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Crestive Industries and Economic Competitiveness

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Abstract

I. Prologue

This is a summary of various books and articles I have written for the Barcelona Metropolitan Strategic Plan in order to determine the best way to overcome the problem of manufacturing de-industrialisation currently suffered by this city region.

In them I attempted to determine whether, to that end, it was sufficient to follow the most conventional strategy of promoting high tech manufacturers complemented with knowledge-based services or, on the other hand, it was necessary to implement a new strategy based on promoting quinary services, i.e. creative industries.

In order to reach a conclusion, I had to develop new hypotheses in the field of Urban Economics and introduce new concepts recently formulated in Cultural Economics...

The conclusion has been that the second strategy was better because, whilst it was problematic to promote high tech manufactures in Barcelona —because it is far away from the European growth axis—, growth in creative industries more related to tourism was much more certain and easier to achieve. And this also had the positive effect of urging on the high tech manufacturers required for their productions.

2. The problem

As in the rest of Europe and particularly in manufacturing cities such as Barcelona and the rest of the towns in its metropolitan area, Spanish cities are undergoing strong de-industrialisation in their low-tech manufacturing activities such as textiles, and even in mid-tech activities such as the automobile industry.

The Spanish government, as in the rest of the EU, hopes to counteract this trend with a series of traditional supply policies: encouraging research, development and innovation, improving education, providing infrastructures to integrate markets and liberalising factors and product markets. And, in some cases, with industrial policies that defend strategic sectors and creating and strengthening national champions.

Although these policies may be successful, as is desirable, they are unlikely to achieve the desired objectives in all cities and regions and much less so in those areas more in need, such as Catalonia, because we don't precisely know how to effectively encourage firms to increment their Research and Development.

There are two further generic reasons: the first is that, even in the most advanced countries, new high-tech manufacturers hardly account for a third of the employment of the mid and low-tech activities they are meant to replace, which means that the unemployment generated by transforming manufacturing industries must be absorbed mainly and necessarily by service and not high-tech manufacturing industries. Service activities which, due to a lack of analytical knowledge, are not sufficiently appreciated and, in the best of cases, without the necessary knowledge to guide them. Secondly, because state of the art technology activities tend to be implemented outside old manufacturing cities, where there is more unemployment due to de-industrialisation.

This means that local and regional governments of the areas most affected by deindustrialisation increasingly feel the need to take on new political and administrative powers to become involved in the solution. A proposal that tends to lead to conflict and frustration.

There are also two groups of reasons for the latter. Firstly, the urban economic analysis on which these actions are based is a localised application of national analyses, but it is much more imprecise than the latter due to the additional assumptions that must be made to explain the differential facts arising in each area. Secondly, because local and regional governments do not have powers over the most effective monetary and fiscal macroeconomic variables needed in order to facilitate manufacturing transition. Besides, even if some of them could be shared with the national government, its effects would be minimal because most these instruments have been to supranational bodies. Consequently, all these attempts to redistribute power between national and regional governments usually results in a conflictive demand for political and administrative decentralisation which, even if achieved consensually, turns out to be quite ineffective.

In my opinion, the solution to this problem requires, as a prior step, a new and more realistic formulation of the urban and regional economic analysis whose explanatory variables are subject strictly to local and regional management. One of the possible formulations is summarised below.

3. The consuming city and minimisation of consumption transaction costs

This new formulation is inevitably based on a broader concept of city in which the most significant explanatory variables can be acted on by means of local powers. It also uses other related concepts such as «culture» and «creation», whose traditional meaning must be broadened in the light of new hypotheses being formulated in Cultural Economics.

From this perspective, and unlike the conventional perception, the city is no longer a place of concentrated manufacturing production, fruit of the three types of supply economies which experiment these activities, due to the growing size of firms, industries and cities, as well as the place of residence for its workers. From a historical point o view It is rather a place of service production: it always has been, because manufacturers have been only an urban phenomenon in the last two centuries, whereas cities have been producing services since Neolithic times. And, statistically, today, more than eighty per cent of their employment is in services

But the aforementioned necessary change in emphasis in the analysis, from manufacturing to services, albeit essential as it is starting to become conventional economic thought, is not sufficient. It is more important to state that both the production of urban manufacturers and that of urban services do not lead but follow the residence of the people that work in these industries. As confirmed by daily experience, people fundamentally value cities in virtue of their supplies for consumption, not by their production structure. People essentially emigrate to cities to work in services, but they choose between the different urban concentrations in terms of where they think they can live better. Therefore employment follows residence.

In short, before being a place of production the city is a place of consumption, which is satisfied firstly by means of trade, l and, if this is not possible, by the internal production of goods and services. The ultimate causes of the origin and evolution of cities are therefore those that determine why people gather together in the territory in order to consume.

My central hypothesis in this respect is that, as in all human behaviour, the permanent concentration of consumers in a territory takes place because this allows them to maximise their consumption in terms of quantity, quality and variety and/or to reduce the cost thereof, which they have to do to meet their needs. In short, their satisfaction is greater when they consume together rather than in isolation.

One way of analytically formalising this concept is as follows: in a similar way to Coase's conception of the firm, i.e. as a way of reducing the costs of transaction incurred by individual producers in the market, a city may be conceived as a way of reducing the costs of transaction that must be carried out by consumers in order to obtain the goods and services they require in the market. Isolated in the territory, without being integrated into cities, consumers, at the same prices, would consume less quantity, worse quality and less variety of services and products.

4. Relational services and mesh economies

To a large extent, this minimisation of costs is due to interaction between the economies of supply and demand generated in cities.

Supply economies are the consequence of the increasing scale of firms, which reduce unit costs, of the increasing size of the industry in which they operate, which favours the availability and price reduction of the capital, labour and technology they need, and of the growing size of cities where they locate, which increase the forward and backward linkages between the different firms of different industries and hence their easier and cheaper interaction.

Demand economies, which are probably the most important, have been studied the least. Demand economies, commonly known as network but better described as «mesh» economies, are the benefits perceived by users of relational services, e.g. the telephone, as the number of consumers increases. The more people who use these services, the more useful they become for every other users. In fact, in Information Economics has been found that, until saturation point is reached, the satisfaction of relational service users increases to the square of the number of users of the service, so that demands to participate in relational services increase exponentially.

In order to understand the interaction between demand and supply economies within cities and their effects upon them it is convenient to briefly summarize the evolution o cities through time and the growing and changing composition of services in them.

Cities are composed of services of different income elasticity. Ordered from lesser to greater growth potential they are as follows: 1) Tertiary services, preferably serving families; i.e. restaurants and hotels, hairdressers and beauty services, washing and dry-cleaning, maintenance and repairs. 2) Quaternary services, primarily transaction services to companies; i.e. local and international trade, transport and communications, insurance and finance, real estate activities, but also public administration services, legislative, judicial, police, security and international relations. 3) Finally, quinary services, usually called knowledge-based services or creative industries, because they have more specialised employment with longer education and aim to increase and maintain the human and social capital but particularly to create it; made up of scientific and professional activities, those of information and communication, education, social and hygiene and health, creative industries, those of entertainment and shows.

These three service groups have been closely related to urban origin and evolution in its different stages. Tertiary and public quaternary services were the factors that facilitated the origin of cities in the classical world. Private quaternary services were those that dramatically advanced expansion in the Modern Age. Quinary services, the creative industries, have been the cause of the boom for large contemporary metropolises, accounting for over a third of all employment. Precisely because they are the ultimate cause behind the acceleration of recorded economic growth, which is not based on the accumulation of physical capital, as in a modern quaternary city, but in the creation and accumulation of human and social capital.

This brief typology and sketchy evolution by stages of services and cities shows that cities are mostly a growing concentration of relational services. Almost all quaternary and quinary services are relational services, both private, which have a lot of external economies, and public, which are almost all public goods. The users of all these services benefit increasingly from the fact that there are other users, in different ways depending on the activity but all of them do so in a fundamental way: without a large number of users it would be impossible to provide the service.

In turn, if in order to satisfy these growing demands for relational services, eventually cities start to produce them internally rather than resorting to imports. Then, the aforementioned supply economies arise. Consequently, the growth of the urban system, in a virtuous circle of demand and supply economies, cities grow progressively faster, but less dense.

Urban concentrations are increasingly larger but more decentralised. As the effects of demand economies, which have the form of a mesh, become more important then supply economies, they do not tend to create mono-centric manufacturing cities, as they used to do when supply economies were more critical, but the polycentric service cities of today, which require a circular or rectangular infrastructure system, the opposite of the radial system that still reigns due to inertia. A system of information, communication and transport that connects, but not hierarchically, the various urban centres that grow in the main junctions of the urban mesh, in order to guarantee a comparable provision of the different services required by consumers.

For these reasons all regional and municipal authorities, although they do not have the scientific support to justify it, have always resorted to promoting public and private services in the hope that they could indirectly promote growth in their cities' extractive, commercial or manufacturing activities and, ultimately, their economic growth. On the one hand, they have always believed that there was a close relationship between the provision and the dynamics of these other activities and, on the other hand, this was in any case their strict area of authority. In fact, manufacturing production activities have only been promoted directly when cities, as national capitals, have been able to manipulate the state monetary and fiscal policies for their own benefit.

The proposed focus of a consuming city with service product allows to formulate tentative empirical and theoretical justifications for the aforementioned traditional activity of regional and local governments. It is also an aid to how these policies should be put into practice nowadays, when the services to be promoted in a de-concentrated metropolis design are fundamentally creative industries.

5. Creative industries and their promotion of high-tech manufactures

In fact, for empirical and theoretical reasons it can be shown that, nowadays, creative industries are those that directly generate the most and best-paid employment in the most developed cities. And possibly more surprisingly, they also seem to be the condition for the most high-tech manufacturers to occur in these cities.

The clearest practical example is provided by the evolution of information and communication technologies or ICTs in the United States over the past decade. Both appeared at the same time on both coasts, the Atlantic and the Pacific, near the scientific and manufacturing complexes around Harvard-MIT in Boston, Massachusetts and UC Berkley-Stanford in San Francisco, California.

In addition to the required knowledge, in both places there was also a supply of and demand for their products and factors. Namely industries of information and telecommunication, research, finance, health, military and education, etc., which demanded their outputs and venture capitalists, in addition to capital markets that were needed to finance d their investments . In scarcely five years, however, the west coast had outdone the east coast, in spite of the fact that the latter had had an initial advantage in the computer industry and financial activities. New England wasn't even able to recuperate this loss once ICTs had matured on the west coast, as the overflow has gone to the Mid-West rather than the Atlantic coast.

The explanation given for this phenomenon is that the various demands for ICTs by the different activities employing them on the two coasts could be satisfied from very different distances. Some, the more traditional, could be supplied from far away, yet the more novel required a side by side supply. This led to ICTs being predominantly and increasingly located in those areas where their supply was inevitably more complex, urgent and close. This occurred on the west coast because the most differential and dynamic demand for new information and communication technologies soriginated in the entertainment industries, cinema, television, video and music, which are closely linked to the territory because the interaction between their main agents is very fast and changing. That is why there was, and is, a need to supply them with computing products and services that are very near. Whereas the computing demands of more conventional industries, manufacturers, finance, health and education on the east coast could be supplied from different places. So, although it may be surprising, the success of Silicon Valley should be largely attributed to Hollywood.

6. Culture and creation

From the traditional perspective of a manufacturing productive city, we cannot explain analytically how the demand for creative industries, such as those in California, determines the creation and location not only of the production of new services but also of the production technologies of high tech manufacturing. However, from the point of view of the city as a consumer of services, this seems clearer.

With the new conceptions of culture and creation, which support this point of view, it is evident that the processes of creating new services and new production technologies are specialised parts of the same mental process, which takes place more extensively and intensively in certain social environments. And, more importantly, that the creation of services is related to and precedes that of technologies.

In fact, until very recently it was thought that science and technology were almost antagonistic activities to arts and humanities. In short, it was believed that there were two almost opposing cultures; the scientific and the artistic. Consequently it was believed, and is still largely believed, that humanistic and artistic knowledge not only weren't related to scientific knowledge but were even the opposite to them. This is not the case. The latest discoveries show that science and technology and arts and humanities are specialised elements of the same culture which, in its current conception, is a different and faster way of understanding and transforming the world than that of natural evolution. Culture —artistic and scientific, humanistic and technological— is only opposed to Nature. It is the correction of Nature. This broad scientific-artistic culture is not a passive consumer culture either, as is often believed, at least not in its artistic component. Given its aristocratic roots, it obviously has the aim to teach how to consume better. But even in its limited artistic-humanistic version it also has the bourgeois aim of teaching how to produce better. In short, culture is productive. In fact, it is the most productive activity, since its basic function is creative; it consists of constantly generating new and better knowledge about nature and society in order to use it to produce and consume more quantity and more variety and thereby to survive better. And within cultural activities, the creative industries, scientific and artistic, are naturally the most creative.

Coherently, the new theories of economic growth are being developed in this direction. Economic progress is no longer attributed to the accumulation of physical capital but human and social capital. In other words, to the level of cultural knowledge accumulated by people and societies that, over time, depend on the rate of their creation. From this new perspective of culture in general, and of the economy in particular, the most important, although least studied activity is creation.

Fortunately, in recent years significant progress has been made in this respect in Neuroscience, which is the bridge that is integrating the arts and the sciences within the new culture. Some authors state that the creation of goods and services is a prediction by analogy from different perspectives. What people do to satisfy a need that cannot be met in any other way, and that this occurs by applying the invariant representations of the world formed by brains to new contexts.. The result of creation, hard in science or soft in humanities, is therefore a formulation that, although surprising, is familiar to others, so that it can end up as effective, useful and applicable or not.

There is nothing automatic in creations, not even in the best ones. In order to understand this, we must also correct other prevalent but erroneous conceptions. Firstly, creation is not elitist; it is not the product of a few, an extraordinary act of singular people, as is still believed today. Quite the opposite, in fact. Creation is very democratic. We are all creators of big or small things and, to this end, as for copying, we all imitate each other. Because the essence of culture is imitation, complete and direct or mutated in creation, to meet new needs that are impossible to satisfy with previous knowledge.

Secondly, creations, both material and spiritual, have a lot of diverse levels of application, such as scientific, technological, innovative, organisational, business, etc. These are carried out by different people and with differing chances of success because, at each level, successive creators have to overcome a range of different impediments that depend on the existence of the required factors and on the extension of the necessary markets for their activity. This explains the disparity in creative capacity in each activity in each space and territory, and that some countries are more creative in some dimensions that in others at different times of their history. The practical developments of creations are not indicative of their originality.

However, within this creative ambiguity we can distinguish some relations that are reasonably stable. This is due to the fact that the invariant representations of the physical world formed in people's brains are more homogenous than those formed regarding the social world, because the fundamental characteristics of the physical world change over time and territory less than those of the social world. This means that physical, chemical and biological creations can be used by almost all people in all places, while social, cultural creations are only useful in those societies with compatible cultural values.

7. Creative alternatives: institutions, organisations, discoveries and technologies

If we accept that scientific-technological creations originate via the same general mechanism as artistic-humanistic creations, and that these are interrelated, although some are more universal and others more local, we still need to resolve which of them is most decisive.

It's a critical question because, if the «hard» revolution of science and technology is the determining factor, the world and its nations must apply those patterns of cultural homogenisation that are more in line with the most fundamental scientific and technological creations at any time. Despite the fact that this may come from countries with highly diverse humanistic cultures and hence destroy the local institutional and organisational systems, replacing them with those systems that are most compatible. On the other hand, if the most decisive creations are the «soft» ones, those of art and humanities, the patterns to be followed must be the reverse, i.e. adopting the most effective soft patterns, both institutional and organisational, and only adopting those scientific-technological patterns that are most compatible with these, although they may not be the best ones. This is what universal history seems to teach us, contrary to the dominant technologist view. Samurais abandoned the muskets they adopted to fight the Dutch invaders and returned to their traditional swords once they defeated them.

At least in economic evolution, institutions, i.e. the common and stable ways of behaving for individuals, and organisations, i.e. the various social forms conceived to carry them out, have always preceded the use of mechanisms in order to apply and carry them out more effectively. Formulas and machines have always been concrete manifestations of the social organisations and individual institutions they are based on. The division of labour and the manual specialization carried out in Smith pin factory were the base on which instruments were later developed as Marx explains. So the automated and robot-controlled assembly line was previously a chain of illiterate immigrant manual workers specialised in successive tasks of automobile production.

The technologist conception that puts institutional and organisational evolution as a consequence o previous technological and scientific evolution contains at least two significant errors. Firstly that, although this could be carried out without rejection, it might not be successful because evolutionary patterns are not lineal nor unrelated to time. What is adequate in one space-time is counter-productive in another. Secondly, because the norm for contra-cultural adoptions is rejection.

That is why humanistic creations and the scientific creations most closely related to them only tend to originate and, in any case, be adopted in societies with the adequate cultural values. Even more so if, as has been said before, there is a strong territorial tendency in the relations between both of them.

From the above, it is fairly clear what should be Barcelona's growth strategy. In addition to its manufacturing past and present, Barcelona also has a long history of quaternary and especially quinary services, of creative industries, and has a highly competitive structure and location to carry these activities out, probably the best in Spain and one of the best in the Mediterranean. All this leads us to deduce, at least for this city, that, in order to compensate the negative effects of globalisation, it would be better to expand these services. This would also facilitate the appearance of cutting edge technologies required by its manufacturing restructuring.

8. Human capital but particularly social capital

Whoever leads this project should reverse the priority given today to human capital over social capital. To this end it is necessary to ensure that policies aimed at improving social capital are more effective than traditional policies, e.g. educational, aimed at increasing human capital. Policies aimed at raising human capital encourage people to increase their production and consumption knowledge through different learning processes, including the fundamental process of imitation, but individually in nature. In other words, these processes are built on iconic or indicative references, which illustrate and help people to realise and assume that similarity, correlation and/or causality between data exists. On the other hand, policies aimed at raising social capital encourage the same learning processes but of a social nature, i.e. those in which imitation takes place through social interaction and consensus, so that they can lead to configuration and use of symbolic concepts.

Both these kinds of policies are necessary but the latter conditions the development of the former. In fact, individual knowledge of a scientific and technological nature cannot be very effective if it becomes inapplicable because it lacks the great reliability and trust between social interlocutors required for it to be adopted. This kind of behaviour can only occur if there is a community of beliefs and values, synthesised in symbols, that guarantees strong social capital.

The convenience and sometimes necessity of this community of beliefs, values, implicit norms of behaviour, etc., the usefulness of territorial cultural identity has already been stressed in the sphere of manufacturing production. It needs to be

emphasized that cultural homogeneity and compatibility is much more essential in the case of services. In fact, manufacturers can be exported to countries that are not only culturally disparate but even hostile. On the other hand, in service economies a community of values between the production and consumption spheres is basic both in production as well as in consumption in the service economies. Particularly in the quinary service economies —the creative industries economies. That is why people say that language is a decisive factor for its area of expansion.

But language is not the most decisive indicator, only the most obvious one. The other creative indicators can be more decisive. An economy centred on the production of creative activities must be the most progressive area, committed to the progress of a sub-civilisation.

The way to achieve these indicators cannot be anticipated in quantitative terms because it depends on how societies evolve in the world, both in absolute and relative terms. But, given the above and the belief that people are more interested in relative justice than absolute effectiveness, it is foreseeable that, within their own differential symbols, institutions and organisations, creative societies must achieve the trusting and reliable competitive involvement of their citizens in creating, producing and consuming goods and services.

Fundamentally, therefore, governments at all levels must consequently guarantee the competitive, certain, trustworthy and reliable involvement of their citizens in all their activities. In other words growth, not only progress, is cultural, artistic, scientific, and moral.