

TOWARD A COMPLETE NETWORK OF EXPRESS- WAYS AND DUAL CARRIAGE-WAYS. THE NEW STRATEGIC PLAN OF INFRASTRUCTURES AND TRANSPORTS IN SPAIN

José M^a. Serrano Martínez

Department of Geography. University of Murcia
jmserran@um.es

The transports allow the increase of displacements, shortening the necessary time to save the distances and to improve accessibility. The transport like system considers in a global and integrated way the diverse aspects included in its operation. Improving the accessibility has become a preferable object of the management of the territory. It should not make us forget that their essence resides in measuring the complementarity relationships among the different uses of the human action inside the territory.

Always the localization of any activity on the territory bears the factor it distances. The localization decisions try to reduce the economic costs in the productive processes. All the sectors and subsectors implicated in the market ratios move for that interest.

It proves to be easy to verify that the human activities spread to concentrate on looking for complementary effects. In turn, such an operation outline bears the rupture of the homogeneity, in the measure that these concentration focuses become upon the basic centers of articulation of the networks. In developed societies, the group of the activities generated directly by transport reaches a substantial economic significance. They are also important the indirect elements that they propitiate and favor. A key point to be made is that the role played by transport in terms of economic growth becomes the basis for later development. It is accepted that without some modern infrastructures of transport it is not feasible to begin to impel a growth of economic activities; but it also doesn't mean that the improvement of infrastructures and systems of transport are sufficient cause for their immediate impulse.

Here we focuses on what the road transports mean, and specifically the network of infrastructures in the way that they allow a fast traffic with a great capacity for displacements.

In Spain, until now, the existent network of such roads responds to a basically «radial» layout. Its center is Madrid, and the ways in which its roads are linked split the different cities located in the periphery leave. This is due to a complex series of reasons. The Strategic Plan of Infrastructures and Transports (which will be abbreviated from this point in the Spanish acronym «PEIT») presented in 2004, that has a realization forecast of between 2005-2020. One of their central intentions consists on analyzing the possible advantages and the inconveniences of that outline of a «radial» organization by another that seeks to enlarge and be organized in the shape of a complete network, that is denser and «mallada» (intersecting, and more complete).

The decisions made in territorial politics's must always choose between several options; on one hand, economic investments almost always have scarce resources; therefore it is necessary, to establish priorities.

In Spain at the end of 2006 the sum of roads including that of express-ways and dual carriages-ways (in the spanish acronym, VRGC), is quite satisfactory when compared to with that of other surrounding European countries of a similar population size to ours. They have been built rapidly during the last few years. Increasing from less than 2.000 km. in 1980 to more than 12.000 in 2006. Their organization, like it has been said, is basically «radial». These roads constitute the basic network where by they circulate the greater number of the vehicles possible. Also it should be recognised that it presents the greater importance of transport by road in general, as 90% of the whole domestic traffic is of passengers and 78% of domestic traffic is of goods. The improvement of the infrastructures has impelled the increase of its traffic. At the same time, the number of vehicles has grown with force. As a result, investments are being put into other forms of transport, for exemple: in railroads, to relieve the pressure on the roads.

The different central governments and, those of the autonomous regions, have proposed with force and continuity to maintain similar politics of new works of that nature. The improvement has been remarkable and with good results.

Now, through the new planning program, a substantial change has taken place in the investments. One refers to the biggest protagonism given to the railroad. Their investments pass from 25,23% to 43,7% of the total dedicated to the infrastructures of transport, after several years in which the highways were the high-priority objective. The aim now is to build a network of high-speed trains join the main cities of Spain as well as connecting to other countries.

As for the highways, the desire is of ordering the new realizations of VRGC, not only by increasing its quantity, but also by introducing significant strategic changes. Thereby: enlarging the main, more saturated stretches and building a complementary network of new distances to complete their basic «radial» disposition, perfecting the network with new alternatives, etc. In that way the accumulation of traffic will be avoided in some roads, and the accessibility will be facilitated to numerous parts of the territory, which up to now were lacking these services.

In order to complete the wide existent network, all the big Spanish cities will be connected. It is also sought to adapt and improve those section that support bigger circulation density and the sourrinding areas and ring roads of the big urban and metropolitan areas. In total it is sought to build more than 5.000 new kilometers of these VRGC. The modification of the

current space morphology will be made favoring those outlying and traverse itineraries, in front of the mentioned predominant «radial» disposition. The objective to being that 90% of the whole Spanish population resides to within less than 30 km. of a section of these roads. Equally it is an essential goal to improve the transborder permeability with the European Union to nearby countries, such as with Portugal and France.

Over the coming years, two main problems come in to question among others. Some of territorial order, and others of an economic and financial nature.

The disposition of the Spanish urban network and the performance of their urban system do not fit well with the new planning and design. The current «radial» organization of the infrastructure roads is adjusted better to the functioning of the national urban system. It will be very difficult to transform the morphology of the Spanish urban network over the centuries. Although the dimensions and features of the national territory favor the changes. Numerous stretches foreseen can have a certain strategic interest toward the future; but they are not high-priority from an operative perspective, neither of bigger use and profitability, at present.

In another order of things, the new constructions of the transports framework specify elevated economic investments. Up to now, the help coming from the budgets of the European Union, have provided an important part of the investments. But, everything points to the fact that these sections will see reductions during the coming years. The new investments will have to come for the most part from Spanish, state or regional public budgets. This economic difficulty will suppose a shortage and a necessary priority of the new investments. As a result, the question is: to what extent can the reduced existent economic funds be devoted toward the putting into service of large scale and long term constructions?, or will they be devoted to other of a more intense use, in terms of traffic, although it supposes the reinforcement of the «radial» layout that already exists?. These are difficult questions to answer.

The economic and budgetary limitations always constitute a fundamental question. Up to now the contribution of the public has been clearly predominant. If that cannot continue in this way, it will be necessary, more and more, to go granting bigger participation to the private investments. However, they will only invest their capitals in those sectors that promise bigger yields thanks to their more intensive use. On the contrary, they will have less desire in taking part in other sections of strategic interest, despite the smaller potential of growth.

The areas of highest importance in terms of their improvement are:

— *Transborder connection.*

— The running national corridors and stretches of general interest, such as:

- Cantabrian axis
- Via of the «Plata»
- Traverse axis of Aragon
- Pentagon of central ring road around Madrid

It appears difficult to maintain the existent «radial» plot, along with the introduction of other changes and transformations. Although the latest have a certain strategic interest. Therefore:

- The «radial» pattern is not enough as it neither covers, in a total and satisfactory way, an agile structuring of the national urban system. Consequently, to go acting toward a complete network is guessed right, in principle.
- Now then, the convenience of the complete network resides more in a desire to reach better connectivity levels than as an alternative to the «radialidad». I estimate that except in some sections, the increment of new distances inside that proposed complete network, won't reduce the enormous load of Daily Half Intensity significantly (spanish acronym «IMD») of vehicles that support most of the «radial» roads.

It is deduced that it is not simple to make decisions toward other alternatives. All this does not invalidate the desires of changes introduced by the new PEIT. But, it will be difficult to complete them.

At the same time, it must not be forgotten that this way of transport, the highway, and mainly the use of the private vehicle, after almost half century of uninterrupted popularity, until reaching the current prevalence, is consequence of its own success. It seems very difficult to limit their influence. Now, given its enormous significance, it is completely necessary to confront it, considering all its enormous complexity. Their massive land usage gives rise to the tremendous need for transport, which in turn reinforces the dependence on the roads. Inside the combined planning of the metropolitan environments transport constitutes one of their biggest challenges. To attempt realistic and effective solutions to it all is a great challenge.