## THE ROAD SYSTEM OF CATALONIA: CORRIDOR y. NATIONAL NETWORK Pág. 26 (Vol 1)

Spain is a country with no roads. Catalonia, which is so closely bound to the central Administration of the State, shares in this lack with a vengeance. Economic historiography pro-vides abundant documents of the relationship between transports and the extension-articulation of markets. The medieval theory of commerce, set in modern historiography, regarding demand (which is not satisfied be-cause the non-existence of modern transports strangles production) and supply, or rather production, the inexisistence of which (even if transport were available) is what really prevents all possible economic relationship which would articulate the different national geographies.

The approximately 10,000 kilometers of road in Catalonia have been rebuilt between 1800 and 1950 as follows:

Up to 1850 the three "royal" branches of first importance were built: it is the Y centered in Barcelona with its ends reaching Lleida, Tarragona and Girona: it is the itinerary "from Madrid" to the border with France; it is worth observing that it is reinforced by the road which comes from Valencia and Tarragona to Molins de Rei, through Vilafranca and Ordal, thus avoiding the difficult coastal access. Until 1900 half of the mileage of the present day roads was built; this was carried out by the Junta de Carreteras de Catalunya until 1860, by the State until 1880 and the County Councils were the principal agents until 1900. The Junta de Catalunya based itself on the 1848 plan which designed some Catalan axis, two of them transversal and several important radial ones centered in Barcelona, Reus and Tarragona. The State doubled railway itineraries and derived from an administrative hierarchy routes of first, second and third importance, this classification being based on the importance of the extremes of the itinerary (whether the

axis which are joined are interprovincial or not... rather than the cities which are joined).

Until 1950 the other half of the Catalan roads are built. Looking at the century as a whole and as the real rhythm for many of its decades, it is possible to say that on an average 100 kilometers per year were being built. A certain symmetry with the previous period can be seen: there is a period under the Mancomunitat and another with domination m the hands of the State and of the County Councils.

In comparison with the feeble but continued effort made to build roads, the building of railways has been a sufficiently large and sudden operation so as to be influential in the historical change of the nineteenth century in a manner which is open to discussion but generally recognized. Catalonia reached the twentieth cen-

tury with a relationship of kilometers of road to kilometers of railway of 4 to 1. In fact, this relationship is almost 1 to 2 if we consider only roads of first importance. Railways m Catalonia have joined together almost alt of its main cities, and from that moment the cities which seemed to have renounced modernity were left on lower levels.

Until 1910, 1,500 kilometers of railway line were built in Catalonia, a fourth of them were narrow gauge. In 1970 we had 1,700 kilometers of railway lines.

The attraction of Catalan savings for the building of railways, which is a radically different model form the capital invested in Spanish railway companies, m possible substitution of industrial investment, as pointed out by Tortella and admitted as plausible by Nadal, has a physical root which does not seem to be sufficiently valued by Fontana in his article in which he qualified in the 1880s the "paper railway" societies as fantastic.

This physical root is the high level of articulation of the territory which has been produced by the railway by linking all of its middle sized cities:

Mataró and Arenys, Granollers, Martorelí, Vilafranca, el Vendreil, Vilanova, Figures (TBF); Sabadell, Terrassa, Manresa, Calaf, Cervera, Tarragona, Tortosa, Amposta Montblanc Vic (Nord); Olot, Palamós, Sant Feliu, Igualada, Berga (narrow gauge railways built in the 1880s). Some thirty cities (of "second" and some of "third" order of importance) are touched by the railway producing a physical relationship which does not exist in Spain, where the great axis of the Bourbonic State leave many important middle size cities unattended and their regional or provincial articulation has even been obstructed by the French railway monopolies. We understand that it is this urbanity of the railway which explains its financial reality the quality which is not "fantastic" of so many firms independently from their profitability.

In the 1960s toll motorways started being built in Spain. This time it is not on the territorial radial model but

on another with its centre in Barcelona which stretches form France to Alacant and from Bilbao and San Sebastian to Barcelona, with certain other scattered focal points (Sevilla, Galicia, Asturias and Madrid); they are itineraries which link nearby important capital cities which have a high demand for mobility; they are itineraries which are very congested with roads, which will lead to parallel motorways. Up to the present 1,750 kilometers of motorways have been built (and there are projects to build a further 700 kilometers) of which 1,500 are toll roads.

These roads trace on Catalonia again the Y shaped route, with the Lleida-Barcelona branch crossing the Penedés corridor.

Motorways now disarticulate the territory, with a negative action which highways

did not have and as opposed to railways, in the measure that they operate a new form of hierarchy increasing the distance between the levels which are on the passage or off it and at the same time breaking the relationship between cities with the tendency there now is to ignore territorial relations of a regional scope.

However, if the strength of these substructures is recognized there is the possibility of orienting action regarding the urban and territorial network and the more capillary channels can be updated and related to the large arteries which appear to have banished them definitely to a historical memory.

If territorial substructure has been able to claim for itself this capacity of support of the skeleton of the country it has largely been due to its capacity to make dynamic the upper cultural and technological sectors of the moment. We find it worrying that public works should so emphasize "development" that they forget they are inserted into and aged or old tree which the parasites of administrative formulas or old techniques might dry out negatively.

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