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Becattini's Legacy: Industrial Districts and Clusters

Intervention of Deputy Governor of the Bank of Italy
Luigi Federico Signorini

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'BECATTINI'S LEGACY: INDUSTRIAL DISTRICTS AND CLUSTERS'

LUIGI FEDERICO SIGNORINI

Introduction

Let me begin with a personal recollection.



Negli anni Novanta del XX secolo, Luigi Federico Signorini, frequentatore abituale degli *Incontri di Artimino sullo sviluppo locale*, aveva maturato dubbi sul totem principale colà onorato, il concetto di distretto industriale, di marshalliana memoria (Becattini, Sforzi, 2002).

La fiducia diffusa, ad Artimino, nelle virtù salvifiche del distretto industriale non poteva non irritare un ricercatore del severo Servizio Studi della Banca d'Italia come lui. In breve: Signorini sospettava che dietro i discorsi sul distretto industriale si celasse una difesa del mito perverso del "piccolo è bello".

Qualcosa del genere, infatti, era contenuto nei discorsi sul distretto industriale; ma non nel senso che fosse la piccolezza dell'impresa rappresentativa di per sé a dar forza concorrenziale al distretto, ma - come abbiamo capito meglio in seguito - che quest'ultima scaturisse dalla intimità dei nessi. Non, dunque, "piccolo è bello", ma casomai "intimo, o coordinato, è bello".

Signorini si pose allora - come confessò in seguito - l'obiettivo di dimostrare che la divinità onorata ad Artimino esisteva soltanto nella fantasia dei suoi cultori.

Senonché ... come al Profeta d'Israele, cui era stato comandato di maledire il suo popolo, uscivano dalla bocca solo parole benedicienti, così a Signorini, al termine di vari tentativi di accertamento statistico, accadde di dover riconoscere che le virtù salvifiche della divinità distrettuale risultavano, in complesso, confermate da ROE e ROI (Signorini, 1994b) mediamente più alti di quelli delle imprese "non distrettuali".

Nacque così, nei saloni della villa Medicea di Artimino, un filone di studi a cui anche la formula attuale della geo-settorialità può essere ascritta (Sforzi, 2007).

Five years ago, commenting the results of a research project of the Bank of Italy on local production systems, Giacomo Becattini recounted the beginning of my personal contribution (and that of the Bank) to the literature on industrial districts. This is what he wrote¹ (since the

¹ Becattini G. (2012), *Oltre la geosettorialità: la corallità produttiva dei luoghi*, in "Sviluppo locale" n° 39.

language of this session is English I need to translate the quotation, and forgive me if the translation does not retain all the literary flavour of Becattini's prose):

In the last decade of the twentieth century, Luigi Federico Signorini, a regular guest at the Artimino meetings on local development, began to have doubts about the main deity worshipped there, the concept of the industrial district, of Marshallian descent. The belief in the salvific virtues of the industrial district, so widespread at Artimino, could not fail to irritate a researcher, like him, from the exacting Research Department of the Bank of Italy. In short, Signorini suspected that behind all the talk of industrial district lay a defence of the perverse myth of 'small is beautiful'.

Something of the kind was, in fact, contained in the discourses on the industrial district, but not in the sense that it was the smallness of the typical firm itself that gave the district its competitive strength. Rather – as we later came to understand – that strength stemmed from the closeness of connections. It was not, therefore, a matter of 'small is beautiful' but, if anything, of 'close, or coordinated, is beautiful'.

Signorini then set himself the goal – as he later confessed – of demonstrating that the deity worshipped at Artimino existed only in the imagination of its cult members. However, just as when the Prophet of Israel was commanded to curse his people but only words of blessing came from his mouth, so Signorini, after several attempts at statistical inquiry, had to recognise that the salvific virtues of the district divinity were generally borne out by the ROE and ROI (Signorini, 1994), which were on average higher than those of 'non-district' firms.

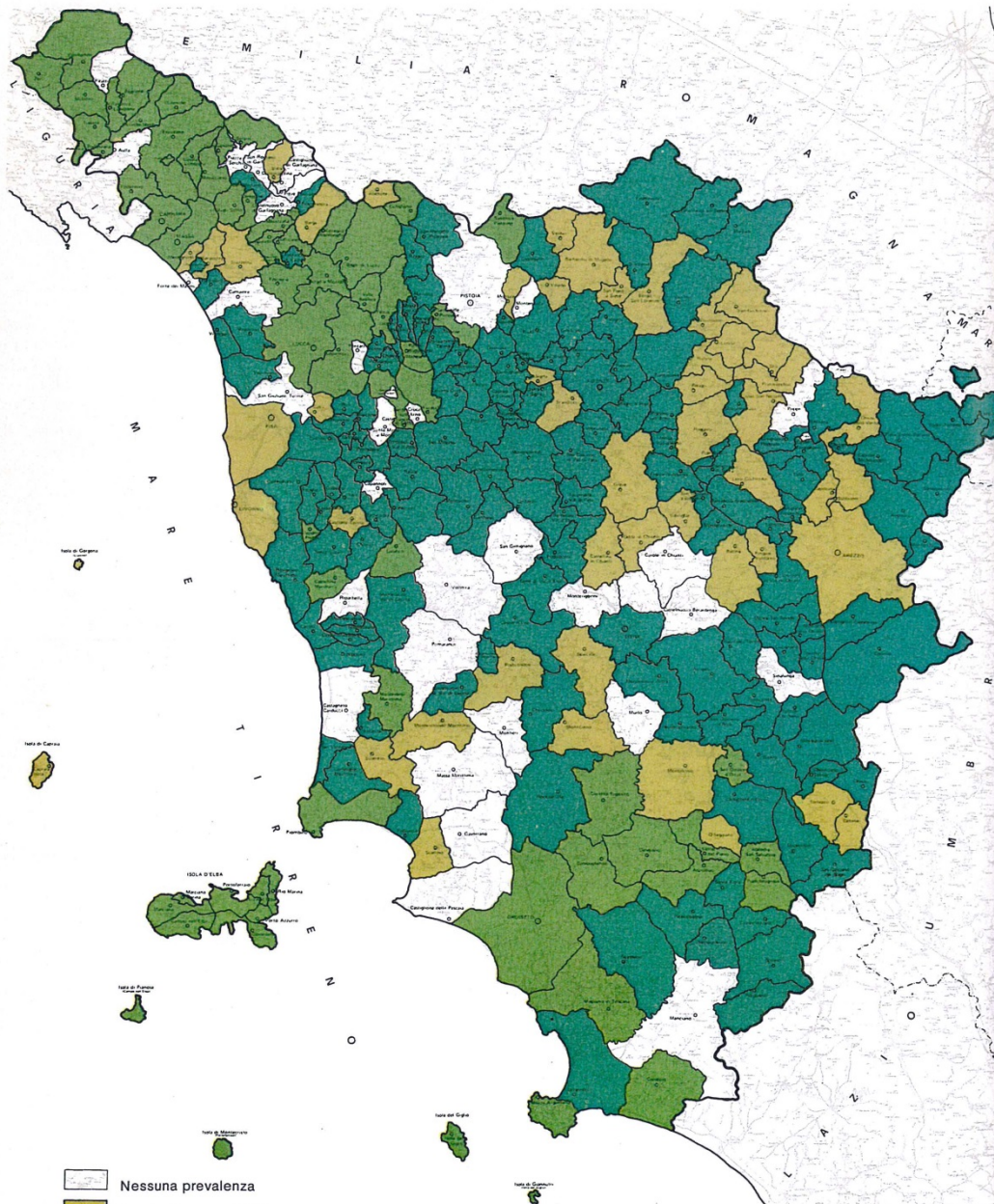
(The prophet in question, in case your memory fails you on this point, was Balaam, famous for having spoken to the she-ass; so one suspects that there was a hidden message in the passage quoted, which hinted at what the high priest thought of disbelievers, even if they were later to repent).



Be that as it may, Becattini concluded: 'Thus, in the halls of the Medici Villa at Artimino, was born a strand of studies to which the present research also belongs'.

If I had to make a comment on the words of Becattini, I should say that in reality my feelings towards his approach to economic analysis were in fact, at the very least, mixed.

Cartogramma 4.3 ATTIVITÀ AGRICOLA: AZIENDE PER FORMA DI CONDUZIONE PREVALENTE¹ 1948-1949
 Saggio di variazione medio annuo (per 1.000 abitanti)



- Nessuna prevalenza
- Conduzione a salariati
- Conduzione diretta
- Conduzione a mezzadria

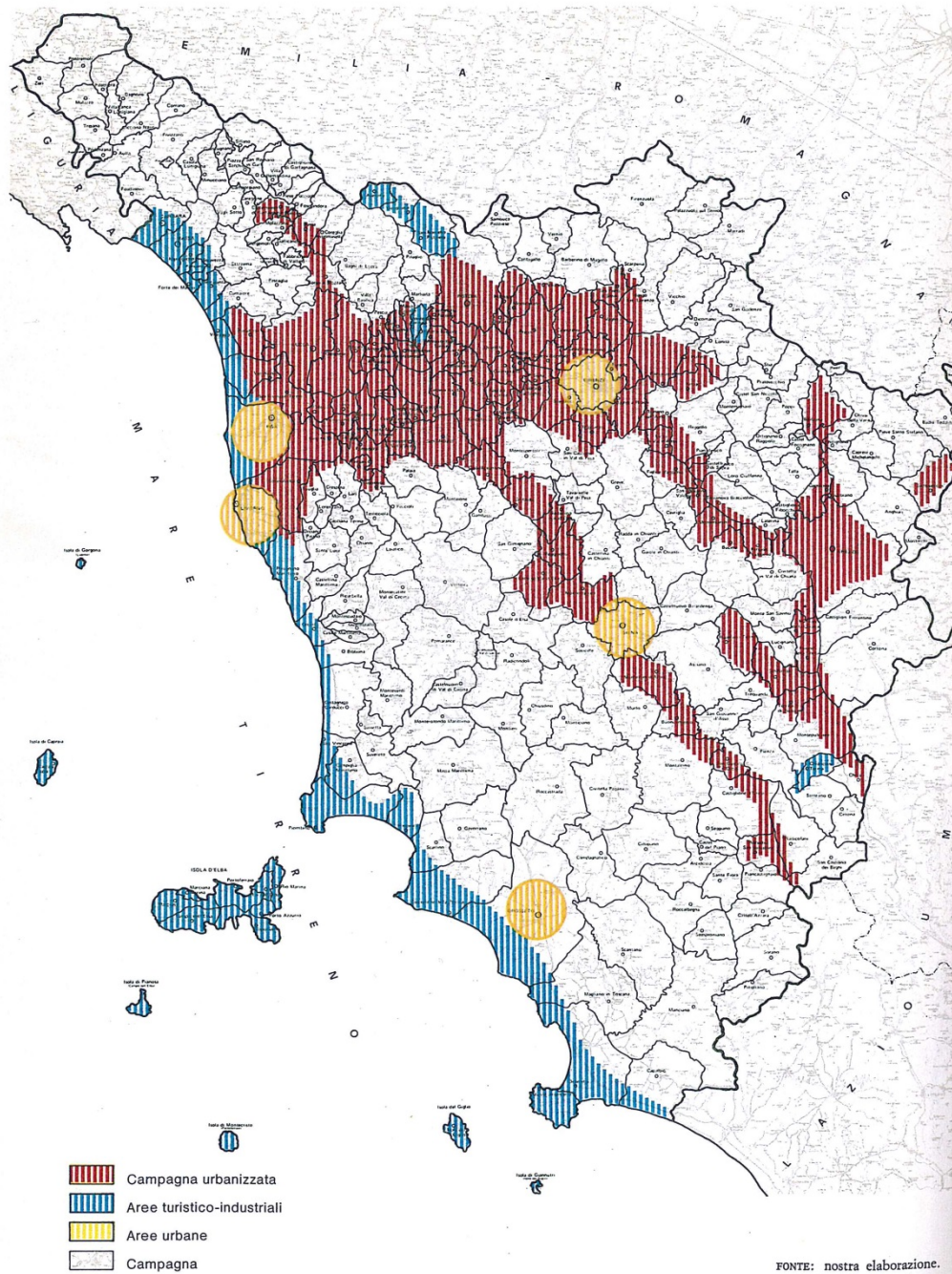
¹ La forma di conduzione risulta prevalente quando, sul fenomeno in esame, incide in misura *relativamente* superiore alle altre. Nel caso in questione la percentuale di superficie coltivata viene considerata prevalente quando la forma di conduzione dominante differisce di almeno cinque punti da quella relativa alle altre forme.

FONTE: nostra elaborazione su dati tratti da: INEA, *Carta dei tipi di impresa nell'agricoltura italiana*, Roma, 1958.

For instance, in my student days at the University of Florence, when I attended his beautiful course in Economics, the required reading for the course was his book on *The Economic Development of Tuscany* (1975) (more precisely: it was officially the product of Irpet, the economic analysis institution of the Region of Tuscany, but Giacomo Becattini, as editor, was

of course the driving intellectual force behind it). There I found countless thoughtful, realistic insights about the concrete conditions in which a peculiar organisation of the productive activity had historically developed in the region; and I enjoyed the refreshing feeling that economics was about real life, and was something you could actually see and touch and even walk through. There were, among other things, charts and maps aplenty. The first one showed here as an example displays the prevalence of sharecropping arrangements (in dark green) in the immediate aftermath of the War; and the next one introduces visually the concept of the 'urbanised countryside', *campagna urbanizzata* (in red); it could not escape the reader that the two areas overlapped to a significant extent, giving some suggestive support to the idea that the embryonic entrepreneurial skills that were required for the *famiglia mezzadrile*, the sharecropper household, to be economically successful, may have favoured the emergence of a large number of small manufacturing enterprises in the following years. If my memory of those days does not betray me, the concept of 'industrial district' was not yet spelled out there; but there was the seed that was later to beget the plant.

Cartogramma 7.15 PIANIFICAZIONE TERRITORIALE: AREE TIPOLOGICHE



Therefore I'm not sure if I actually wanted to dethrone any deity at the time. But I certainly wanted to put a fascinating idea to test, in such a way that, if the test was positive and the

deity was allowed to survive, it could also have a chance to further develop and integrate with the pantheon of mainstream economics gods.

Of course, a trade-off does exist between analytical and argumentative richness and formal and mathematical or econometric rigour. On the other hand, there is also a huge difference between an analytical skeleton that can support the nerves, muscles and flesh of a living being, and one that, even when it does not shatter at the slightest contact with reality, will always remain just an elegant, coherent, fancy puppet. Richness or rigour: there is no doubt on which side Becattini's sympathies lay. Moreover, the wealth of analysis and argumentation he put into his work was such as to almost erase the boundaries between theory and verification, as well as between induction and deduction. Nonetheless, Becattini rightly considered himself a 'theoretical' and not an 'applied' economist, and thus – although he never showed any personal enthusiasm for statistical testing – he appreciated our attempts at econometric verification of the district theory.²

Bank of Italy research



² In one of his interviews, however, I read one of the best praises of statistics. Speaking about his youthful adherence to Communism, he said, 'A first breaking point came soon, with the trials of Eastern European Communist leaders. First of all I noticed the statistical absurdity of the betrayal of so many people who had endured great hardship for the cause of Communism. A "rotten apple" among them was possible, but that all apples but Stalin were rotten, it was too much. There was no need for political culture, the calculation of probabilities was enough.' (*Vivere la Toscana*, intervista a Giacomo Becattini di Nicolò Bellanca, Piero Meucci e Tiziano Raffaelli. In Becattini G. (2007) *Scritti sulla Toscana. Miscellanea (1954-2007)* Le Monnier, Firenze, vol. IV pp. 185-218).

This is not the occasion for re-telling the whole story of the research on local production systems at the Bank of Italy. Nevertheless, since that story is probably the reason why I have been invited to take part in this panel, let me just mention that before the 1990s there was basically still no econometric evidence on the theory of industrial districts. It remained a narrative; a fascinating narrative perhaps, at least for some; but it had not yet had the opportunity to prove its worth against hard statistical data. On the one hand, the paucity of data on statistically and geographically meaningful local areas made empirical investigation of the theory very difficult; on the other hand, some of the factors that, according to the theory, were at the core of the districts, were inherently unmeasurable. This explains why the economics of industrial districts was, as I said, mostly based on narration; which in turn helps one to understand why mainstream economists found it difficult to take the theory seriously into account. We bypassed the problem, as Becattini noted, by trying to discover whether a 'district effect' could be found in various measures of productivity or profitability for 'district firms' compared with 'non-district firms'. I must admit that in doing so we were forcing the theory somewhat, since the district as a whole, not the single firm, is the economic entity to which the theory refers and whose competitiveness it would make sense to evaluate. But this is the sort of trade-off you often have to accept when conducting empirical research. On the other hand, if a competitive advantage does exist for industrial districts, it should show up somewhere, be it in profits, wages or rents.

Since then, the Bank of Italy has devoted much research effort to providing robust statistical evidence on the presence or absence of a 'district effect' in Italy, and to looking inside its black box. At the same time, we tried to create – through econometrics – a bridge between the vast Italian literature on industrial districts and the growing international success of the *New Economic Geography*. Despite everything, we did not find Becattini prejudiced against this sort of hybridisation.

At the heart of our efforts was not only an intellectual challenge for the economists of the Bank of Italy nor even my own personal curiosity. For a central bank and a banking supervision authority, an in-depth knowledge of the economic structure of the country in which they operate is essential. It makes it possible to understand the main sources of national competitiveness (or lack thereof), and to improve the interpretation of economic fluctuations. It is even more valuable for banking supervision, especially when the local economy and local banks are closely intertwined. In these last years we have seen, once again, that being embedded in the local economy may entail disadvantages as well as advantages. Such disadvantages are partly connected with the lack of risk diversification that standard theory has always warned us of; but they are also the dark side, so to speak, of those close connections that are the main point of the district theory: in other words, there is a risk that the same mix of competition and cooperation that is at the heart of the district may sometimes become inextricably linked with conflicts of interest and unsound lending practices.

But back to the econometrics of districts. The picture below is my room at the University of Newcastle, where I was a visitor for a few months in 1989 and where I first developed the idea

of estimating the 'district effect'. You will have noticed the archaic computer and the *de rigueur* coffee mug. But if you look very carefully to the right,



you will also spot a copy of the book by Goodman and Bamford on small firms and industrial districts in Italy, then freshly out of the printing press. It contained one of the first essays in English by Becattini, which popularised the research on districts in Europe and stimulated similar research in Britain, Spain, France, and elsewhere. I still have it³.

The work of those years resulted in my article on 'The price of Prato' (1994) and the first attempt to measure the district effect in one particular case (I was working in the bank's Florence regional economic research unit at the time). Years later (1998-2000), after I had gone back to the research department in Rome to coordinate the Bank's regional research (among other things), the first of a number of research projects on local productive systems took shape.

³ It had just been given to me by Ash Amin, another key contributor, who had invited me to Newcastle and with whom at the time I was discussing my approach to putting the theory of industrial districts to test. Fabio Sforzi, Carlo Trigilia, and the late Sebastiano Brusco, among others, were also on the list of authors.



LO SVILUPPO LOCALE

Un'indagine della Banca d'Italia
sui distretti industriali

A cura di L. Federico Signorini

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SAGGI



The main focus of this first project was an attempt to conduct a generalised empirical test of the comparative and absolute advantages of small-scale agglomeration, trying to understand the mechanisms that had ensured the competitiveness of this particular production system and to evaluate their prospects and risks for the future. We also argued, within a firm-theoretic framework *à la* Coase, that the relative advantages of districts and vertically integrated large firms could vary across sectors and over time, given the variable interplay of

economies of scale and transaction costs. That industrial districts had been a success was a fact; whether that success would last was difficult to predict.

In those same years our industrial system began in fact to undergo major developments that were once again altering the balance between economies of scale, transaction costs and agglomeration economies. The globalisation of markets, the advent of information and communication technologies, and European integration led to a sharp increase in competitive pressure to which the reaction of Italy's productive system has been slow and incomplete. Whereas at the end of the 1990s the focus of analysis was still on documenting and explaining the success of districts, at the beginning of the following decade it shifted to the causes of the slowdown in the Italian economy.



Economie locali e competizione globale

a cura di
Luigi Federico Signorini
Massimo Omiccioli

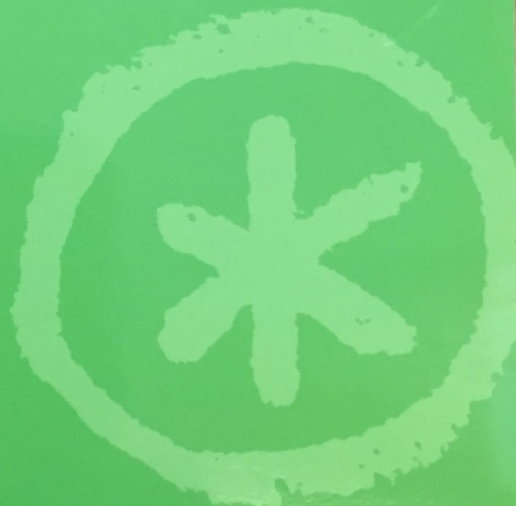
il Mulino Prismi

The second research project (2002-05) was driven by a wish to investigate whether the peculiar features of the Italian manufacturing sector were among the causes of the signs of 'decline' in our economy.

I sistemi produttivi locali

Trasformazioni
fra globalizzazione e crisi

A cura di Massimo Omiccioli



Carocci editore

The third project was carried out between 2011 and 2013, that is to say, in the middle of the global crisis and after globalisation had established itself as the main driving force of development, and global value chains had become ubiquitous. (One can see from the covers that the baton of leadership in the research on local productive systems had gradually passed

from myself to Massimo Omiccioli; it has now passed on further⁴). We asked ourselves whether our small local specialised systems had the ability to withstand the impact of these powerful forces.

To give you a skeletal summary of the main conclusions to date: a 'district effect' exists, but it has gradually weakened during the last two decades, becoming almost statistically insignificant at the end of the period. Some industrial districts have disappeared; others have dramatically changed their structure. Many are still looking for new specialisations and new sources of industrial competitiveness.

This should not sound strange to an attentive student of Giacomo Becattini. One of his main legacies is the criticism of a linear conception of economic progress and of industrial development in particular: the critique of the idea that 'one size fits all'. If there is no single, most efficient production system, anywhere or in any circumstances, whatever the local conditions, prevailing technology or demand configuration, then of course this holds for both the large firm and the industrial district.

⁴ For an update on recent research, see <http://www.bancaditalia.it/pubblicazioni/altri-atti-convegni/2016-sviluppo-urbano/index.html>



Having mentioned what I consider to be one of Becattini's most important lessons, I would like to recall another couple that typify his 'humanistic' approach to economic thinking. In 2009,

calling for a debate on how to ferry our industrial districts beyond the crisis, Becattini wrote: ‘the factors of production which are the most difficult to change are not machines, plants or even strategic infrastructures [...] but the skills and attitudes, current and potential, of the vast majority of human beings in a country. Skills and attitudes, of course, also change over time, but only slowly and along paths that are still largely ignored’. (The quotation is actually from a journal article⁵ and not from the book shown here, but he makes a similar point in both places). And let me add that this point – a legacy from Becattini’s reading of Marshall – is one that economists, and policymakers too, often disregard. Becattini has consistently, and rightly, emphasised the close, secular relationship between the community and the natural environment, between the economy and the territory.

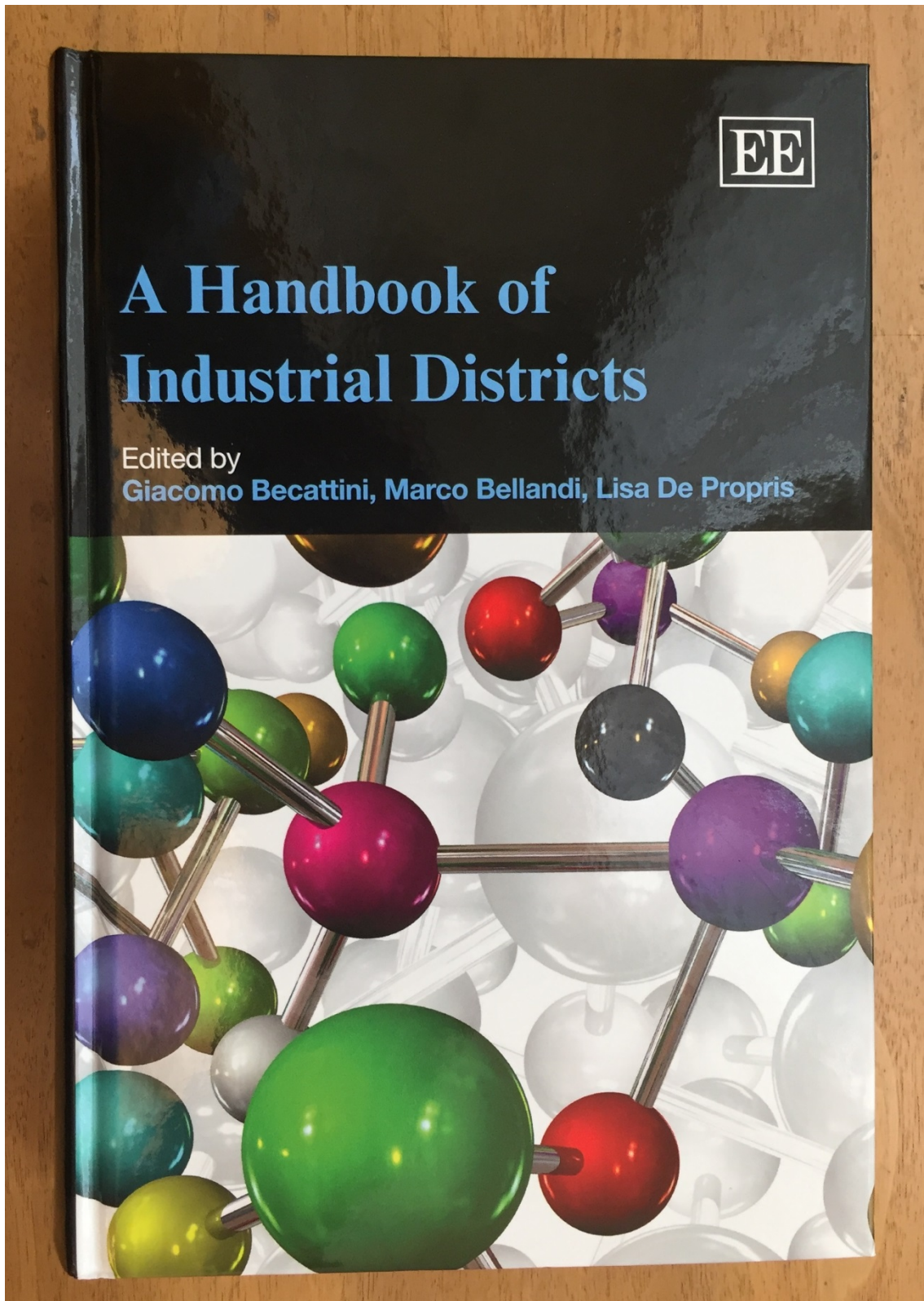
The attenuation and possible disappearance of the ‘district effect’ – whether temporary or definitive, only time will tell – has not exhausted our interest in the spatial features of the Italian economy and in the transformations that are taking place in our local systems. Our third research project showed how the growing role of international outsourcing and the increasing fragmentation of production processes created new sources of industrial competitiveness. Some of them still relate to features of the environment in which firms are located, but the localisation advantage for large urban areas has become stronger. Others relate to the degree and manner of firms’ participation in international supply chains. This change has also seen a strong polarisation between those firms that have taken up the challenge of globalisation, have become international, have embraced innovation and have progressed up the quality ladder, and those that have succumbed to such challenges.

Firms in the former category are more likely to be found in urban markets. Our findings suggest that urban firms now enjoy a significant productivity premium, partly due to their larger size, but also reflecting some local ingredients, such as a higher participation in the labour market, an easier circulation of new ideas and a more skilled workforce.

Conclusion

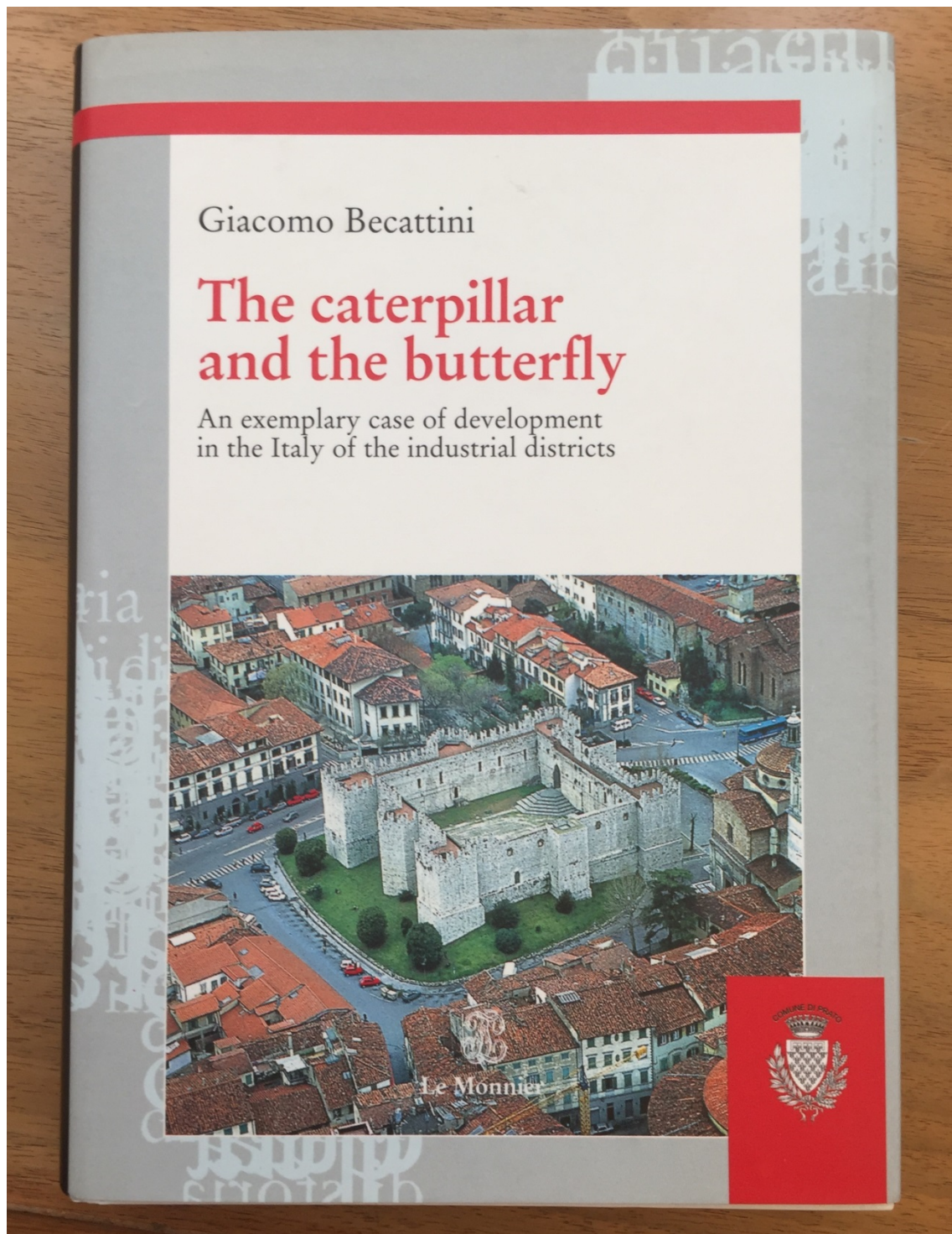
Giacomo Becattini’s theoretical intuition has spawned not only a large strand of empirical studies and research, but also a new and fruitful way of observing and evaluating the dynamics of local development.

⁵ Becattini G. (2009), *Traghetiamo i nostri distretti industriali oltre la crisi*, in “Il Ponte”, 65, 6, pp. 94-96.



His work (the book pictured above, the Elgar handbook, might be considered the coronation of a lifetime's research project on industrial districts) is one of the best examples of how to find 'easy ways of complicating some categories of economic discourse', to borrow Albert Hirschman's words. This intuition is probably also connected with two crucial facts in

Becattini's life: first, his connection with the town of Prato, a traditional hub of small successful firms, and, second, the encounter with Alfred Marshall's work and thought, on which Becattini was one of Italy's leading scholars.



Here is Prato, taking pride of place on the cover of another of Becattini's books, with the symbols of the local identity in full display: the *Castello dell'Imperatore*, the city's coat of arms. Interpreting Prato's ancient industrial vocation in the light of Marshall, Becattini offered a

vision in which the entrepreneurial skills that you can ‘breathe with the air’ of some localities, as he said, become the ‘choral contribution’ of the people to the economic destiny of that locality (*‘coralità produttiva’* are the words he uses in his afterword to the book that resulted from our third research project: as everybody acquainted with him and his work know very well, he was never at a loss for the effective, suggestive phrase).



The geography and history of the places where firms are located then act as a key source of productivity, thus becoming a useful means of complicating the economics of over-simplified models. Here is Prato, and here,



is a young Giacomo Becattini breathing Prato's air, as it were, and pointing to a few industrial agglomerations in the *campagna urbanizzata* between Prato and Florence – a pattern that whoever flies over central Tuscany on a clear day can easily spot from a window seat.

Finally, to conclude, as I started, with a personal recollection, here is an older Giacomo Becattini



in his apartment near Florence, with Fabio Sforzi (on the far left), affectionately welcoming a small team from the Bank of Italy on a visit. It is 2012, and the person on the right had long forgone the pleasures of active economic research to take other responsibilities in the Bank, but was still keenly interested in others' research on local economies in Italy. The person on the left is Massimo Omiccioli, whom I already mentioned, and the one in the middle is Giovanni Iuzzolino, another thoughtful and original contributor to this strand of research. (Both, by the way, especially Massimo, helped me to put together these recollections).

This is my way to close and say farewell and thank you, Giacomo; grazie, Professore.



Grazie.