

What about Industrial District(s) in Regional Science?

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ABSTRACT: The aim of this paper is to critically consider how the concept of «industrial district» was born and evolved in the field of regional science. Despite the claim by Isard that the emergence of a spatial dimension in economics was being hampered by Marshall's alleged prioritising of time over space (Isard, 1956), the concept of «localization economies» introduced into regional science by Ohlin, Hoover and Isard clearly is itself a legacy from Marshall. This contradiction in the work of Isard and others followed to a large extent from the way in which Marshallian concepts were historically situated in economic thought before Giacomo Becattini's re-reading of Marshall and his ideas. This re-reading began in the 1960s, focussing on conceptual issues related to industry (Becattini, 1962), and then culminated in the following decades with work on the idea of the «industrial district»: considering it first as a unit of investigation of economic research (Becattini, 1979) and, later, as a way of industrial development (Becattini, 1989). In brief, the originality of Marshall's economic thought can be found in Book IV of his *Principles of Economics*. This originality can be seen in the statement that economics is more important as a way of studying man in society than as a way of studying wealth; and continues through the affirmation that man's character is moulded by his daily work. That is to say, a person's «place of living» (where individuals live and work) is important not only for the formation of human skills but also for the formation of character. The place as the unit of investigation (i.e. the «functional region») is one of the main elements which distinguishes the identity of regional science from other branches of economics.

JEL Classification: B2; R10.

Keywords: industrial district; regional science; regional studies; regional economics

¿Qué pasa con el Distrito Industrial en la Ciencia Regional?

RESUMEN: El objetivo de este artículo es enmarcar críticamente el nacimiento y evolución del concepto de Distrito Industrial en el campo de la Ciencia Regional. Es conocido el cargo de Walter Isard contra Alfred Marshall, según el cual este

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último, al haber afirmado la prioridad del tiempo sobre el espacio, habría impedido el surgimiento de una dimensión espacial en la economía (Isard, 1965). Sin embargo, conceptos como los de economías de localización, también introducidos en la Ciencia Regional por Ohlin, Hoover e Isard, son, evidentemente —aunque no se especifique—, un legado marshalliano. Esta contradicción se sustenta en gran medida en la forma en que el sistema marshalliano es situado en la historia del pensamiento económico antes de la relectura de Marshall por Giacomo Becattini. Esta relectura comenzó en los años sesenta del siglo pasado con respecto a la manera de conceptualizar la industria (Becattini, 1962) y culminó en las décadas siguientes con la conceptualización dual del Distrito Industrial: primero, como unidad de análisis de la investigación económica (Becattini, 1979) y después, como una forma de industrialización (Becattini, 1989). En pocas palabras, la originalidad del pensamiento económico de Marshall se debe buscar en el libro IV de sus *Principios de Economía*. Esta originalidad procede de la afirmación que la economía es más importante como una parte del estudio del hombre en sociedad que como estudio de la riqueza; y continúa mediante la afirmación que el carácter del hombre es moldeado por su trabajo diario. Esto significa reconocer que el «lugar de vida» (donde las personas viven y trabajan) es importante en la formación del carácter, así como en la formación de capacidades humanas. Pero el lugar, como unidad de investigación (es decir, la «región funcional»), es uno de los principales elementos que definen la identidad de Ciencia Regional en comparación con otras ramas de la economía.

Clasificación JEL: B2; R10.

Palabras clave: distrito industrial; ciencia regional; estudios regionales; economía regional.

1. Introduction: The thesis

According to the classical definition of Giacomo Becattini (1990), an industrial district is: «a socioterritorial entity which is characterised by the active presence of both a community of people and a population of firms in one naturally and historically bounded area». Then Becattini clarified in Duch (2006) the industrial district can also be defined as «the result of a transformation of a local community that specialises in a certain kind of production». This specialization occurs within a place defined by the residence of the local community, and encompasses a main industry and the range of goods it produces together with subsidiary industries (including manufacturing and business services) which support the economic activities of the main industry's firms. Each firm in the main industry specialises in one or a few phases of the production process.

So, the local community —composed of a community of people and a population of firms embedded together— specialises in the production of a certain range of goods and this production is organised in a form that involves «various trades relatively one another» (Marshall, 1961, p. 139). This local community shares a system of values and common practices which are spread throughout the district by means of

social norms and institutional structures (markets, firms, professional schools, trade unions, employer's organisations, and more).

Our wish to embed the industrial district phenomenon in regional science raises the question of what should be the appropriate unit for studying economic facts through a proper «regional» perspective. In our opinion this unit should be the «economic region» (hereinafter referred as the «region»), used here as equivalent to the notion of «economic nation» in Marshall (Becattini, 2002). The identification of the «region» as the key unit of investigation is that which should distinguish regional science from other sub-disciplines of economics (such as industrial economics or business economics: the first being centred on «industry», the second on the «firm»).

But, as we know, Walter Isard founded the new discipline of regional science on the basis of «location theory»: that is, places were defined in terms of the location of the economic activities of individual firms and/or aggregates of firms (i.e. industries) (Isard, 1956, 2003). It follows that the region is conceived as resulting from processes of location. In other words, in this perspective, an «agglomeration of firms» (or cluster) defines a given place, and so the place has a «derivative status»: i.e., it is a secondary concept. But the industrial district is a place-based concept, in the sense that the place (or local community) is a condition for its definition both in theory and in practice. So from the industrial district perspective the place is not a derivative; it is a «primary concept».

How to disentangle the matter? For many scholars the matter does not arise. For them an industrial district is believed to be an agglomeration (of small and medium-sized enterprises) resulting from a process of location. Obviously, we disagree with this belief. To disentangle the matter we must begin by removing the «foundation stone» on which Walter Isard founded regional science as a discipline.

This article is divided into six sections. After the Introduction, section 2 introduces what we refer to as «the American bias», based on a «location-theory filtered» interpretation of regional science and considers how Marshall's view of space was misinterpreted, leading to the omission of industrial districts from the regional science perspective. Then section 3 briefly asks: given the findings of section 2, how can the concept of industrial district fit into the regional science theoretical framework? This then leads on to section 4 which looks at how a re-reading of Marshall led to the creation of the idea of industrial district, and a proper understanding of the role Marshall saw space playing in regional development. Then section 5 sums up the essence of the industrial district idea and how it differs from other location-related concepts. Section 6 presents the conclusions.

2. The American bias

Isard opens Chapter 2 of his 1956 (p. 24) book *Location and Space-Economy* with a harsh critique of Marshall who was judged to have thought time was «more fundamental» than space for economic development. He cites Marshall thus:

«The difficulties of the problem depend chiefly on variations in the area of space, and the period of time over which the market in question extends; the influence of time being more fundamental than that of space»¹.

Isard blames Marshall, and, incidentally, the Anglo-Saxon economic tradition, for preventing the insertion of space into economics (Isard, 1956, pp. 24-25):

«Thus spoke Marshall, in line with the Anglo-Saxon tradition, and in the half-century to follow Anglo-Saxon economists were to hearken to his cry. Theoreticians of today are chiefly preoccupied with introducing the time element in full into their analyses, and the literature abounds with models of a dynamic nature. Yet who can deny the spatial aspect of economic development: that all economic processes exist in space, as well as over time? Realistically, both time and space must be vital considerations in any theory of economy. Unfortunately, however, aside from those of the monopolistic competition school of thought, particularly Chamberlin, the architect of our finest theoretical structures have intensified the prejudice exhibited by Marshall».

Isard's words «prejudice exhibited by Marshall» spread the belief (see, for example: Harvey, 1984, p. 8) that Marshall prioritized time over space:

«The insertion of space, place, locale and milieu into any social theory has a numbing effect upon that theory's central propositions [...] Marx, Marshall, Weber and Durkheim prioritize time over space. And, where they treat the latter at all, tend to view it unproblematically as the site or context for historical action».

This misunderstanding was perpetuated until recently (see, for example: Capello, 2010, p. 34):

«There are several reasons for this belated consideration of space by economists. Firstly, as often pointed out by the founder himself of regional economics, Walter Isard, the neoclassical school has conceived the temporal analysis of economic development as crucial and has always neglected the variable "space" as a consequence —often in order to simplify the treatment. As Marshall wrote: "The difficulties of the problem depend chiefly on variations in the area of space, and the period of time over which the market in question extends; the influence of time being more fundamental than that of space" (Marshall, 1920, vol. 5, Chapter 15, section 1). Secondly, the treatment of the variable "space" in economic analysis —especially if it is included in a dynamic approach— complicates the logical framework».

This misinterpretation of Marshall's thought comes from having chosen the «wrong» Book of *Principles of Economics* in which to look for an answer to the question of how to insert space or place in economics. Indeed, Isard chose a quote from Book V of the *Principles of Economics*, titled: *General Relations of Demand, Supply and Value*.

However, he forgot, or did not know, about Marshall's writings in Book IV, dedicated to *The Agents of Production*, where he first introduced the role of territory in the form of «neighbourhood» and «the whole civilized world» (Marshall, 1961, pp. 265-266):

«Many of those economies in the use of specialized skill and machinery which are commonly regarded as within the reach of very large establishments, do not depend on the size of individual factories. Some depend on the aggregate volume of production of the kind in the

¹ Alfred Marshall, *Principles of Economics* (8th ed., London, 1936), Bk. V, chap. XV, sec. 1.

neighbourhood; while others again, especially those connected with the growth of knowledge and the progress of the arts, depend chiefly on the aggregate volume of production in the whole civilized world. And here we may introduce two technical terms».

Further, this sentence precedes the introduction of one of the most central concepts in regional studies, namely that of «external economies», which provides an important link between the concept of industrial district and the field of regional science (Marshall, 1961, p. 266):

«We may divide the economies arising from an increase in the scale of production of any kind of goods, into two classes —firstly, those dependent on the general development of the industry; and, secondly, those dependent on the resources of the individual houses of business engaged in it, on their organization and the efficiency of their management. We may call the former *external economies*, and the latter *internal economies*. In the present chapter we have been chiefly discussing internal economies; but we now proceed to examine those very important external economies which can often be secured by the concentration of many small businesses of a similar character in particular localities: or, as is commonly said, by the localization of industry».

Or maybe Isard did know about Marshall's writings in Book IV, but he was simply using what was then a typical view of Marshall's thought to highlight his own contrary ideas? Perhaps Isard decided to make an instrumental use of Marshall's statement found in the earlier influential textbook in order to create «the villain of the story» in order to support the originality of his (Isard's) own suggestion of a need to focus on a space-economy.

But actually Isard was not the only economist who misinterpreted Marshall's thought or conveniently interpreted his words. In fact, we can think of Isard as a member of a group which included two other equally illustrious authors Bertil Ohlin and Edgar M. Hoover. Let us consider Ohlin's book *Interregional and International Trade*, in which on the first page of the Introduction (Ohlin, 1933, p. 3) Marshall is cited:

«The time element is probably the chief cause of the obstacles in the way of a clear cut presentation of fundamental economic principles. "The difficulties of the problem depend chiefly upon variations of ... ; the influence of time being more fundamental than that of space"²».

And then following that statement we find, apparently, the origin of Isard's argument:

«No doubt every author of a treatise on general economics has agreed specially with the last part of the statement, for while the time element has in most cases been more or less fully considered throughout the analysis, the space element has been at first almost completely neglected —only touched upon in the theory of rent— and has later on been dealt with only from a special point of view in the theory of international trade (Ohlin, 1933, pp. 3-4)».

Probably the reason for Ohlin and Isard confronting the most recent general treatise of economics (Marshall's *Principles*) and its author, was that they were dissatisfied with the treatment that dominant economic theory of the time gave to the spatial dimension. As Isard explained (Isard, 1956, p. viii):

² Marshall, *Principles of Economics*, Bk. V, ch. XV, § I.

«... to improve the spatial and regional frameworks of the social science disciplines, particularly of economics, through the development of a more adequate general theory of location and space economy».

In order to try to develop this dimension in both trade theory and general economic theory, Ohlin and Isard resorted to the only economic tradition in which spatial interpretation had any strength: German location theory, including the books of von Thünen, Launhardt, Predöhl, Weigmann, Engländer, and in particular the treatise on location theory of Alfred Weber.

Weber's interest, however, was in a less theoretical and much more concrete question. This was expressed by his translator to the English edition, Carl Joachim Friedrich, thus: «What causes a given industry to move from one location to another?» (Weber, 1929, p. xxiv). Answering this question resulted in a theory of distribution of activities. Following in Weber's footsteps, in the United States E. M. Hoover developed his theory of localization (Hoover, 1937). But Hoover differed from Weber by using an approach which was more integrated into Anglo-Saxon economic theory³.

An interesting feature here is that Ohlin, Hoover and Isard, interpreted Marshallian external economies through the lens of Weber's agglomeration laws, basically independent from the Marshallian point of view. This will be more widespread interpretation in the regional science. In fact, Hoover's popular taxonomy of economies of concentration (1937, p. 90) was influenced both by the works of Ohlin (1933) and by criticism of Weber's theory of agglomeration.

The second of Hoover's economies of concentration is named «localization economies», and refers to:

«all the firms in a single industry at a single location, consequent upon the enlargement of the total output of that industry at that location».

But are these «localization economies» not an interpretation of what Marshall meant by «external economies», but without citing their origins in the *Principles of Economics*? (See the previously quoted passage from the *Principles of Economics*, p. 266). It should be said that the terms and description used by Marshall in his characterization of external economies were ambiguous enough, in the absence of a thorough study of Book IV, to allow this interpretation. Thus, Ohlin (1933) and Hoover's (1937, 1948, 1971) interpretation of the meaning of «external economies» related them to «industry» rather than to «place»⁴. So, when Isard (1956, p. 172) provided

³ In fact, a first attempt to compare Weber's theory of location with the Anglo-Saxon literature can be found in the Introduction by Carl J. Friedrich as editor (and translator) of Weber to English. Friedrich's introduction is meritorious in that it compares and contrasts the differences and points of view between theories.

⁴ Ohlin and Hoover's interpretation followed from the perspective they adopted, that of the «theory of location» of Alfred Weber (1909). Weber's theory concerns the firm and industry, but not place. Let us say it in the words of Isard (1956, p. 172): «In his classic work on location theory, Alfred Weber emphasizes three basic location forces. Two of these, transport cost differentials and labor cost differentials, interplay to determine the regional distribution of industries. [...] The third general location factor,

an illustration of the agglomeration factors «neatly» classified by Hoover, he detailed them as follows:

- «(a) *Large-scale economies* within a firm, consequent upon the enlargement of the firm's scale of production at one point;
- (b) *Localization economies* for all firms in a single industry at a single location, consequent upon the enlargement of the total output of that industry at that location;
- (c) *Urbanization economies* for all firms in all industries at a single location, consequent upon the enlargement of the total economic size (population, income, output, or wealth) of that location, for all industries taken together».

It may be noted that Weber's term «agglomeration», the title of chapter V in his book, ended up becoming one of the most important and popular terms used in regional science. The term «agglomeration economies» was created by assimilating Marshall's «external economies» into the idea of «localization economies». A careful reading in Hoover's 1937 book of one of the case studies he presented, one relating to shoe production, reveals his knowledge of Marshall and the role played by the place. He says:

«For only by intensive concentration of production in special areas it is possible to develop and utilize effectively the specialized labor market that is necessary. When plants are clustered in a shoe district, and especially in a single shoe city, a manufacturer knows he can secure on short notice a skilled employee for any position in his plant» (Hoover, 1937, p. 210).

«Some of the more intangible labor advantages of industrial concentration have been described by Alfred Marshall in these terms: "When an industry has thus chosen a locality for itself ..."» (Hoover, 1937, p. 211, referring to Marshall's *Principles of Economics*).

Yet, in his later 1971 book *An Introduction to Regional Economics* (Hoover, 1971, p. 77-79) Hoover emphasises not the Marshallian interpretation offered in chapter XIII (Labor) of his 1937 book but, rather, in this later book, in chapter VI, a different opinion:

«We can thus distinguish three levels at which economies of size appear. There are, in respect to any particular activity: (1) economies associated with the size of the individual *location unit* (plant, store, or the like); (2) economies associated with the size of the *individual firm*; and (3) economies associated with the size of the agglomeration of an activity at a *location*. We can refer to these economies, for brevity's sake, as "unit", "firm" and "cluster" economies [...].»

Then, in a footnote inserted at the end of the above sentence, Hoover states the following (Hoover, 1971, Ch. 4, footnote 9, p. 79):

«What are identified here as "cluster" economies are sometimes referred to as economies of localization. Alfred Marshall's succinct characterization of the "economies of localized industries" is often quoted from his *Principles of Economics*, 8th ed. (London: Macmillan, 1925). Book IV, Chapter 10. F. S. Hall's Census monograph, "The Localization of Industries" (U.S. Census of 1900, *Manufactures*, Part 1, pp. cxc-ccxiv), reported on the development of highly clustered patterns of individual manufacturing industries toward the end

agglomeration (deglomeration) economies and diseconomies, acts, according to Weber, to concentrate or disperse industries within any given region».

of the nineteenth century. Unfortunately, however, the term «localization» has also been used synonymously with «location» and even in the sense of “dispersion”, so it is best avoided».

This is «the American bias»: (1) the prejudice against Marshall’s views on space, and (2) the location-theory filtered interpretation of Marshallian external economies. This was done in defence of regional science⁵ by enthusiastic researchers.

3. The question

Walter Isard is the founder of regional science as a discipline or field of study. Edgar M. Hoover is a co-founder of regional economics, but his reputation in the field of regional science is so high that his book opens the list of «Path-breaking books in regional science» (Waldorf, 2003). The ideas of Isard and Hoover were so influential as to guide regional scientists and regional economists in a direction which unwittingly prevented the discovery of (1) the «industrial district» in the field of theory and (2) the «industrial districts» in social reality.

So, «what about industrial district(s) in regional science?». In the theoretical framework of regional science there is currently no place for the industrial district concept.

4. Back to Marshall

Regional scientists and others are aware that Alfred Marshall contributed ideas important to the conceptualization of the industrial district. Therefore we must «go back to Marshall». And Giacomo Becattini will be our mentor.

The reason for going back to Marshall is not to look up «the definition of district» in his writings: simply because there is not one! Rather, it is to prove that there is «another Marshall», one whose writings suggested to Becattini «the idea of the district». Becattini (1962) decided to address Marshall’s theoretical system not according to the traditional approach, i.e. in respect of formal logical considerations, but, rather, in terms of its ideological foundations. His belief was that only through this way could the most original aspects of Marshall’s thought be grasped. And history has proved he was right. It was through this *unconventional approach* to Marshall’s thought that Becattini extracted a whole range of ideas that he reorganized in an original manner, and from which he derived the industrial district concept. If you look for the industrial district definition in Marshall’s writings, you will not find it. The «inventor» of the industrial district concept is Giacomo Becattini.

⁵ In economics the misuse of terms such as «agglomeration economies» or «externalities» as synonyms for «external economies» is frequent. These three terms correspond to three different ways of conceptualizing localized industries. Agglomerations and externalities are concepts introduced to explain the origins of localized industries, while external economies explain why an industry, after it was formed in a place, tends to remain there for long.

The cornerstones of Becattini's contribution are: (1) the centrality of human labour; (2) a particular conception of industry; and (3) the Marshallian concept of «economic nation». In Marshall's writings there are two main references for the ideas that constitute the foundation of the industrial district concept:

- Book IV of the *Principles of Economics*, and the concepts contained therein;
- *Industry and Trade*, with its introduction of the concept of «economic nation».

The concepts brought together in Book IV of the *Principles of Economics* are well known. These include the ideas of: organization as an agent of production, knowledge as the «engine» of production, the role of local external economies, and «homines novi» as agents of reproduction of entrepreneurship.

The concept of «economic nation» is, however, little known. Few people know — or remember — that it played an important role in Becattini's conceptualization of industrial district, and was maybe even more important than the concepts contained in Book IV of the *Principles of Economics* (Becattini, 2002). In *Industry and Trade*, Marshall (1932, pp. 13-14) introduced the concept of «economic nation» as follows:

«If the local spirit of any place ran high: if those born in it would much rather stay there than migrate to another place: if most of the capital employed in the industries of the place were accumulated from those industries, and nearly all the income enjoyed in it derived from its own resources: —if all these conditions were satisfied, then the people of such a place would be a nation within a nation» [emphasis added].

What attracted Becattini's interest in this concept was the «sense of belonging» that holds together these places. In this sense of belonging the «objective component» of a common interest and the «subjective components» of a historical-cultural nature are blended together. The sense of belonging is one of the founding criteria for re-conceptualizing industry (Becattini, 1962). It makes possible the conception of industry through the awareness of economic agents (workers and entrepreneurs) of belonging to a particular industry. The awareness forms inside the place where a set of productions have the common characteristic of occurring under the same technical conditions, that is characterized by the same production process.

This sense of belonging embeds the technology in the place where the production occurs since neither the production technique from the culture and social relationships that go with nor the relations of competition or alliance towards the counterpart from feelings of rivalry and solidarity that arise (e.g. between workers and entrepreneurs) can be strictly separated.

The above definition alludes to the industrial district as a «socio-economic concept», and to the fact that, as Becattini says, the district is a «social machine» that produces goods as well as people; because it moulds a distinguishing entrepreneurial and working mentality (Becattini, 1999).

We can see the difference between the above and the concept of «economic region» as found in the early works of regional science, for example when Ohlin (1933, p. 232) explains «the importance of the region concept»:

«Districts united in the same monetary system have specially intimate relations in some ways and it is often convenient to treat them as a region. From other points of view other modes of regional division are desirable. In general we may say that there are certain groups of districts between which factors or goods or both move less easily than between the districts themselves, and that such groups should in many cases be regarded as economic regions».

5. The Concept of Industrial District(s)

To sum up, the industrial district is a triadic concept:

- it is a «unit of economic classification» for defining industry (Becattini, 1979);
- it is a «unit of investigation» for interpreting economic change (Becattini, 1987);
- it is a «socio-economic concept» for understanding the organisation of production (Becattini, 1989).

As a way of defining different industrial forms, the employment of the industrial district concept is superior to the use of traditional technological criteria. Such technological criteria are «place-blind», because they neglect the importance of the places where production actually occurs. As a way of interpreting economic change, the industrial district concept postulates that economic change forms concretely within and between places, and so is a socio-economic place-based process. Thus an industrial district can be seen as a form of «local development». There are other forms. For example, while the «industrial district» phenomenon exists when a community of people interpenetrates a population of firms and furthers change, in contrast an «industrial pole» refers to a community of people which is subjugated to a large company, and it is the company which furthers the change.

The industrial district as a socio-economic concept facilitates an understanding of production organisation. It explains how a local community dominated by small entrepreneurs, specialized in producing parts or in manufacturing phases of the same product, achieves economies of production through co-operation («bundles of relationships» in which they are embedded). The cooperation is made possible by a common system of values and beliefs —such as a belief in the «ethic of work and activity, of the family, of reciprocity and exchange» (Becattini, 1989, p. 113)— shared by the local population, which generates mutual trust while giving importance to the value of reputation in life and in business, and which facilitates the exchange of productive knowledge.

This kind of industrial organization can be as competitive as a large vertically integrated firm when it comes to satisfying the desires by groups of consumers in the world for variety and distinction —that is, when the demand for certain classes of goods differs from place to place and/or over time— and for which the production process can be technically partitioned. Such goods can be produced in a place where the «community of people» and a «population of firms» intertwine, and where the first furthers the change of the second, as has been found, in brief, to be the case in

industrial districts identified in Italy, Spain, and the United Kingdom (Sforzi, 2009; Boix, 2009; De Propris, 2009).

The industrial district as a productive concept is in short an output of Becattini's theoretical thinking which integrated two key ideas derived from Marshallian concepts:

- the idea of the importance of the role of a «community of people», developed from Marshall's concept of «economic nation» (*Industry and Trade*);
- the idea of the part played by a «population of firms», a concept built on Marshall's idea of place-based «external economies» (*Principles of Economics*).

Such concepts can be said to be Marshallian «tools for thinking» which Becattini would not have been able to elaborate without his study of development in Tuscany (Becattini, 1969, 1975) and in particular the history of Prato (1979-1997) (Becattini, 1997). In Becattini's view —as in that of Alfred Marshall— the «observation of facts» and «theoretical thinking» complement each other, because: (1) facts by themselves are silent; but (2) theory alone is a mere criticism.

The aforementioned three concepts of industrial district (see page 70) are not mutually exclusive; rather they are synergistic. Through these industrial district concepts Becattini is able to concretise Marshall's statement that economics is more important as a part of the study of man in society than as a study of wealth (Marshall, 1961, p. 1).

6. Conclusions

The title of our paper is a play on Torsten Hägerstrand's presidential address to the 9th ERSAs Congress (Copenhagen 1969), later published in the *Papers of the Association* (currently *Papers in Regional Science*) under the title: «What about people in Regional Science?» (Hägerstrand, 1970). In that paper Hägerstrand distanced himself from regional science as a discipline about locations. He stated that «Regional Science defines itself as a social science, thus its assumptions about people are also of scientific relevance» (Hägerstrand, 1970, p. 7).

At the beginning of his address, Hägerstrand (1970, p. 7) pointed out «a difference in emphasis or tone between the European and North American meetings» of people involved in regional science:

«When looking over the proceedings of the sixties one gets the impression that participants in this part of the world have preferred to remain closer to issues of application rather than to issues of pure theory. We in Europe seem to have been looking at Regional Science primarily as one of the possible instruments with which to guide policy and planning. I have chosen to proceed along this line by suggesting that regional scientists take a closer look at a problem which is coming more and more to the forefront in discussions among planners, politicians, and street demonstrators, namely, the fate of the individual human being in an increasingly complicated environment or, if one prefers, questions as to the quality of life. The problem is a practical one and, therefore, for the builder of theoretical models, a "hard nut to crack".

Now, first of all, does the problem fall within the scope of Regional Science? I think it does. A forest economist remarked some time ago that, “forestry is people, not trees”. How much more accurate it would be to say that Regional Science is about people and not just about locations. And this ought to be so, not only for reasons of application. Regional Science defines itself as a social science, thus its assumptions about people are also of scientific relevance».

So according to Hägerstrand, regional science is about people, not just about industrial location. So there is a clear difference between the conceptual frameworks employed by Hägerstrand and Isard. The American economist supported a spatial reorientation of economics through a general theory relating to industrial location (Isard, 1956), while the Swedish geographer argues for reversing this setting, by placing the local community, of which industry is an attribute, at the centre.

The similarity between Hägerstrand’s conception of regional science and Marshall’s and Becattini’s conception of economics is remarkable (even if grounded in different philosophical backgrounds). Marshall and Becattini considered economics more important as a study of man —not in the abstract, but in relation to a given place and time— than as a study of wealth. The similarity is even more compelling when one considers that in the Marshallian universe, in Hägerstrand’s time geography, and in Becattini’s industrial district, at the centre of the thinking are labour and place and social organization; place and social organization being determined by labour. Social, and therefore economic change, mostly occurs in places, through the formation and enhancement of human abilities.

Despite being rooted in a different philosophical background and choosing an alternative scientific research road, Isard’s last thinking on the scope and nature of regional science was not so different from that of Hägerstrand and Becattini (Isard, 2003, p. 188):

«Regional science is primarily (a) social science. It is concerned with the study of man and spatial forms which his continuous interaction with, and adaptation to, the physical environment take».

The authors of the present paper agree. Industrial district(s) and regional science are about people and place (the local community), not about firms or individuals.

At this point, the reader will probably be wondering how the industrial district was introduced into regional thinking and into the regional science literature. This, however, is another story.

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