

The local and the global: regional individuality or interregionalism?

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(President's Guest Lecture, delivered at the Annual Conference of the Institute of British Geographers, Royal Holloway College, University of London, 6 January, 1993)

Revised MS received 22 October, 1992

ABSTRACT

Thinking about economic spaces has always been divided between two moments of a dialectic: locality and globality; or regional personality versus interregional (international) division of labour. Even in the most extreme versions of these pairs (central-place theory, stage of development theory, dependency theory), considerations pertaining to the other sides were implicitly taken into account. This is also true in the 'new orthodoxies' of 'the new international division of labour' and 'endogenous development of localized productive systems'. Both are single-mindedly focusing either on locality or on globality, and both involve a particular vision of present evolutions within the world capitalist system ('peripheral Fordism' or 'flexible accumulation').

A historic overview of this dialectic is presented in this text. Then the present terms of the regional debate are presented, including the new concepts of governance, industrial districts, networks, etc.

KEY WORDS: Local, Global, Regional, Governance, Industrial districts, Networks

INTRODUCTION

The concept of the local and the global: in spatial economics, whether regional or international, this contrast is not only between objects of study, but is also a contrast of methods. For those who give weight to the local (the 'region', the 'country') the area exists (in the style of the geographer Vidal de la Blache) with its 'personality'; in other words, its natural and human endowments, its institutions, its own 'atmosphere'. And on the basis of this personality it confirms links, which are more or less beneficial, with other regions. This approach focuses on the *internal* structure of an area in order to explain its relationships with other areas, but it is not 'globally' structuralist.

On the contrary, the global approach defines the regions by their place in a more total or encompassing structure. The region and its characteristics are thus the products of interregionalism. For example, the approach would talk of connections from the 'centre' to the 'periphery'.

Recently this methodological conflict has taken a new turn: it is the debate between the approach in terms of *the interregional (or international) division of*

labour and that in terms of *endogenous development*, of which a characteristic form would be the *industrial district*. This paper will aim to make a point in this debate. This debate itself remains an open one, not only in its theory but probably even in reality. The world changes and shows us new shapes and new topologies.

The first section recalls the pre-war orthodoxy: theories of urban hierarchy, 'globally structuralist' theories, but which hide the undertones of 'endogenist' processes. The second section will look at the great post-war orthodoxies, the methodological duel between 'stages of development' and 'dependency theory'. The third section will present the revival of the 'endogenist' theories and the fourth section will go over the more recent phases of the debate. Section five will attempt to go beyond all of these theories and yet will preserve the dialectic of local and global.

THE FIRST ORTHODOXY: URBAN HIERARCHY

The first theoreticians of spatial economy, regional or urban, those of the School of Jena (Lösch, 1940;

Christaller, 1933), started from the following question: given a homogeneous flat space (the countryside dedicated to agricultural and pastoral pursuits), how was it possible to see the emergence of urban concentrations of manufacturing activity or of a tertiary sector? How was it possible to give an account of the hierarchy (in size, in the scope of services furnished, even in wealth) between these agglomerations?

The reply seemed simple enough, within the scope of micro-economic theory which was dominant then: it was that which ensured profit maximization and cost minimization. Every good to be supplied, every service to be rendered, defines an optimum scale of production. And this optimum corresponds to a demand distributed in the homogeneous space. The costs of transport (of goods, of clients or of personal users) are minimized if the producer serves a local catchment market from within the homogeneous space. Urban production will tend to organize itself into networks of 'central places' whose catchments will cover the space. This system is best realized if the network is a hexagonal mesh. With services more and more rare (or with production presenting economies of scale more and more massive) the hexagonal networks will correspond (according to Christaller) to a larger and larger mesh. In supposing that a town be at the node of the majority of the networks and in making these pivot around this 'centre of nodes', a regular concentration of nodes can be seen, priming the towns of second rank.

Thus would be constituted, thanks to some invisible optimizing hand, an urban hierarchy running from metropolitan areas endowed with opera houses, to villages simply endowed with a small grocery. This idea should not make us smile. It is just about realized in the vast north European plain, from Western France to Holy Russia (it is not by chance that it was Lena that saw the maturity of this theory) as well as in the great North American spaces. But above all it invites reflection.

First of all it is a *structuralist* outline. The size of a 'central place' and the scale of activities within it depend on its position in the network of the urban hierarchy. If there are small towns, poorly endowed with important activities, it is because the 'place' for these activities is taken by a larger town, with a superior ranking. 'They' are not going to put an opera house, a department store, and a university everywhere. One can already see in this the theme of the 'world economy' in the terms spelled out by Wallerstein (1974) and Braudel (1980): the 'success' of

certain agglomerations ('centres') is one side of a medal whose reverse is necessarily the impoverishment of its periphery. This mediocrity is only relative: down to the most humble hamlet an urban network always the centre of a periphery... a finer network.

But whose is the invisible hand which concentrates the best activities, the most noble, in certain metropolitan areas? At first sight, it would seem to be competition balanced against the individualist behaviour of optimization. Businesses regularly spread out in space as they seek to evade competition and find fresh clients.

It is not so. First and foremost we know that, in each centre, several competing businesses may generally offer the same service; if possible, in the same street (one need only think of the Sentier of Paris, for clothing). It is the effect of the 'stock exchange', of the 'market' (the 'marché', in the organizational sense of the word market: a cattle market for example). It is necessary to set up in a place where clients look for certain goods or certain services, a certain spot known for the coming together of those who are involved in similar industries. This is not a matter of single enterprises serving discrete territorial catchments. It is an agglomeration of businesses: a 'district' already! When, on the contrary, there is only a single form of service provision linked through the network, one can suppose that it is not truly competition but a planned organization which gives rise to the structure of this 'place'. It was the Church who shared out its priests and bishops amongst the villages and towns (and very often it was they who began the urban hierarchy). It was the State who distributed schools, universities, and hospitals and thus *intentionally* consolidated the urban hierarchy in order to save an area.

In order to take account of this effect of agglomeration, in spite of competition, certain proponents of general equilibrium theory have had recourse to a paradox in the theory of games thought out by Hotelling (1929). Two ice cream sellers have an interest in dividing the promenade of a sea-side resort so that they might place themselves at a quarter and three-quarters of the long distance along it, thereby sharing the beach. But, each seeks to 'bite' into the territory of the other so they are both going to 'stick' to the middle of the beach, thus losing customers at each extreme end!

This game of non-co-operation is hardly convincing. People go to the middle of the beach because they know that there will be various ice-cream sellers (and also pedlars of sun-cream, sun glasses, etc.).

Coming together does not inevitably have a perverse effect: it can offer positive results for the competitors, the effects of *agglomeration*: economies of agglomeration internal to the sector concerned (the ice-cream seller is nearer to the maker of ice-creams) and the effects of closeness external to the sector (somebody goes to buy sun glasses and comes back with an ice cream).

This last effect, internal to agglomeration but external to the sector, thus takes account of a second weakness in the reasoning base of the School of Jena: why admit from the start that there are some metropolitan areas which are at the core of several networks? Because, suggest the theoreticians of 'external effects', all behaviour is not governed by isolable commercial transactions. There is the effect of amazement, of emulation, of informal exchange, of non-financial interaction which are all features of an agglomeration. Already the concept of *atmosphère* dear to Marshall and Betalini can be seen here.

Thus, the most structuralist spatial theory, an inspiration for the most functionalist of administrative management, rests on an imponderable, unmeasurable, non-mercantile principle of organization, specific to agglomeration itself which can indeed be begun and stimulated by higher administrative decisions. In short, certain towns succeed better than others because they 'merit' it, the economic (or cultural) life is more active there, or because the citizens adopt an attitude which is more co-operative or better co-ordinated. From this it follows that the spatial hierarchy is the result and not the cause: all towns could be as prosperous if they set about it equally well.

In taking the town (and the region which surrounds it and shares in its prosperity) like a 'collective subject' the structuralist view can be reversed, as on a Möbius strip, and one can see the two opposing faces of all social science: holism and individualism, structure and trajectory or, in the language of spatial analysis, 'global' and 'local': it is between these two poles that the two great spatial 'orthodoxies' of the 1960s confront each other.

BACKWARDNESS OR DEPENDENCY? THE POST-WAR ORTHODOXIES

The chief weakness of central place theory is that it presupposes a purely homogeneous space. In such a space, the structuring of an urban hierarchy (by the market, external effects or administrative decision) is indeed plausible. The problem is that regions – and

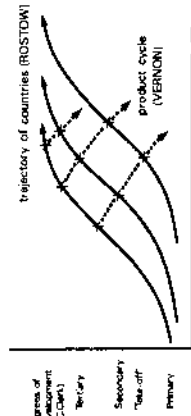


FIGURE 1.

nations even less so – are not homogeneous one to another. In Normandy as in Hesse or Mazuria there are indeed networks of urban hierarchies in the Christaller fashion, structurally equivalent to one another... but the social composition of these towns and their wealth, are far from being alike since these are urban networks of lands which are *heterogeneous* with respect to each other. Some areas are said to be 'developed' and others... less developed. Likewise, there are industrial and residential quarters, rich and poor quarters in Paris as in Mexico, but Paris is not Mexico. The unequal development of regions or nations and of their urban framework was in centre stage during the 1960s and 70s, giving rise to two rival orthodoxies.

The first 'orthodoxy' which dominated the 1960s was the subject of the spatial development of economic activities. Each geographical area (region or country) was thought to have passed through the same stages of historic development in line with the historic scheme of Colin Clark (1951). These stages were pre-industrial (primary), industrial (secondary) and post-industrial (tertiary or even quaternary). But all countries (or regions) did not 'take off' at the same moment, hence the relative under-development of some in relation to others at each point in time (Fig. 1). Such was the theory of *stages of development* of Rostow (1963). Across this difference between geographical areas, new products invented in the most developed zones became commonplace and their production would head for the less developed countries (the *product cycle* of Vernon, 1966).

This sequence outlined by Clark, Rostow and Vernon is not, according to the classification of approaches outlined earlier, 'globally structuralist'. Nothing hinders the trajectories of countries, at the end of their time in the quaternary era, from converging together in a similar internal structure. The delay of some relative to others is not structural: it is the effect of historical accident which has seen certain countries take off before others because of *internal*

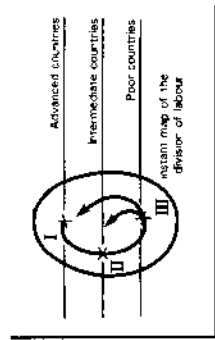


FIGURE 2.

structure. The emergence of the Weberian work ethic, the presence of materials indispensable to the 'first industrial revolution', the weakness of feudalism which allowed the emergence of a bourgeoisie, all the reasons invoked by one or the other refer back to the lineage, to the 'personality' of the country in question. Symmetrically, internal reasons can be evoked in order to explain the 'backwardness' of other countries: difficulties of climate, social structure or conservative ideologies etc. Taking off would thus be a matter of internal reforms and from then on the advance of other countries would be all positive: the last would 'catch up' with the first by importing their know-how. In this sense, this orthodoxy derives from an 'individualist' methodology ('collective individuals' in the form of countries).

Set against this orthodoxy, arising under various guises, stood a globally structuralist theory: *the theory of dependency*. For its supporters, the very cause of under-development in some countries was the development of others, and the wealth of the latter increased the misery of the former. It had once been possible for them to reach the industrial capitalist arena by their own efforts, but the relationships of political domination and then the competition of the world market barred the way definitively to newcomers. Thus there would be lastingly consolidated an *international division of labour* between a dominant centre, based on manufacturing and tertiary activities, and a dominated periphery, exporting primary goods, food and mineral wealth. This unequal exchange prevented the periphery from accumulating the means for its own take-off, and in addition the progress of the competitiveness of the centre would impose ever higher 'barriers of entry' on the periphery.

It was clearly easy to transpose this second orthodoxy from the international scale to that of the interregional, in order to take account of the unequal development of French, British or North American regions. However from the late 1960s onwards the changing evidence forced a re-think: certain peripheral countries were becoming industrialized. Industrial production was becoming commonplace. Could this be seen as 'taking-off', according to the Rostow-Vernon paradigm? Certainly, but it was not necessarily a 'catching-up', a homogenization of space. Indeed one could always read, in the interregional inequalities of the level of qualification in the heart of manufacturing industries themselves, more of an *instant complementarity* (synchronic) rather than a *delayed similarity* in time. So far as concerns the division of labour between the French regions, there

regions or tying them into relationships of subcontracting. But transposed to the international scale, such a theory (where the role of the structuring agent would be confined to multi-national firms) dealt too lightly with the irreducible specific characteristics of local society, of the role of the local state, of the nature of links and local social arrangements, of the method of regulation guaranteed by the local state, etc. The development, in France, of the *regulation approach* undermined the importance of the institutionalized arrangements made by the nation state, and re-centred attention on the dynamic, the *regime of accumulation* engendered by these solutions.⁵ If therefore, international firms were seeking to extend their branch circuit throughout the nations as they had done throughout the regions, then they would encounter a more autonomous agent, the local state, an expression of local 'idiosyncrasy' with its representatives, its conflicts and its ambitions.

In reality, this duality of 'global/local' was already present in the origin of the theory of the regional division of labour as Doreen Massey has noted (1978): The regions according to Lipietz (1977) appear sometimes defined in themselves, in their pedigree, and sometimes defined by their synchronic place in the interregional division of labour'. At the time it was for her a critique: the region could only carry the scars of more global structures which successively left their mark. Some years later, the evolution of Anglo-Saxon radical geography led Massey (1985) to recognize 'The unique is back on the agenda'. Return of the singular, of the regional personality of Vidal de la Blache. And the regulationist critique of the orthodoxy of the New International Division of Labour tended to reverse global structuralism in order to put back at the centre of thinking the 'personality' of the local area, in this instance the nation-state. Others were going to push much further in this direction.

'ENDOGENOUS' REGIONAL DEVELOPMENT

Breaking radically with global structuralism, but also with the determinist theory of Rostow's stages of development, different strands of work eventually came together towards the end of the 1980s to form a new orthodoxy: the success and growth of industrial regions were essentially the result of their own internal dynamic.

The departure point was incontestably the researches of Arnaldo Bagnasco, Carlo Trigilia and

Sebastian Brusco on 'the Third Italy'.⁶ Between the classic industrialized triangle of Milan-Turin-Genoa and the hopelessly persistent under-development of the Mezzogiorno, some towns and valleys were emerging which, by their own efforts, were successfully engaging in the world market through one specific industry. Whilst the first studies insisted rather more on the social characteristics of these regions of endogenous development (the 'social construction of the market'), Becattini (1979) gave a reminder that the type of industrial organization in these regions, a mixture of competitive-co-operation in the heart of a system of small and medium sized business, was reminiscent of the 'industrial district' concept of Alfred Marshall (1900). For him, there were indeed two forms of industrial organization. On the one hand was organization under the sole command of the technical division of labour integrated into the heart of a big business; on the other was the co-ordination by the market and by face-to-face contact ('reciprocity') of a social division of labour broken up between smaller firms, themselves specializing in one sector of a productive process.⁷

But the real stroke of genius was that of Michael Piore and Charles Sabel (1984) who were to interpret the success of some industrial districts as a particular case of a much more general tendency. Referring (perhaps excessively)⁸ to the regulation theory approach, they put forward the view that *Fordist mass production*, rigidly structured, was going to be followed by a regime founded upon *flexible specialization*, whose spatial form was the district, in the same way as the branch circuit was the spatial form of the deployment of Fordism. This *new industrial bifurcation* was indeed a way to emphasize the professionalism of the workforce on the one hand, and on the other the decentralized innovation and the co-ordination (by the market and by reciprocity) between firms: two characteristics already evoked in the social atmosphere of the industrial district.

At the same time, the Californian geographers, Allen Scott, Michael Storper and Richard Walker, impressed by the growth of their own state and in particular by that of Los Angeles, came to similar conclusions from a slightly different base. At first they were interested in *metropolises*, even in megapolises, which they recognized later were patchworks of districts. Eventually, although recognizing the regulationist approach from whose terminology they borrowed, they drew mainly on the neo-Marxist or neo-classical analyses (those of Coase (1937) and Williamson (1975)) on the dynamic of the division of

of the oligopolies and of political society), or through the structural necessity of the new model of development, *flexible accumulation* (itself induced by a technological revolution)? It is here that the debate begins.

From the start a deep gap divides the partisans of the district. For the Italians Becattini (1990) and Carofoli (1992), the 'miracle' districts of Third Italy (those of the years 1960-1980) are not pure economic districts, they are not simply a collective benefit favouring commercial transaction. The atmosphere shows itself in other ways in the regulation of the texture of civil society: the family, 'loyalty' between entrepreneurs and their employees, the role of local collectives,¹² etc. In a word, the 'community' (necessarily small!) in the Tommiesian sense (Gemeinschaft) as opposed to the individualistic commercial society (Gesellschaft). At the other end of the spectrum - the French Courlet and Pecquer (1992) taking a midway position - the Californian Allen Scott (1992) presents us with a 'gigantic accumulation of capital and labour', a purely economic logic presiding over the explosion of the most spectacular megalopolis of the 1980s, his own city Los Angeles (and that of Tokyo). In the strict continuity of the 'American dream' (without ignoring those left behind by it) he praises the godlike genius of the enterprise spirit, its capacity to create and spread, its force of attraction and of integration on those who have lost their roots. He does not leave out the non-commercial forms of internal regulation in an agglomeration, but explicitly points out that they have diminished whilst Los Angeles exploded. And, whilst the Italians prudently conclude with the dangers threatening districts, Allen Scott continues to present the hegemony of the new model of development, *flexible accumulation*, whose outline he sketches: polarization in labour, social polarization, triumph of the market, retreat of the nation state, flexibility of techniques and of workforce.

Critiques of the hypothesis of industrial districts have rushed into this gap. Amin and Robins (1990), Martirelli and Schoenberger (1991) have argued against the district being the 'finally found form' of the exit from crisis, and they put forward three reasons. First, the old Fordism is not dead: big business and its hierarchical network of establishments, branches and sub-contractors are distributed in space by the plainly visible hand of managerial planning. Next, the Italian districts are particular cases, highly dependent on a world macro-economy which baffles them, and on ties of dependency of which they were

unaware. The qualities attributed to them hide their social costs: the over-exploitation of female labour, etc. The 'qualification' is not at all the characteristic trait of this new model. At the end of the day (and this is the key argument of Martinelli and Schoenberger), even if the hypothesis of a new model of flexible accumulation is admitted, it can assume many shapes, and the old hierarchy (typical of the Fordist multinational) can make a return in force under the market pretence of sub-contracting. The autonomy of small entrepreneurs in the years 1970-80 could have been a small interlude in a phase of reorganization of the centuries old concentration of capital: 'order through chaos' as it were. More radical still, amongst economists, the 'regulationists' like Leborgne and Lipietz took the problem back to its source: the new model of development simply does not yet exist, therefore it is useless to claim to lay the forms of spatial development on the Procrustean bed of 'flexible accumulation'. Much better to study the actual living forms of regulation which are being put into place and to think about their coherence.

It is this which, more or less, is reflected in all the recent contributions as they seek to move beyond the caricature-like terms of the debate which juxtaposes the 'international division of labour' against 'industrial districts'. And since it is urban regions that are being discussed, attention is going to focus on the intermediate forms of regulation between the materiality of urban agglomeration and government, legislation and the action of the state. There then emerges an English equivalent: that of 'governance'. In retrospect, this expression becomes clear: it concerns all those forms of regulation which are neither commercial nor under state control. To paraphrase Gramsci's definition (the state equals civil society plus political society), governance is civil society minus the market - plus, it is as well to add, the local political society, prominent people and the municipalities!

NETWORKS AND POLITICS

This change of position immediately brings on two consequences: the substitution of the term 'district' by the more general one of 'network', and the return in strength of the political.

First the *network*. This is a form of inter-business organization whose governance goes further than the market, and has been defined: that is to say to be content with inter-business links, hierarchical links (of dependence) or of co-operation within 'partnerships'.

labour and the external effects of agglomeration.⁹ Scott, in his major synthesis *Metropolis* (1988), undefined the fact that the most recent electronic district of California, Orange County, had not even had a 'reservoir of skilled workers' to start with (contrary to Silicon Valley, founded round the industrial park of Stanford University). Storper and Walker (1989), with almost Nietzschean accents, proposed an emerging model of 'poles of growth' arising from almost nothing.

Thus from the smallest Italian district to the world metropolis, the new technological paradigm of 'flexible specialization' would give the impulse for return, not only of factories and offices to the urban zones, but also to a new quantitative growth of metropolises: at last a way out in spatial terms of the Fordist crisis! The future hierarchy of towns and of urban regions world-wide would be the result of the internal strategies of the districts (or groupings of districts): may the best win!

THE DEBATE

The subsequent debate about the re-emergence of the theme of industrial districts at least bears witness to a considerable shifting of theoretical preoccupations, even amongst those who have doubts about the endogenous dynamic of areas.¹⁰

First, has been the issue of method. There is a grand return of 'industrial organization', the study of the different ways in which different economic activities are linked, at the heart of geographic analysis. Twenty years ago debate was dominated by a model of very 'organized' capitalist development, of 'Fordism',¹¹ based on the illusion of reasoned planning by large firms and by some nations, structuring production, social reproduction and space. The *hierarchy* (in business), the *government* (of society) seemed to control urban and regional 'planning' (a word, in French - *aménagement* - which is very close to 'management'). Today it is the apparent spontaneity of agents in their rival initiatives which seems to have the first and last word, and this great reversal seems the key to the new economic geography. 'Vertical disintegration', 'social division of labour' are surely the chief instances of these attempts.

But since society ultimately forms a whole, this contradiction between entrepreneurial subjectivity and social coherence, must necessarily be 'regulated' in some fashion, even in crisis, and especially to get out of it. And the first result which leaps to our eyes,

is that the materialization of spatial activities, the *economic landscape* in the true sense of the phrase, is the first of the forms of regulation; even before the market, before the first monetary transaction between a supplier and his client, an employer and his employee. In the same way as in Marx's time, 'simple co-operation' - which is the grouping of artisans under the roof of the same workshop - was the first running on the capitalist hierarchy ladder (dear to Foucault's first version of 'panopticon'), in the same way, *agglomeration* with its retinue of potential opportunities that can be carried out at low cost, was - and still is - the first condition for the capitalist market.

And when we talk of low cost, we are not thinking so much of the cost of transport as of the costs of information, of the costs of 'transactions' in their true sense. And when we speak of information we are not talking about standard information which appears on the screens of our computers as once it was published on the market price lists. We are talking of information in a real sense: what is new, what is contingent, or improbable, which emerges from the background noise of all routine activity. Economic geographic studies are converging on another result: computer technology applied to distant exchange of data has done nothing to lessen the desire for agglomeration. In order to seize the opportunities it is necessary to be *there*, to be on the spot, to see with your own eyes, eyeball to eyeball.

In a word, *agglomeration is to space what apprenticeship is to time*. The atmosphere - so frequently mentioned by writers on industrial districts, following Marshall's lead - is the exact counterpart of 'culture', of 'training', of 'experience'. It is the collective form of this creative experience, it is the way through which humans communicate to each other what they have acquired through their individual experience, and it is the collective base of individual subjectivity.

Therefore, when crisis shakes the macroeconomic mastery of nation states, when the emergence of new technologies and the instability of markets shakes the well-established methods of management in large businesses - when in a word the hierarchy loses ground - it is natural that agglomeration comes back into force, as an ante-chamber to and as an arena for the market. At present and for the immediate future, urbanization is winning every time.

And yet? Industrial agglomeration, the 'industrial district', don't they only work for the 'market'? And does the market not come back into force through the transitory weakening of powerful hierarchies (those

'condense' in Toulouse in the 1980s (after decades of state will to decentralize high tech industries out of Paris); and – in spite of the claims of Montpellier the super-endowed – the American observers saw there only 'a cathedral in the desert'.

Here we are coming to the second dimension of the 'change of ground': *the return of the political*. It has already been noted: it is by the bias of the word 'governance' that this entry is made most clear. But Mick Dunford himself aggressively puts the political dimension of the debate straight away (against Thatcherism, of course): independent of all discussion on the form, nature, ethical or social dimension of the methods of governance, the simple fact that the networks *work according to governance* as much as, if not more than, with the market, is sufficient to refute all neo-liberal pretension.

More Gramscianist, Leborgne and Lipietz (1992) show that the *political* choice of one model of development rather than another (a choice which originates in the emergence of a new territorial social bloc at the same time that it solidifies it together) helps to determine the type of industrial network and reservoir of employment, and therefore the direction of development of an area. This raises the immediate objection from Pierre Veltz: at what geographical scale is this choice operating?

Good question. On re-reading their thesis, it would appear that in spite of their denials Leborgne and Lipietz are suggesting the 'country' (the nation-state) when they talk about area, because they place the transformation of capital-labour relations at the first bifurcation node of the post-Fordist scenarios, and these changes depend largely on a legislative framework and national agreements.¹⁴ It remains –

and Pierre Veltz is right to draw attention to it – that all this only has practical interest (and a theoretical one as well) if a margin of manoeuvre for the regional social blocs exists, which would be capable of putting into practice methods of local governance, independent of either national or even continental politics (the EEC, for example) and of the world macro-economy. Bernard Ganne (1992) confronts this problem directly by showing that it is Gaullist politics, modernist and centralist, of Fordization 'top-down' which killed most of the former industrial districts of France in the 1960s; and if they have let themselves be eliminated it is because their local reproduction depended on forms of governance which had little dynamic and which themselves depended on a central 'melinist' policy of systematic protection of vested interests.

d'Avions (SNECMA) CFM-56 motors are products of another district of mechanical high technology forming a half moon on the South West corner of the Parisian agglomeration (the SNECMA arc). This latter district rose from the ruins of a former 'classical' industrial district or rather from the 'red belt' of districts founded on the skilled workers who were at the forefront of the French social movement.

Let us study this latter district (the SNECMA arc). We notice that it intersects with other districts, notably the 'Science City' of Paris (centred on Orsay) and the electronic district of the South. It even touches in its northern extremity the business district of La Defense. Besides being linked in partnership with General Electric in New England, the aeronautical district of Paris is also tightly meshed with other districts (which can also collaborate with Toulouse in particular for on-board electronics). Thus it belongs not only to a 'network of districts' but also to a 'district of networks'. Several sectors are brought together here, between the Western and Southern autoroutes across the Saclay plateau with its nuclear industry. These are often transactional links, but above all they have in common a market for the employment of highly qualified workers, technicians, engineers, and scientists. We can find economies of inter-sector agglomerations, in other words economies of urbanization, 'the atmosphere'. When we remember that equally Toulouse by no means confines itself to Aerospace (it also has nitrogen industries, electronics, etc.), you realize the specific characteristic of the metropolis: it is a 'district of networks', an agglomeration of industries connected together by their proximity and above all by their common 'social type' before getting into commercial transactions.

This is what Leborgne and Lipietz (1992) – in a contribution which enlarges on a concept initially advanced by Garofoli¹⁵ – call an 'area system'. Grenoble is just such an area system: if electronics have developed there it is not only because of internal logic (in the fashion of Silicon Valley) but because Grenoble was *already* and remained an electro-mechanical district linked to the transformation of hydraulic energy. The contradiction between 'professional regionalist firm/large national group' which Mick Dunford mentioned in 1991 about telemechanics, this contradiction had *already* shaken Grenoble in the spring time of Fordism at the time when Alsthom absorbed Merlin-Geurin.

But the specific atmosphere of a district of networks and even just of districts does not take shape easily. We should note that it only began to truly

The contribution of Storper and Harrison (1992) shows us the extreme variety of forms of governance and their relative indifference *vis-à-vis* technology and more surprisingly *vis-à-vis* the degree of the social division of labour. There are districts entirely structured by their great 'core' firms – one could call them *paternalistic districts*, but they have nothing to do with the arguments of the Marshallians. From this, the geography of vertical disintegration can identify itself with the old Fordist geography which Castells and Godard (1974) had once depicted in a Dunkirk-like caricature: a zone of industrial activity flanked by large blocks of low-priced housing and of neighbourhoods for management. This is not at all a survival of the past: Toyota City is the most spectacular prototype, even though methods of the most post-Fordist management have flourished there (Benjamin Coriat, 1991, would say 'Obuistes'): just-in-time, quality without cores, pure 'halos' or rings.

Because its definition is more functionalist than geographic, the network, however, can enlarge in an amazing fashion the spatial potential of these new 'objects' that we are considering. If the essence of new industrial organization is the union of self-governing economic units and of their routine co-operation with one another (social division, plus face to face), the topology of the network is going to depend on the social and technical forms of the organization and of the interface of that which ought to stay 'modularized' on the one hand and 'co-ordinated' on the other. This is exactly why the point of view of the engineer working within his profession, as presented to us by Pierre Veltz (1992), is interesting. From that, a good network of transport and communication can compensate for the loss of certain advantages of agglomeration. Beyond the district (which is a network, even if it is only a 'halo'), stands outlined the 'network of districts' which Veltz conjures up when he talks of industries living by 'straddling two cities'. The most outstanding example of that is the bifurcated aeronautical industry of Paris and Toulouse.

Let us consider this example. The aeronautical district of Toulouse is a hierarchical area around Aerospace, strongly influenced by its state origins (from before the War and for military reasons). Essentially it occupies itself with the final assembly of the product: the aeroplanes. It is also involved with a network of districts of European dimensions (those of the Airbus industry). On the other hand, the Société Nationale d'Etude et de Construction des Moteurs

BY WAY OF CONCLUSION

The impassable dialectic of local and global that was pinpointed in the introduction as being present in all social analysis is found again at the level of all forms of governance. There can only be a certain type of 'regions which win' (or rather a certain fashion of winning for a region) within the framework of a certain type of national state (or confederation): Lipietz, 1985; Leborgne and Lipietz (1990b), and these states will only 'win' in international economic competition if they know how to create this type of 'regions which win'. And the regions of countries which are 'losing' will be condemned to the sidelines, or to an ever greater *structural* subordination (for example via sub-contracting) *vis-à-vis* the regions which win.

It goes without saying that all of this is concerned with who wins *economically*. We have not entered here into the debate about political, social, ethical or ecological criteria of victory in this matter. It could be argued that Los Angeles is in itself an ecological and social catastrophe (and the LA administration might share this opinion), but there are some Greens who are bored in a Frankfurt which they see as 'too small'. Even though Frankfurt is the financial capital of a rising world economic power, Los Angeles 'wins' in the heart of a falling economic dinosaur.

NOTES

1. On this duality, see Lipietz (1988, 1990); and on the notions of local and global, see Benko (1990).
2. The most significant representatives of this are Samir Amin (1973), André Gunder Frank (1969) and, to some extent, Immanuel Wallerstein (1974). For an evaluation of 'dependency' see Lipietz (1985).
3. Entry barriers: minimum threshold of capital and of knowledge skills required together to enter into competition in any given activity.
4. See Lipietz, (1977). The Fordist organization of work is a combination of Taylorism and mechanization. It must not be confused with the *Fordist model of development* which consists amongst other things of a sketch of macro-economic growth (or regime of accumulation), centred on mass consumption and a 'method of regulation', a body of customs and procedures constraining individual people to conform to the regime.
5. 'Regulation theory' has been developed as a result of the work of Michel Aglietta (1976) and a team from CEPREMAP (1977). The most recent and accessible summaries can be found in Boyer (1986) and Lipietz (1985) as well as in the contribution of Leborgne and Lipietz (1992).

6. Title of a seminal book by Bagnasco (1977). Equally important was his article of 1985 and that of Brusco (1982). Independently Stohr and Taylor (1981) were beginning to talk of endogenous development.
7. At least since Marx, *the technical division of labour* inside a firm is contrasted with *social division of labour* between independent firms. The first is co-ordinated by the notions of hierarchy, authority, 'iron law' and 'deductive calculation': the second by the market and by its 'anarchy' (according to Marx). This fundamental distinction has been adopted by Williamson (1975).
8. The reaction of French regulators to Piore and Sabel's book was generally mixed: see Leborgne and Lipietz (1992) – and for more frankly polemical view, Leborgne and Lipietz (1990a) – and Coriat's book (1990). Basically the regulators accuse Piore and Sabel of confusing a form of industrial organization (a technological paradigm) – itself improperly deduced from a technical necessity – with a model of complete development.
9. The juncture of this opinion, centred on the spontaneous proliferation of high-tech metropolises, with the researches on districts in the Italian style 'was not obvious. It did take place however, under the banner of 'flexible specialization'.
10. A review of all the significant recent texts can be found in Benko and Lipietz (1992). For simplicity texts will be quoted according to this book, even if they have been published before that date in another language. The year of the reference will nevertheless give the date of first publication.
11. See note 4.
12. Danièle Leborgne (1991) sheds light on the role of 'compradors': those communes which form associations with a view to urban social and economic planning, informal in the 1960s, formalized in the 1970s and especially active in Emilia Romagna (the electoral region of districts 'at the top of the scale') in Lombardy (that is to say, in First Italy), in the Venice area, etc.
13. Under Carofoli the area system, in a district which remains of a small size (for example Modena), rallies several sectors which interact in the same network (for example an industry and the production of machine tools for this industry).
14. Naturally, however, these authors know enough about Gramsci and Italy not to underestimate the inter-regional variability of hegemonic blocs within the bosom of the nation!
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