

THE STUDY ABOUT TERRITORIAL ROLE OF THE TRANSPORT INTERCHANGES: REVISION AND METHODOLOGICAL PROPOSAL

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The territorial role of transport infrastructures has been of the interest of investigators of diverse disciplines for decades. Nevertheless, due to the complexity of the territory, its dynamics and interrelations, the studies carried out present limitations, principally, in relation to the observed aspects and the spatial and temporal scales used to identify those territorial transformations. The above mentioned studies are of specific usefulness for each case study, but without don't allow to generalize the implications of this type of infrastructures.

The limitations in the studies of the territorial role of the transport infrastructures urge to rethink the methodological approach to adapt it to the reality of the phenomenon studied.

Understanding transport as the system whose purpose is the satisfaction of the need for mobility of people and goods, one of elements that compose it is the infrastructure, which makes possible the service. These services, finally, are those that satisfy the above mentioned need. In this sense, both transport infrastructure and services allow people and goods to be available in the place and in the moment in which they are needed or wished. Additionally, the transport infrastructure (and its operation) is a substantial part of the territory, which intervenes in the dynamics of its components (biophysical, socioeconomic and political) and as such, influences and is influenced by its features and dynamics, being this planned or not.

Although the territorial role of a certain type of transport infrastructure in a specific territory cannot be generalized because of the big quantity of variables that intervene and because they be «similar» but «are never equal», a realistic understanding of this role would constitute a basic useful knowledge in order to take decisions about transport infrastructures or territorial variables.

Linear transport infrastructures (highways, train lines) and punctual ones (airports, ports, terminals) have features and specific purposes making its incidence in the territory different. These punctual infrastructures named transport interchanges¹ are the object of this article.

In accordance with the definitions given by different authors (Terzis, 2000; De Santiago, 2001; Menerault, 2006; Bentayou and Crossonneau, 2002) for transport interchange, it is not only a point in a network or in a city, but about a place in which there are diverse activities related to mobility (accessibility and connection), to the territory (incidence in territorial dynamics from accessibility and proportionate connection) and with the services needed to organize and to facilitate the fulfillment of interchange functions. For such a reason and in accordance with the type of transport interchange, the article uses the terms: place of centrality, place that polarizes, place of articulation and transference or place of interchange between different transport modes.

This article includes the review of the state of the art about how the relation transport infrastructure-territory has been studied. This review is presented describing the methodologies and variables observed in the studies classified in accordance with the territorial aspects by which the studies have tried to verify the incidence of transport infrastructures. Such aspects are:

- Economic development
- Spatial structure
- Territorial dynamics

From the analysis of this review and from the identification of their methodological limitations that have not allowed the clarification of the territorial roles of infrastructures, we develop the proposal of a new methodological approach. This methodological approach pays special attention to the elements that must be observed and the spatial and temporal scales to be considered, specifically for transport interchanges.

The proposed methodological approach considers how this type of infrastructure transforms the urban scenery, by the recognition of urban changes and by the identification of economic, social and political aspects that have determined the dynamics and the interrelations of the studied territory. The methodology debates the use of appropriate spatial and temporal scales, according to types of interchange and territory.

Nevertheless, the transport interchanges and their territorial roles cannot be analyzed bearing in mind generic features of interchange or of territory, due to the complexity of the processes involved in this relation. Therefore, it is necessary to consider a typology of such aspects, in order to facilitate the understanding both of its interaction and its effects.

Therefore and with the intention of advancing in the methodological design of experimental investigations about incidence of transport interchanges in the territory, a typology of this type of infrastructures is proposed. This typology bears in mind the features of each interchange and of each territorial dynamics that can influence the territorial role

1 The term *transport interchange* is used principally in the United Kingdom, while in the United States, expressions like *transfer center*, *traffic transfer* and *intermodal transfer facilities* are used.

of the above mentioned infrastructure. The typology proposal is organized according to the following two criteria:

Criteria with regard to the territorial dynamics and the incorporation of transport interchange in such dynamics:

- Dynamics and territorial situation.
- Urban structure and location of transport interchange with regard to the city and the urban project.
- Features and dynamics of the place of emplacement.

Criteria with regard to the type of transport interchange:

- Transport services offered in the interchange.
- Services offered to passengers and not passengers.

In synthesis, the aim of this article is to propose a new methodological approach that allows understanding the territorial role of transport interchanges, analyzing the state of the art of how they have been studied and identifying of the methodological limitations of the different types of studies carried out.

