take place, along with those used for housing and infrastructures, to different degrees constitute the most perceptible forms of occupied land and are those that provide it with a structural function. Other spaces, though also hosting economic activities, may - due to their extensive nature - play the role within the territory of being open spaces that form part of the necessary balance between extension and intensiveness, soft and hard, permeable and paved, rural and urban, etc., which does not necessarily have to be quantitative, but structural.

Territorial planning seeks to provide guidelines for rationality and efficiency among the three above-mentioned components of land colonisation: agrarian areas, infrastructures and settlements. To do this and in order to maintain coherent attitudes in different territories and circumstances, the *Generalitat de Catalunya's Programa de Planejament Territorial* (Territorial Planning Programme) has proposed fifteen criteria expressing the logic that makes sense of contemporary territorial planning¹.

Although the criteria should be understood as a whole and many of them are highly transversal in nature, we can highlight here those that are of the greatest relevance to the subject of this article.

Criterion 8. To favour the coexistence of activities and housing in urban areas and rationalise the implantation of industrial and tertiary estates.

Criterion 10. To ensure the compact and continuous nature of growth.

Criterion 11. To reinforce the nodal structure of the territory through urban growth.

Criterion 12. To make mobility a right and not an obligation.

The objective of mixed urban areas in which activities and housing coexist in keeping with the reinvention of the dense and varied Mediterranean city has very much been assumed nowadays, at least in ideological terms. I do not believe that it has been assumed quite so much in terms of specific projects. Whatever the case, the spatial interrelationship between housing and activities is an objective to be defended at least insofar as this coexistence or proximity should not have more negative than positive effects for one use or the other.

It could be said that in this historic period for cities, the factors that benefit the coexistence of activities and housing are the more dominant. The increase in the number of jobs in tertiary activities (trade and services) in comparison with industrial and some primary jobs that may once have been of importance in certain areas (such as mining and the energy sector), has led to a high proportion of employment that can be located in a fully urban context. If we also consider those small-scale industrial activities that continue to be located in the urban environment, we could safely say that urban areas that contain housing and compatible uses, and that have been developed continuously through growth from the historic core, are the spaces offering the largest amount of employment and are therefore the main areas of economic activity.

However, it is also true that there are factors that tend to lead to specific areas of economic activity being differentiated and located in separate parts of the general, mixed-use urban fabric. These factors are derived from the incompatibility, either objective or subjective, of certain activities and their containers with urban fabrics in which housing is the dominant use. There is, however, a need to determine and analyse these factors.

Incompatibility due to the disturbance, danger or unhealthiness caused by activities is sufficient reason to promote specialised areas for such activities. Another important factor is the size of the spaces and buildings that some of these require. It is certainly difficult to properly fit elements of anything greater than two hectares in an urban street network. Apart from geometric problems, a large industrial or logistic site located in an urban area will generate a very large void in the immediate surroundings where there will be very little urban intensity. There may also be difficulties, although the effects on the surroundings could be very different, if the site is destined for commercial, hotel, leisure or public-service purposes. In these cases, urban intensification could occur, although in some cases disturbances to housing could be generated as a result of the intensification itself.

We should add that in recent decades there has been a progressive increase in