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*Industrial districts and real services* (Preliminary note) Relazione tenuta negli Stati Uniti, 1988

Testo rivisto da Anna Natali e David Lane (novembre 2006)

Possibly the best way to start is to say that there is a crucial condition, if what I am going to say is to make some sense: namely that there is no technologically determined best way of producing a given good. In other words, I am convinced that, in one way or another, the political system and also the features of the local community play a major role in shaping the industrial structure. If this is true, different productive systems can produce the same thing and compete on the same market, each of them having advantages and disadvantages. Within this assumption, my talk intends to examine a peculiar system of production, which, remembering many passages of Marshall's *Principles*, will be called "industrial district".

The first point to stress is that the industrial district is a system that does not consist of a single firm, but which is built up from a number of firms, I mean hundreds, which work to produce the same product in a small area. It often happens that these firms are classified by statisticians in different industries or sectors. If I think of footwear, the system of production I am describing includes the people who produce the shoes, but also the people who produce the boxes for packaging the shoes, who would be classified in the paper industry; or the people who produce the machinery to produce the shoes, who would be classified as metalworking; or the people who print the depliant of the footwear- producing firms, who would be classified as printers; or the people who glue together boxes, who would be classified as belonging to the chemical industry. In fact, all these people are pieces of a vertically integrated sector. To the eyes of the statistician and to the economists, all these connections disappear completely. The people working in different sectors appear simply as different: it does not appear in any way that those chemical or printing firms are producing footwear. So the first difference between the usual way of looking at a productive system and the way I am adopting is this: that I look not at the industry but at the vertically integrated sector.

Then there is still another difference, and that is that, contrary to what is often done, in our analysis the territorial aspect is of primary importance.

Which kinds of firms are in an industrial district? There are minifirms (I have come to describe these firms as "mini" because when I say "small", you think of a firm with 200 employees) with 10 employees or even 4 or 2 employees. These firms are very numerous and I would say on the whole 50% - or even 60% - of the labour force works in them. Then there are some small firms and there are also some big firms, I mean having 500 workers. But looking at the single firm would

be misleading. I would say that the best way of looking at this system of production, which may be referred to as an industrial district, is to take account of all the people in the area who work to produce the final product for the vertically integrated sector. The district, in most cases, has at least 10.000 or 15.000 workers working in it. In some areas, it may be even bigger. So what we are looking at is 15 or 20.000 workers, dependent or independent workers, who work in a number of firms, maybe 1.000, 2.000, 3.000 firms in a very small area, all of whom work for one final market.

And it may be useful, in passing, to note that the markets in which industrial districts operate are very diversified. Some districts produce fashion goods: clothing, knitwear, footwear. Some produce goods in which design is a very strong competitive factor: furniture, jewellery, tiles. But there are also many districts that produce metal tool machinery, robots, farm equipment, oleodinamic equipment, packaging machines, and so on.

Another important feature of the district is that many of the minifirms have immediate connection with the market of the final product. In the most developed district, you could find something like 30% of the minifirms which produce their own product, and which sell their own product on the world market without any intermediaries other than the retailers.

On the other hand, the other 70% of the firms work on a phase, on a stage of production, and inside them they perform only one stage of production or few stages of production. You can think of someone doing the lathework, of someone doing the looming for the knitwear, or someone doing the designing, or someone doing the sewing, or someone doing the carpentry. So that the production process is somehow "exploded" into the various stages of production, into various phases, and there is one group of firms for each phase. All the firms work together to produce the final product. The firms that are responsible for the final product subcontract some stages of the productive process to the phase firms, choosing the level of vertical integration which they think best for them.

Which are the relations among all these firms? They are often described in terms of networking, co-operation, trust, mutual assistance. These firms are told to collaborate with each other strongly instead of fighting with each other. But I think that this point, which is the central ideal of networking, or of the industrial district, must be examined more closely, not to run into deep misunderstandings. What I am saying is that the model that interprets the working of the industrial district is a model which, first of all, must be based on competition. There are many competitive markets - the market for lathework, the market for sewing, the market for looming, as I was saying before - and each one of them is a competitive market. These firms strongly compete with each other: the firms which produces lathework strongly compete with each other in terms of prices, in terms of quality, precision in delivery time, in terms of shortening the time between order and delivery. This competition is very strong and very bitter. And there is not any kind of agreement between the firms that perform the same kind of work (I mean the same phase of production: lathe, loom, sew, and so on), nor

among the firms which produce the same components, or the same final product. There is no agreement on not cutting price, on one firm not underselling the other. That agreement simply would not work, and there is no one who tries to do it. And - I think this is very important point to make - there are very few cases of consortia to sell the product of the firms. We are not talking about people who set to work together and to go to the market together.

The places and the ways in which these firms co-operate with each other are different and it is of great interest to describe them.

The first thing is that the amount of fraud and the amount of cheating you find among these firms is very low. And the reason why it is so is that all the transactions are somehow ruled by community rules, by community statutes which are enforced by the fact that anyone who cheats too much or who makes frauds too often will be excluded by the business community. The economic activity is regulated not by laws and codes but by rules that are more deeply embedded in the business community. There is a kind of consensus among the members of the community that enforces a rule which is different from the law, though not in opposition with it. This happens in exactly the same *way* (and I would say that this is important to keep in mind) in which people who bought and sold cows or bulls or horses fifty years ago used to shake hands to seal a contract. That was the proper way of doing business. Of course, all the lawyers were kept out: which was, it seems to me, a very good thing. And the rules of the community were clearer, more defined, more easily applicable than the rules that derive from the law or from the record of past cases.

There are other ways of working together.

The most important of these is that the final-product firm, when it needs something, let us say a component for its product, very often does not work out a detailed blueprint and look for the subcontractor who will produce it at the lowest price. In the districts, more frequently, the final-product firm goes to discuss with the component producer the best way of designing and producing the component. What happens is that he goes there and says, "I need a component of this kind, to perform this task on the machine I am designing. What do you think of producing it in this way?". And the other says: "Why don't we use something which I have done a week ago to make something similar, which would be easily adaptable? Or, we could use a standard component which may be found at the retailer shop, or, anyway, if we are to produce it, let us modify your sketch this way, because in this way the part you need for your machine may be produced at a lower price". At the end of all this complicated process what comes out is that the cost of production of the component is lower than it would have been without this cooperation.

What we have here - and I would like to stress this - is not working together and collaboration and co-operation out of good will or out of concern for the progress of humanity, or for the progress of the Italian economy. There is a search for profit which is made easier by the fact that the firms obey rules that are more easily applicable than the rules of the code, and this makes the cost of transaction

very low; the firms are prepared to help each other to decrease their costs of production. I hate people who think that the Italians are easy-going people who like working together. What is true is that within the districts there is in most cases strong competition, but there is also a great deal of working together: and these cases are most frequent among firms that are customer of each other.

It must be stressed that, in this area, as important as this interaction between the working of the community and the working of the economy is the role of the local authority and of the regional authority. Now, talking about policy, the question arises: how do we keep this situation going? The systems of production we have called industrial districts do not necessarily enjoy success. There are some districts in which activity slows down, and which go out of the market. There are other districts that are able to remain competitive on the world market. What is the role of the public sector in governing this structure of production, and how a cluster of firms, a number of firms which work on a small area, all belonging to the same industry, or to the same vertically integrated sector, may be transformed into something which is similar to a district and which will work as an industrial district? This is the policy problem.

I would certainly stress the need for financial measures, technical training, managerial training and so on. But I do not want to talk about these points. Many people know a great deal about these matters, more than I do. So I want to concentrate on what we call the real services. The idea of real services - as opposed to financial services - is to offer the firms what they need; so to say, in kind: in the same way as the sharecroppers were given not money, but wheat, barley or even beer, you do not give the firms the money to buy something, but give them the real thing. Let me make a short list of services, real services, in order to understand what I am talking about. A service could be to run an office that collects all the norms about farm equipment in all the different regions of Germany, in France, in the UK, in Italy or anywhere. So when an entrepreneur wants to build a cart to be hauled by a tractor, he goes there and asks: must the wheel have a minimum diameter in order to conform to Bavarian specifications? And he is told that in Bavaria until yesterday, the wheels were to be from 30 cm to 40 cm large, but now they must be from 35 cm to 45 cm (the ever-changing specifications, of course, are a form of non—tariff protection: and the agency that provide the service helps to get over it). What you are giving the firms, in this case, is simply information about the norms. Now this is something that is very difficult to find, and it is different if you give the thing, or the money to buy the thing. Another example is that of giving help in running for a tender. Let us imagine that Nigeria offers a tender for some tractors, some pipelines, and some pesticide spreaders. The small firm reads about the tender in the specialized press. But how is the entrepreneur to get the text of the tender, how can he get a good translation, how is to get inside information about the competitive factors which are important in Nigeria? You can set up an agency, in which there is a good technician, who is able to ring a friend, or a friend of a friend, in Lagos, and get the needed pieces of information viva voce o by telefax. Another service, and a fairly easy one to organize, would be to buy the magazines produced by the

fashion institutes throughout the world and make them available to the firms in the district. There are approximately 6 or 10 of these magazines. They go out 18 months before the season and give first hand information about fashion trends. They are fairly easy to get, but cost from 2.000 to 4.000 dollars. But how would the small firm know about their importance, and how could it afford them? So the agency buys them, and if anybody wants he may have a look at them at the agency office. This is different from providing money; you are giving them the thing necessary to cope with their needs.

Why should these services be provided by the public sector? The point is that most of the real services are based on information, and information even in economic theory has the nature of a public good, in the sense that it is costly to collect and very difficult to sell at a profit. It is very difficult, in fact, to sell a piece of information twice, or three times: news spread around, and very quickly though they remain useful - become valueless. In some sense, information is similar to a public good, and public goods, even in neoclassical theory, must be provided by the public.

But then, what is the technique of providing real services? I want to describe the technique in four points, and I shall try to be as quick as I can. To whom must the service be given? Which services must be given? How are the services to be delivered, and how are they to be priced and - if we want to make our government officials happy - to be evaluated?

Let us begin with the first point: to whom is the service to be given? The question here is: are the services to be tailored to a single firm, or to a group of firms? In my opinion there are many reasons why services should not be given to single firms. The first reason is that the entrepreneur would never give you all the details that are necessary to understand what is going on in his company. At least I have never found anyone who told me everything. He will never say: I cannot make a joint venture with him because I had an affair with his wife. He will never tell you anything of this kind, and still, this is a constraint he must obey, and you never catch the real position of the firm. The second reason is any economist who has grown up in Bologna or at M.I.T. and goes to a firm to give advice inevitably finishes up by saying: "Look, I shall tell you what to do". And any entrepreneur to this attitude will answer: "Look, this is my firm, and you please go out of the door". This is the only reasonable answer. I am not saying that he is not prepared to work with you. I am only saying that no one is prepared to accept the patronizing attitude that is invariably a mark of an economist talking to a single small entrepreneur The last point of not providing services to a single firm is the most important of all. And that is that you may be wrong. You may provide the wrong advice. And if you provide the wrong advice, the whole initiative gets into trouble, dramatic trouble. The news spreads around, everyone is told that you are saying rubbish, and the whole initiative fails. On the contrary, if your target is a whole district, with, let us say, 20.000 workers and 2.500 companies, the effect of your action is different. You try to identify the need, and then you offer, you produce one single service, after having studied quite a long time. Sooner or later someone will use it, and you will find that some services will be better used by a young

entrepreneur, some services will be used by a female entrepreneur; someone, and this someone is different from case to case, will start experimenting the new way of doing things, and the whole process will start rolling. During this process you shall have time to understand the reasons why people are reluctant to take advantage of the opportunity, and shall have the chance to adjust your product.

Which services must be provided? Here there are two points of reference to be kept in mind.

The first one is that you must somehow increase competition among firms and ensure that no firm is squeezing the other firm's project. This means that the higher the number of the firms who work for the final market and who look backwards to the other firms to buy equipment or components or parts, the better, because the whole system gets a more efficient structure.

The second point is the following. My experience suggests that the strategy of the agency that is going to provide the real service cannot be directly derived from interviews to the firms. Asking directly to the firms would be an efficient procedure only if the firms were big enough, and technologically advanced enough, to precisely identify what their needs are, and the way in which the bottlenecks they face may be coped with. But in the industrial districts the firms are mini, in the sense we said before, and they lack precisely the knowledge of the methods that could be used to overcome their difficulties. In this situation what an economist must do is exactly what a doctor does in a hospital, going in there and saying, tell me about your diseases and I shall tell you about the medicine. It would be somehow funny a doctor going in a hospital and saying, tell me which medicine you need. To arrive at defining the services, you need a huge amount of research. And this is an attitude fairly different from that which usually characterize the government officials who love simple procedure for distributing money, or giving low interest loans. Usually, the measures which are taken are, let us say, undifferentiated, uniform for all areas and for all people, the only difference - if there is one - being in the degree of help the firms get from the public. Here, on the contrary, research will show that the needs of one district are different from those of another district. And this is the reason why quite a lot of research is necessary to understand which are the specific technical or marketing needs which must find an answer.

What I have in mind here is something very similar to what Hirschman call linkages: the bottlenecks that may become opportunities for growth. The simple idea is that you must work on specific groups of firms to understand which are their specific needs and provide those services. After all, if the market is not able to provide those services, most probably in those communities the competence to provide that service is lacking, and so is the knowledge to understand precisely which services are needed.

The last point is how to deliver the services. I have to say that here the watchword is "tailor-made"; we must give a tailor-made service. You cannot go there and say, look, you need a CAD-CAM. You go there and say, what are you producing, which kind of CAD-CAM do you need; let us go together to see which CAD-

CAM are available, and let me do the work of producing the software which adapts the existing CAD-CAM to your particular needs and to your specific way of working. If the software houses have not produced the CAD-CAM for the furniture industry, I mean if the market has failed in producing the CAD-CAM the small firms in the district could understand and use, this means that a great deal of work is still to be done, in order to adapt the existing software to a particular way of designing the product and of transforming the blueprint into a production process. Possibly, some of the difficulties arise from the fact that the district needs a CAD-CAM that has to be used in a situation in which there is a strong division of tasks among different firms. And Danielle afterwards will tell you which were the specific problems of the people for which she and her agency produced some CAD-CAM with very particular specifications.

And here we are at the very last point, how the price of the services should be fixed. One aim, of course, is to get as many firms using the services as you can. But there must be a price. And I would also say that the price should increase over time. In the sense that, after a while, the agency that is working in a given social and productive context must recover at least the direct cost that is necessary to produce the service. There is no reason why we should give the services as a gift to the firms. We make the initial investment because the market is not able to offer the service; we start selling it at low prices, because we want the firms to experience it, and to appreciate it, learning new ways of being competitive; but as soon as the new piece of knowledge has spread around, and the firms have became conscious of this need and of the ways to overcome it, we may increase the price, recover the investment, and start doing something else. Or, if our budget allows us to do so, we can simply let the market provide what is needed, and move to some other initiative. But - and this is a point on which the government officials are often wrong - you cannot measure the utility, the productivity of the service simply by the amount of profit the agency has made year after year. The technique that must be used here is something similar to cost benefit analysis. based on the number of firms that use the service and on the amount of saving each of them has been able to achieve.

That is all, thank you.