

# The impact of new technologies on regional and urban development

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Analysis of the influence of the new intercity transport infrastructures and their specific impact on the urban nuclei within the metropolitan area of Madrid and, more precisely, as regards the city of Segovia (Spain)

## URBAN INTERVENTION IN A GLOBALISED WORLD

Within the context of globalisation, at the present time suitable conditions are being created to facilitate changes in all aspects of our lives.

There have been changes in communication, in economy, etc. and these have been or will be transferred to the social and urban structure, creating new opportunities which will arise and must be adopted so that they can be used to our advantage.

Both the Public Administration and private enterprise find it extremely difficult to take decisions in this regard.

This leads us to establish an integral view of urban development, in which leadership, and the will and consensus of the citizens are fundamental to fixing objectives for development both collectively and individually. Concepts such as governability, competitiveness, shared financing must be assimilated with others such as sustainability, risk management, markets, price, short-term aims, etc. which, together, contribute to the creation of conditions which improve the quality of life.

On the one hand, there is external action. As the standardisation of the cultural frontiers leads to a loss of individuality at all levels due to the use of criteria which are perhaps excessively close to the interests of the market and communication, this area is a negative aspect of the uniform development.

On the other hand, there is the internal reaction as this global uniformity can be the reason for local differentiation, understood as the encouragement of differentiating positive aspects.

Most European cities were conceived in the past, and have suffered from the new possibilities rather than benefit from them. Change could mean updating many aspects which could then become an improvement in the quality of life.

Creative urban policies are of greater importance. At management level, these entail an increase in the importance of companies and local governments which have the capacity to increase competitiveness, infrastructure, technology, etc.

It is necessary to reconsider the techniques concerning the evaluation of investment projects, which fundamentally affect items such as: costs and social benefits, not only taking profit into account but also welfare and profitability.

Long term decisions may negatively affect some current interests, thus the tendency to seek short-term results prevails.

This requires a change of mentality since growth, traditionally, has come about based on natural, geographical and other “inherited” resources, and this tends to promote only part of the city, and the consequence is the weakening of public centres.

The threat of being absorbed by development must be turned into an opportunity!

## THE METROPOLITAN AREA OF MADRID

In the last few years, the urban centre of Madrid has undergone serious communication problems and the a decrease in quality of life and the periphery of the city is where new possibilities and better conditions are being created for expansion with regard to several population nuclei.

Currently, although the centre – periphery split no longer exists as this was understood before, as the urban centres also made up of periphery urban nuclei with a complex system of economic, political, cultural and communication relationships, in this specific case, there is a substantial difference as the periphery has a countryside environment which is much more developed than the centre and is also relatively near to the centre at certain points.

The spatial distribution of these nuclei are at a greater level of development than the population nuclei which make them up, and are influenced moreover by the new technologies. This is fundamentally due to the public transport which has been relatively well conceived and has contributed little by little to joining up the city centre and the periphery.

The increased population and the success of the periphery developments have led to the expansion of the metropolitan area of Madrid, which has absorbed important towns within its environment together with historical cities such as Toledo and Segovia, both of which are world heritage and close to Madrid, and give rise to problems which differ from those of others types of nuclei. Therefore, due to the characteristics of these developments and the way they have been managed locally and the fact that they are subject to different regional governments, this entails substantial difficulties as regards the spatial intersections and the processing involved.

Our focus is the definition of work in two directions, as this work has been absorbed by Madrid, however, this may be taken advantage of by positive action, especially in recent years with the development of new technologies.

## THE CASE OF THE CITY OF SEGOVIA

The case of the city of Segovia with a population of approximately 50,000 inhabitants, clearly illustrates these problems both as regards the intervention of public administrations and the role of public enterprise in urban development.

Until now there has been tremendous passivity in the public sector as regards the global aspect. The city has been functioning like a "theme park" at the service of Madrid, particularly due to the wealth of its historical heritage.

However, thanks to new infrastructures and technologies which are finally being created in the city, the opportunity may be there. The new motorway and the new high-speed train will reduce the travelling time to Madrid, 45 and 20 minutes respectively, and will open up a city which had concentrated on its historical environment to new alternatives for development.

Fortunately, there are signs of change thanks to the new impulse given by the local corporation and it seems that the existing opportunities may be taken advantage of and alternatives offering a better quality of life than that which exists in the city centre may be established. Current passive growth may be alleviated by managing planned development with an adequate analysis of the environment, which will save Segovia from becoming a satellite city during the week and will consolidate the idea of a theme /heritage park on weekends.

As regards the analysis of the external influences such as the proximity to Madrid and the possibility of receiving tourists, the following should be taken into account:

- Positive Consequences are the creation of wealth and influence and an increase in the quality of human resources due to education and training offered by the city. There is also the possibility of the generation of more work due to growth.
- Negative consequences, as regards a decrease in quality of life, which includes the difficulties of the rush hours and the busy days, and the consequences deriving from the rise in prices of goods, such as housing, and services which are affected by the former.

In addition, there is the analysis of possibilities:

- Positive: a city which forms part of the world heritage, a small sized nucleus with the possibility to expand, nearby countryside and a quality environment, etc.
- Negative: lack of industry, commerce, employment, education, etc. Entrepreneurial initiatives are lacking and there is a certain amount of exclusion as regards the provincial nuclei and the autonomous communities they belong to.

Strategic planning would have to be carried out while taking into account the role of the public sector with regard to the agents involved and their role in the real estate risk deriving from the uncertainty of the administration and production of the land which currently entails a great deal of risk.

This affects the rise in house prices which is taking place at the present time, and makes these more competitive as regards the price rises occurring in the periphery closer to Madrid.

The successive planning which has been carried out since 1989 and whose approval has taken until the present time is now beginning to be implemented.

The impact on the city will be substantial and will generate a debate on the economic and social conditions with a view to facilitating new possibilities as regards urban development.

A study is being made of the growth resulting from the development of four partial plans, with an approximate 8,000 houses (in a population of 50,000), involving a surface area of over two million square metres.

We will analyse the last of these approved in 2002 which is contained in the so-called "Sector Bonal", as this fits in with what has been stated above, as I understand it.

This has come about through private initiative and with the consensus of the administration and the team which drafted the new general plan.

This approach is also included in the "Modification to the General Plan for the Urban Regulation of Segovia", a plan which is in the process of being approved. Thus, the possibilities of acting together have been improved by this situation.

This includes 1,200,000 m<sup>2</sup> and 2,500 houses which have also been included in this plan together with special characteristics as this connects the city with the high speed train and the new motorway. This is being carried out in an area which is specially protected due to the countryside environment.

The low density and the fact that it provides commercial and administrative support to this development which is somewhat dispersed are significant aspects.

It could be an example of sustainable development because of the density, adaptation to and respect for the environment, as well as the coordination and consolidation of an area which at present is extremely split up.

There are also peculiarities which add interest to this development as it involves a number of elements which enrich the proposal as it requires the unification of a number of different aspects.

- Global conditions deriving from the directives on national and regional development and the development of the metropolitan area of Madrid, the ring roads, the high-speed train, the motorway, commercial equipment, services, etc.).
- Local conditioners which are very strong and difficult to deal with, but enrich the proposal as regards the landscape, rivers, traditional sheep tracks, Roman Aqueduct, etc.).

As there are no highly developed industries in the city of Segovia (nor are there conditions for such industry), new options must be created for urban development as well as for new sources of employment.

This point must be specified imaginatively, while evaluating the need to create alternatives and free ourselves from the current dependence on Madrid.

## CONCLUSIONS

Although it is not easy to choose the most appropriate developments, the present time may be crucial when planning the future of our cities. Action must be taken in the light of the general approach while taking the following questions into account:

>Mixed strategy, combining the short-term and the long-term. Although the unifying objective would be long-term, it would be advisable to include partial /additional objectives which are welcome and involve the people in the urban process (participation, civic culture and social consensus).

>Concentration. Initiative and competitiveness as regards the management of the options to be developed in the urban environment. This affects the concentration and favours cohesion and governability creating the proper dialectic between centrality and mobility.

>Coordination. An integrated system of infrastructures with regional transport which is a complement and continuation of the local model (public transport and private parking).

>Quality of Life. Re-thinking some concepts by relating the approaches to the environment and those of the built –up areas. The influence of *technical progress* at the service of quality of life. (quality growth).

>Risk Management. Several approaches in relation to the way of acting of the administration, by reaching a consensus on urban development, sharing out posts and benefits and involving the population in the illusion of a city project. This will affect the production and use of land, and lead to competitive results in relation to other urban areas.

>Flexibility and approaches. The near future and the adaptation of the possibilities provided by the new technologies and the progress which can fit in with a new concept of city. This is necessary if the possibilities arising from this new development are not to be wasted.

To end, perhaps we should question some concepts such as price, economic yield, maintenance, etc.; besides changing some approaches deriving from the financial problems due to the rapid growth and the outsourcing of services which would make it necessary to reconsider the techniques for the evaluation of investment projects in accordance with the criteria of social benefit.

Therefore, creativity in the assumption of new social approaches and criteria which favour the standard of living of the community and the participation of citizens could lead to these aspects finally being materialised and encourage the community to get involved with these new projects.