PART TWO Basic Lines of Research.

- 8. INDUSTRIAL GEOGRAPHY
 - 8.1. Industrial Geography Studies in Spain: Recent Development and Main Research Lines, by *F. Manero*
 - 8.2. Industrial Geography and Revival of Industry and Territory Studies, by *R. Méndez*
 - 8.3. Energy sources and Mineral Raw Materials in Spain, by M. Molina

8. INDUSTRIAL GEOGRAPHY

8.1. INDUSTRIAL GEOGRAPHY STUDIES IN SPAIN: RECENT DEVELOPMENT AND MAIN RESEARCH LINES

F. MANERO

In the renewal process of geographical research in Spain, it is not gratuitous to see Industrial Geography as a scientific field with the most significant evolution either from the quantitative or from the qualitative point of view. It is, however, a recent expansion in parallel to the metamorphosis suffered by the Spanish Geography since the '70s and to the geographers' openness towards analysing and understanding industrial change. Geographers could not remain indifferent towards said change, specially when its clear mark can be seen on Spanish industrial spaces, and it is a process closely related to the processes prevailing in the E.C.

Thus, research has diversified in our country; geographers, besides following traditional scientific lines, have added new working lines or are adjusting others to modern conceptualization and methodology. These new lines allow more strict and appropriate analysis approaches to understand a complex and changing reality.

A PROGRESSIVE RENEWAL OF PURPOSES AND METHODS

When analyzing the scope of main research lines in Industrial Geography in Spain, we have to refer to their theoretical-methodological development in time. It is said that the turning point was the IV Coloquio de Geografía, hold in Oviedo in October 1975. Till then, the most relevant contributions leant towards sectorial studies; these studies were so numerous that other more geographical perspectives were totally darkened. There is a number of relevant works that have focused on analyzing features of key areas in the production system: either the mineral-energetic fields or manufacturing activities linked to basic sectors (siderurgy, shipbuilding, railroad material, etc.). According to the French tradition in these matters, research and its methodology follow simple schemes in order to actualize their problems and its possible perspectives in the short and medium run.

From the second half of the '70s, Industrial Geography in Spain presents a new dimension due to the important quantitative and methodological jump taken by the Spanish Geography. Although there are valid antecedents, studies from now on will have a spatial approach. Industry is considered as an agent and a reference fact needed to evaluate land dynamics, related to population movements, to changes in employment structure, to location strategies for enterprises or to contrasts in space.

Under such premises, and pointing out in each case the most determinant variables, the literature expands greatly in two scales: local and regional, which

turned out to be the most used analysis. However, local studies will have an exceptional character and will be substituted by titles refering to singular settings or to significant urban-industrial nuclei. The most important contributions are in regional studies thanks to the possibilities opened by the State's autonomous division, which promotes an easy access to statistical information. Traditionally lack of said information difficulted global research on Industry's economic-spatial behaviour in Spain. Therefore, nowadays there is a wide and interesting collection of studies on industrial dynamics within Spain's Autonomous Communities; all of them are contributions that analyze their different development levels and their influences on space.

Although national studies are few, the variety of approaches does not prevent arriving to a global idea of Spain's industrial reality, since the studies present homogeneous methods and perspectives in their analysis criteria and approaches. Though research is, often, conditioned by the sources' quality or by each concrete scenario, it is possible to find a similar methodology: a certain tendency to stress historic foundations of processes, and to study industry within an integral view of all demographic, economic, decision taking and spatial events induced direct or indirectly by it.

THE OPENING TOWARDS INDUSTRIAL CHANGE-INDUCED RESEARCH LINES

Regional analysis is the main contribution in the field of Spanish Industrial Geography; however, we can not ignore the new orientations appearing in our research field at the end of the '80s. Although regional studies do offer a frame of excellent and known results, industrial papers from a geographical point of view on increasingly useful and appealing subjects are not trivial. Among them we include relevant papers that study spatial consequences of crisis and adoption of new growth strategies, due to the industrial change's guidelines. Although these papers follow recent working lines and are just a few, they deal accurately with significant phenomena for our time and territory as re-industrialization policies, the new guidelines for industry location in urban spaces, the meaning of technological innovations in sectorial and spatial re-adaptation, or the role played by local iniciative in promoting economic activities in rural areas.

Therefore, the different economic-spatial activities present in Spanish industrial dynamics are better understood. Geographers are studying industrial main tendencies, although there are some lacks in the theoretical-methodological field, in assessing environmental impacts, or in land analysing the companies strategies or public decisions.

In any case, though empirical analysis dominates, we can say that the balance sheet is satisfactory and positive, specially if we take into account the low starting point and Geography's tradition. It must be considered as a solid launching pad for Industrial Geography's development in Spain. Development that must be connected to the ripening of existing research lines, to the opening of new ones, capable of filling the blanks found in the treatment of basic subjects. Moreover, said development is associated to the acknowledgment of Industrial Geography as a specific subject in University Curricula and its leaving the equivocal position within the mixture of contents that conforms Economic Geography.