

## INTRODUCTION



The location of economic activity is or should be a concern of every industrial establishment. Each factory occupies a portion of the earth's surface, and stands in a certain spatial relationship to other factories and other economic phenomena. As the participants in a specific industry make their locational decisions, selecting one place for development in preference to another, an areal distribution pattern emerges. It may be concentrated or dispersed; it may tend towards regularity or take on a more random form. Each industry adopts its own distinctive areal distribution, and the assemblage of all these patterns make up the complex reality of industrial space economy. Attempting to understand industrial location patterns, and the individual decisions embodied in them, constitutes the fundamental task of the field of inquiry which is the subject of this thesis.

In an economy governed by market forces, the decision of where to locate is, or rationally should be, one of choosing that site at which the profit to be maximized by the individual enterprise is as high as possible for servicing the market or markets in which the product is sold. A number of factors are important in determining where this most profitable location will be for a particular enterprise, and of course the degree of emphasis assigned to specific factors will differ among industries. However, economic theory in the Anglo-Saxon tradition has largely neglected the whole field of location theory. From Adam Smith to Pigou, no adequate analytical treatment of the causes determining economic location was attempted.<sup>1</sup> Not until 1909

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<sup>1</sup>Weber, A. Theory of the Location of Industries trans. by Friedrich, C.J. (Chicago: The University of Chicago Press 1965). p.8.

did the German economist Alfred Weber publish his book entitled "Uber den Standort der Industrien". However, Weber was certainly not the first to turn his attention to industrial location. In the middle of the nineteenth century Johann Heinrich von Thuenen attempted to construct a theory that would explain the process of agricultural location. By the end of the nineteenth century a number of other Germans had written on this subject. The most important of Weber's predecessors was probably Wilhelm Launhardt, who attempted to show how the optimum location could be found in a simple situation with two sources of material and a market represented by the corners of a triangle. He also developed another approach based on the concept of market areas, showing how these might be delimited in a very simple situation. The influence of Launhardt and his contemporaries extended little beyond Germany but the translation of Weber's book into English in 1929 ensured it of a much wider reading and, in any case, Weber's theory was a fuller and more rigorous exposition than anything that had been attempted previously.<sup>2</sup>

By the 1950's it was clear that two largely independent schools of thought on industrial location theory had emerged, embracing respectively the traditional "least-cost" approach and a view that emphasized the locational interdependence of firms. Classical least-cost location theory has its roots in the work of Alfred Weber, and includes much of Palander's and Hoover's theories. This school emphasizes the search for the least-cost location in conditions where

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<sup>2</sup>Smith, David M., Industrial Location (New York: John Wiley and Sons Inc., 1971) p. 113.

the demand factor is held constant, and where the locational interdependence or market area is disregarded. Implicit in this approach is the assumption of perfect competition, with no monopoly advantage with respect to the market arising from specific location. Therefore, the first task at hand is to examine the development of the historical background of location theory from its beginnings up to the present day. After a brief review of location theory, an investigation of a set of empirical evidence will be made, with particular reference to the cement industry in Thailand.

There is no intent to construct any new theory of industrial location in this thesis, nor to test the accuracy of any existing theories. The main object is to find out, firstly, the economic effects of establishment of plants in different locations within a particular industry, and secondly, the conditions which appear to account for variations in costs, output or efficiency in different sets of circumstances. In sum, the study will deal primarily with the question of decision criteria in the location of plants and facilities, and the resulting impact on the local economy. Secondly, the research findings should provide some useful insights concerning location problems and the formation of practical policies in this country.

The first chapter of this thesis will be a brief survey of location theory, as typified by the works of Johann Heinrich von Thunen, Alfred Weber, Tord Palander, Edgar Hoover, August Losch, Harold Hotelling, Walter Isard and others.

Chapter II follows with an overall view of industrial location in Thailand. This chapter will serve to present industrial location

patterns in Thailand, insofar as these patterns are ascertainable at the present level of industrial development.

Chapter III will be an empirical study with particular reference to the cement industry. An investigation of the nature and performance of certain plants in the cement industry in Thailand will be carried out. Chapter IV presents the results of an empirical study concerning the impact on the local economy of cement plants' location.

Chapter V will contain a summary of the thesis, and the author's conclusions.