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THE EUROPEAN CITY SYSTEM IN THE 21ST CENTURY

Peter Hall

One could say, without too much exaggeration, that Europe's history is the history of its cities. There is of course another history: a history of the patient cultivation of the soil, the winning and processing of minerals, the clearing of the forests, the slow development of home industry in peasant cottages in dead of winter; in Sweden, that is a vital part of the story. But if we revisit the history and ask where were the springs of human advance, then we are drawn again and again back to the cities. We think of the beginnings of true urban civilization in the Athenian agora, the still-surviving triumphs of Roman construction in Nimes and Arles and above all in Rome itself, the flowering of Arabic civilization in Granada and Cordoba, the Renaissance in Florence and Siena and then a little later in Nuremberg and Wittenberg. We think of the sudden liberation of dramatic art in Elizabethan London and of pictorial art a few decades later in Amsterdam. We think of philosophy and literature in 18th century Paris, music in 18th and 19th century Vienna, psychology and design and much else in that same city at the start of this century. We think of the birth of modern architecture in Paris and Berlin in the 1920s, the triumph of the avant-garde in the Berlin of that same decade and in the London of the 1960s. And we think of the triumphs of city planning in Stockholm and Goteborg in the 1950s.

The European city, as Ake Andersson has so well put it, was and is the mainspring of European creativity. Despite the insights of creative minds like Andersson, or the late Philippe Aydalot in France, we are still far from understanding exactly what is that quality of chemistry, which makes one particular city uniquely creative, uniquely innovative, at one particular point in history. Why should the Renaissance have been born in Florence? Why was it that Shakespeare and Johnson and Marlowe and Webster came together in Elizabethan London? Why, in a different sphere, were Manchester and Birmingham the birthplaces of the industrial revolution in the 1770s? Why did Berlin become the high-technology industrial capital of the world, the Silicon Valley of its age, exactly one hundred years later? Why now do Parma, Modena, and Bologna flourish as high-style centers to the entire world?

Geographers are beginning to probe these questions, drawing in part on traditions of inquiry which were started here in Sweden, by that great geographer Torsten Hagerstrand, nearly forty years ago. There are some partial explanations. Everywhere, what counts is the development of a network,

a *filiere*, of contacts and opportunities and knowledge circulation. We are talking here of what academics mean when they speak of an invisible college, or French political scientists term a *cite*. Alfred Marshall, that great British neoclassical economist, captured the essence of it in a famous passage from his *Principles of Economics*, 101 years ago:

When an industry has chosen a locality for itself, it is likely to stay there long: so great are the advantages which people following the same skilled trade get from near neighbourhood to one another. The mysteries of the trade become no mysteries; but are as it were in the air, and children learn many of them unconsciously. Good work is rightly appreciated, inventions and improvements in machinery, in processes and the general organization of the business have their merits promptly discussed: if one man starts a new idea, it is taken up by others and combined with suggestions of their own; and thus it becomes the source of further new ideas. And presently subsidiary trades grow up in the neighbourhood, supplying it with implements and materials, organizing its traffic, and in many ways conducing to the economy of its material (Marshall, 1890: 271).

Think as an economist would think, and treat Italian 14th-century art or English 16th-century drama as an "industry," and the analysis is as relevant as for English 18th-century steam engines or Italian 20th-century clothing.

But it is not in itself sufficient, because it does not provide the first cause, the creative spark, that sets the whole process going. For technological innovation, we can say something: it seems that the critical qualities are not found in well-established industrial centers; rather, they are found in cities that are in some sense peripheral, perhaps because they were at that particular time near the border of urban Europe—as Birmingham, Manchester, and Glasgow were in the late 18th century, perhaps because they were new and rising places challenging older-established ones, as Berlin was when it was challenging Paris and Vienna in the late 19th century. Or perhaps they are peripheral because they were re-applying older aristocratic or craft traditions to new kinds of production, as is the case in Emilia Romagna and Central Sweden today.

Notice, by the way, that in none of these cases was the city involved at all a new one, which in Europe would always be a contradiction in terms; all were centuries old during their creative era, and some were even millennia old. They were new only in the sense that they were new at that particular game: they were challenging the established centers, whether the game was leading the industrial world, or being a major national capital, or making high-quality craft goods for a mass market. And that is even more true in the case of artistic innovation, which appears to arise in cities that are well-established aristocratic or bourgeois centers, places that have built up the surplus wealth needed for artistic patronage. Perhaps, as they recognized in 19th-century England, there are two

kinds of city: those where wealth is being created, and those where it is being spent. But that is not quite fair: pure *rentier* cities are few and far between, and 17th-century Amsterdam was a serious money-making place that then proceeded to spend some of that hard-earned money on art. Rather, artistic cities are what in America they call old-money cities, places where money has been built up over several generations and there is sufficient surplus to think about conspicuous consumption. And they may also be places where the money has come easily: from trade and investment and plunder, rather than from native wit and hard work. That is how places like Manchester regarded places like London at the height of the industrial revolution; and Manchester may have been right.

Be that as it may, it still does not explain why the sacred flame is lit in one place rather than another. There is no automatic guarantee, at a certain point of wealth accumulation, that artistic sensibilities will suddenly be released. If so, there would have been an efflorescence in every central Italian city about 1300, or every European capital about 1800. There is an element of chance, of serendipity, about it; at least, we can provisionally conclude that there is, until some historical researcher plunges deeper.

I have started with creativity, because in the last resort I think that it explains why some cities flourish and others do not; why some go up the league table of cities, while others go down. But it is a slow process, played out not over the length of a football season but over decades and centuries. There is an enormous inertia in systems of cities, because, once in existence, cities, like firms, acquire built-in advantages. Much more so, in fact, because seldom do they depend entirely or even principally on one company or one industry; if one suffers decline, another can be simultaneously expanding. Cities are more like conglomerates than one-product companies. And in particular they acquire agglomeration economies, or positive externalities, through the networks of contact that I have already described.

That helps explain one remarkable fact: that the leading cities of Europe may maintain their position not merely over centuries, but over millennia. If you consider other human organizations, only the Roman Catholic Church seems to have survived as long. Places like London, Paris, Cologne, Frankfurt, Marseille, Milan, Rome, Barcelona were the important places two thousand years ago and are still the important places today. Go on into the early Middle Ages, when a few upstarts like Stockholm, Copenhagen, Munich, and Madrid entered the lists, and the picture is already more or less frozen. Well, you may argue, not quite. Some Roman cities died, and are visited today only by archaeologists. But in every such case, it turns out that the Romans were visited by some kind of odd aberration: they had located their city a few kilometers away from the right place, and the next generation of Teutonic tribes simply corrected their error. Thus, in England, Silchester was replaced by Reading, Old Sarum by Salisbury, and Wroxeter by Shrewsbury. This

small detail did little to change the fundamental picture, though it also might mean that some few stretches of Roman road were abandoned.

A little later on in history, there were a few marginal changes. One or two other places got moved, Uppsala for instance. Some North Sea seaports got badly silted up at the end of the Middle Ages, and declined rather precipitously in consequence: Bruges and Boston are notable cases. A little later on, the first industrial revolution caused some small towns to increase prodigiously; but in fact, during the 19th century *most* towns increased prodigiously. In fact, relatively few really new towns were created out of nothing, even during that period. In England, Middlesbrough and West Hartlepool could be said to be effectively new; so could Barrow-in-Furness and Swindon. Virtually all these were either specialized industrial ports, iron and steel towns, or railway towns. But for every one, even in England there were twenty cases of small market towns that grew; and in every case these were of considerable antiquity. And England was the extreme case, because of an historical accident: since the industrial revolution occurred here first, when technology was relatively primitive, industry must perforce locate on the coalfields. Forty or sixty years later, when it was the turn of Belgium and France and Germany to industrialize, they were not nearly so constrained; industrial processes needed much less coal per tonne of output, and that coal could be moved relatively efficiently by rail. So, though there, too, coalfield towns like Lille and Charleroi and Dortmund grew mightily, so did existing cities far distant from coal. By the time that Germany experienced its major industrialization, indeed, electrical power was already making it possible for any city to become a manufacturing city; and duly, any city of importance did so.

What was happening here was that a minor historical aberration was being rectified. The medieval system of cities now reasserted itself; the new railways followed the old medieval trade routes, because they served cities that represented the market and the potential profit; and so a virtuous economic circle developed, whereby urban success beget success. True, during that time the regional distribution of population in Europe showed some significant changes: by 1900, the midlands and north of England, central Scotland, South Wales, the Franco-Belgian coalfield, the Ruhrgebiet, Lorraine, Upper Silesia all were far more important elements on the map of Europe than they had been a century before. But it was a relative shift; and even then, the most important places in these new regions were old cities like Manchester, Newcastle, Lille, Liege, Essen, Dortmund, and Katowice.

Already, at that point, some visionaries were predicting a new urban order. In England, the exiled Russian anarchist Piotr Kropotkin published his *Fields, Factories and Workshops* in 1898: it predicted what economists today call flexible production, based on the liberating influence of electricity and the internal combustion engine, and with it the decentralization of people and jobs out of

cities. Three years later, in *Anticipations*, H. G. Wells predicted the age of the motorway, and argued that the result would be outward diffusion of cities into giant city regions. In 1915, Patrick Geddes brought many of these notions together in his book *Cities in Evolution*. Yet, even ten years after that, when American planners like Lewis Mumford and Clarence Stein borrowed these arguments, they still seemed fanciful.

You may think that, for someone who advertised a talk about the future, I am dwelling a great deal on past history. But I want to assure you that I am doing so with a purpose. The critical question, in thinking about the future, is to grasp which elements may change and which are likely to remain more or less the same. So allow me, if you will, to come down to the present and ask: which elements have changed over the century that is just coming to a close, and which have remained more or less as they were? And why?

Electricity and the automobile and the truck had precisely the effects that the visionaries foresaw. They liberated homes and jobs from the requirement to huddle closely in overcrowded cities. For industry, they meant more efficient locations and layouts that required more land, which could be found cheaply at the urban edge, next to the new motorways. For people, they meant new homes, also at lower densities, served first by electric railways and tramways and motor buses, later by the private car. The result was a profound change in the form of cities, first noticeable in Los Angeles in the 1920s, thence diffusing to other American cities and eventually, after World War II, in Europe. As the urban geographers say, their residential density gradients flattened. And employment, once heavily concentrated in and around the center, began to spread; cities progressively became less monocentric, more polycentric, so the employment density gradient flattened too. The jobs went out to the suburbs to meet the people, and traditional city centers became relatively less important.

All this was exactly what Clarence Stein had predicted in 1925, though it took perhaps 40 years fully to complete the process. It particularly affected manufacturing and warehousing. But, starting in the mid-1960s and accelerating in the 1970s and 1980s, a number of other processes began to occur more or less simultaneously, which no one at all seems to have predicted in advance. And this time, they occurred more or less simultaneously in America and in Europe.

The first of these, in matter of time, was the decay of the inner city. To some degree, of course, the inner city had always been the home to the poorest and the least well-informed new migrants to the metropolis: they came here because they found compatriots and social networks and supportive institutions here, and because they often depended on a casual labor market that was concentrated here. And, because the inner city contained the oldest and most dilapidated housing, because also there were problems of pollution and incompatible land uses, the wealthier

and middle-class people tended to flee to the suburbs. But this entire process, having apparently stabilized in the 1930s and 1940s, took a new lease of life from the 1950s onward as a new generation of migrants arrived. In American cities they came first from the country's own South, a strange neo-colonial enclave which had in effect been part of the third world, and from Puerto Rico; then they poured in from all over the world, from Mexico and the Dominican Republic, from the Philippines and from Taiwan, from Laos and from Ethiopia, and from the Soviet Union. In European cities they came from different sources: from ex-colonial territories like the West Indies and Bangladesh, Francophone North Africa and Portuguese Central Africa, and from the poorer agrarian economies of eastern and southern Europe.

Like earlier waves of migration, they showed very different speeds and degrees of adjustment to city life. Sociologists are still arguing about this, but there is a degree of consensus about the following propositions: first, that settlers from poor agrarian backgrounds have the most difficulty in adjusting to the demands of an advanced urban economy and to the pressures of city life; second, that these stresses and strains affect particularly the second, that is the first native-born, generation and perhaps the one after that. It is this generation that manifests the now-familiar litany of family breakdown, poor female-headed families, gang membership among young men, petty crime escalating into the breakdown of law and order, and the threat of mass violence, that manifests itself in so many cities today.

The second trend, which intersected rather disastrously with the first, was deindustrialization. By this, in fact, we mean three rather different processes. First there is the long secular trend in advanced industrial countries, recognized by Colin Clark as long ago as 1940, for the proportion of the workforce employed in manufacturing to decline. This of course is simply a product of long-term gains in productivity in manufacturing, coupled with the increase in auxiliary service functions needed to produce and market the output of manufacturing, which we lump together under the heading of producer or business services. It is arguable that these productivity gains have been accelerated since 1970s with the development of automation and robotization, but these are in any case impelled by the second trend, which is globalization and the new international division of labor, leading to the offshoring and hollowing-out of advanced industrial manufacturing economies.

But there is also a third and in many ways most ominous feature of deindustrialization, which is the failure of advanced industrial countries to take the lead in developing new and innovative industries to replace those mature industries, which, as they reach a certain stage in their product cycle, are logically being offshored. I need not dwell on this point, which is incessantly discussed here in Europe—and especially here in Sweden—in terms of the relative failure to move from mechanical and electrical engineering into electronic engineering.

Deindustrialization visited the advanced industrial cities with a vengeance in the recession of the late 1970s and early 1980s, when it decimated urban economies in northern England and central Scotland, the Ruhrgebiet, and the midwest of America. Many of these cities partially compensated during the 1980s by making a successful adaptation to the service economy: we look at phenomena like Glasgow as European Culture City, Birmingham's new Convention Centre, cultural events and science parks in Dortmund, and the equivalents in a score of American cities. But the transition had two major consequences which have not yet fully worked themselves out. The first was effectively to end the careers of many tens of thousands of middle-aged men, who were the skilled or semi-skilled workers in the manufacturing plants. In the United States, it happened particularly to affect black men, who had successfully made the transition from the agrarian to the manufacturing economy in great midwestern industrial cities like Detroit. There is clear evidence, for instance, that the urban underclass phenomenon, so much discussed in the United States, is really a problem of about a dozen older industrial cities, where in effect black men lost the basis of livelihood and so the possibility of supporting their families.

That was bad enough, but the second effect is more ominous: it is an apparently growing divergence between the educational and skill demands created by the new informational services economy, and the products of the urban school systems. This is why the quality of education has now become an obsessive topic in every advanced industrial economy, though I am sometimes tempted to think that each country regards its misfortunes as somehow unique. What does seem to be clear everywhere is a paradox: the school systems are successful in producing more qualified students, but nowhere do they seem to be able to catch up with the accelerating demands of the economy. And this seems to be associated with some kind of polarization among the students, whereby the least advantaged are falling further and further behind the rest. The resulting job mismatch, as it is often called in the United States, is both occupational and geographical: some of the young people are not prepared for the available jobs, and in any case the available jobs are being generated farther and farther from the inner-city areas where they live. The result, in the extreme case of the American urban ghettos, is the development of a subculture more or less totally divorced from the economic and social mainstream, where ethnic minority children grow up as separate from the rest of the country—including, notice, their own middle-class role models—as if they lived in Haiti or Zaire.

The third trend, which was an important contributory factor to that mismatch which we have just been examining, was the migration of the fast-expanding service sector of the economy to the suburbs. To some extent, that had been happening at least since the 1960s as a result of the development of the suburbs themselves: they required shops, schools, clinics, doctors' and dentists' offices,

and all the other service paraphernalia of urban life. But, starting some time in the 1970s and accelerating in the 1980s, there was another trend: what we have been calling the producer service sector also began to move. First, the so-called back offices, the large-scale routinized operations of banks or insurance companies, found it more economic to transfer their operations to the suburbs, for two good reasons. They paid much lower rents, typically only half those they paid in the city centers; and they obtained easier access to their workforce, which overwhelmingly consisted of moderately well-educated females, increasing numbers of whom wanted or at least were willing to work part-time, and who wanted short commuting distances from their suburban homes. Later, in the 1980s, some headquarter operations began to move for the same reasons, leaving behind only small executive suites for the residual functions that needed the traditional face-to-face opportunities that are supposed to be found in city centers. And, at the same time, there was a growth of new service functions, such as research and development for the high-technology, especially information-processing, industry, which from the start sought a campus-like atmosphere in semi-rural surroundings at the edge of the urban area.

These trends were most dramatically evident in the United States, where they produced a new phenomenon, variously described as New Downtowns, Urban Villages, or Edge Cities: totally new city centers, created almost overnight in the middle of green fields. One of the most extraordinary, Tysons Corner in the suburbs of Washington, D. C., was a grocery shop and filling station in the mid-1960s; it is now the largest commercial downtown in the state of Virginia. In Europe, on a less spectacular scale, the same phenomena have converted Reading, an agricultural market center and food processing town, into the biggest office center in South East England outside London, and have made the whole strip on either side Britain's main high-tech corridor; and have effectively urbanized the entire 40-kilometer corridor along the E4 highway from Stockholm to Arlanda airport.

I have several times used the term "strip" or "corridor," and that points to yet another feature: the outward movement of activities as well as residences tends to take place in broad zones of urban growth, variously described—depending on the imagination of the commentator—as Sunbelts or strip cities or megalopoles. Very often these lie along the major communication corridors, such as Stockholm to Uppsala, Heidelberg to Munich, or Marseille to Nice. Sometimes, rather confusingly, they lie at right angles to such corridors of movement, as with the British Sunbelt which runs from Bournemouth on England's south coast up to Ipswich next to the North Sea. I do not know of any satisfactory explanation of this phenomenon, nor indeed of much serious work on the dynamics of large-scale urban growth.

I am sure that some of you in the audience must have been quietly muttering the word telecommunications to yourselves; and it is certainly high time that I introduced it. The fact is that the

impact of telecommunications on the location of activities is at best highly ambiguous. Ever since the invention of the telephone in 1876, its spread has paradoxically been fairly systematically associated both with the concentration of business activities into central offices, and with the growth of personal business travel. Work some twenty years ago, both here in Sweden and in Britain, suggested an answer: the telephone is used for preliminary and more routine contacts, but then actually generates a demand for face-to-face contacts where the really important business is transacted. But, very recently, it seems possible that a significant change may be occurring: improved telecommunications are allowing the complex of producer service industries to loosen up locally while still concentrating at a regional scale.

This is why even headquarters offices are relocating to the suburbs, while remaining concentrating within the general metropolitan sphere of the cities from which they came. I now keep receiving anecdotal evidence in the United States of a great variety of producer service offices that are relocating out of the downtowns, toward the suburbs or the airports, because they say that their business is out there, and because the fax machine has removed the need for many of the relatively routine face-to-face meetings. Time and research will show whether these anecdotal impressions are confirmed. But meanwhile, there is little evidence that the hold of the traditional business centers, seen at a regional scale, is weakening. On the contrary: work in Britain for the European Community confirms that there are quite extraordinary differences in the use of telecommunications as between the most advanced regions, which are of course in every case those based on the leading commercial and governmental cities, and the laggard provincial regions. And the gap, it would appear, is not narrowing: a process of circular and cumulative causation is occurring, whereby the leading metropolitan areas have greater demand for more sophisticated facilities, producing a response in the form of supply, and so on.

There are two possibilities for some radical disruption of this circular process, which tend to be much discussed in the literature. The first is variously described as telework or telecommuting. All kinds of exaggerated claims have been made for it, including predictions that by now half of all Americans would be working from home. The fact that they very evidently are not, indeed that it is hard to assemble adequate case studies of people who are, should give us pause. If it does happen, or to the degree that it does happen, it may not be quite the liberating force that some futurologists have blithely assumed. For instance, I notice recently that in the British publishing industry some firms have been firing their editors and re-employing them as freelance consultants working from home. The employers are freed not only of the rent but of all responsibility for social security payments while the employees carry the risks of running their business.

More serious, I believe, is the other possibility: that some relatively remote urban centers may acquire prominence in particular service-industry market niches. This arises from the cheapening of long-distance telephone service and the development of so-called 800 or toll-free numbers, offered by many service industries such as airline and hotel reservations. One such, offered by a leading American hotel chain, operates out of the Arizona State Women's Penitentiary. This gives new meaning to the notion of a captive labor force and to the significance of location. But more germanely, perhaps, the American newspapers have recently carried stories about two remote cities, Salt Lake City, Utah, and Omaha, Nebraska. The first is booming on the basis of services such as American Express's travelers' check department, which is centered there. The reasons are rather interesting. Salt Lake City, as I am sure you all know, is the worldwide center of the Mormon religion; despite diversification of the population, still around half the population is Mormon. Mormons have large families, and Salt Lake is one of the few places in the United States with a growing workforce of young people. Not only that, they are very well educated, with a high literacy rate. And, because young Mormons are sent as missionaries to foreign countries, they have conversational language skills which are vital in providing international services like travelers' cheques. Similarly, Nebraska as a farm state has one of the best literacy rates in the nation, and the quality of its labor force has made it the telemarketing center of America: that is, for selling things over the telephone, which has almost become a way of life as well as the bane of life in the contemporary United States.

I mention these cases, anecdotal as they may be, because I believe that they may be harbingers of a trend. They have occurred within an urban system on a continental scale, with very few barriers to communication, and with an excellent and uniformly integrated telecommunications system. They indicate that new factors are driving the location of service industries. These factors are the same factors that took these industries from central cities to suburbs a decade ago; but now, a few companies have broken what I will call the psychological barrier, and are locating in places that earlier would have been regarded as *terra incognita*.

These then are possible indicators of future trends. Nevertheless, I want to stress that the centripetal influences are stronger than the centrifugal ones. What appears to be happening with the service industries is that a new urban hierarchy is developing, one based not so much on product as on process. At the summit are the global financial centers: London, New York, Tokyo. They increasingly do business with each other; they act as three centers of a trading system that operates globally, 24 hours a day. Further, since their *raison d'être* is the trading of financial instruments, they are becoming increasingly disarticulated from the mundane world of production. Indeed, London and New York have suffered major losses in manufacturing and related goods-handling employment over the last twenty years. In a very similar position, although handling smaller national markets

with more limited international functions, is the next range of centers: Paris, Frankfurt, Zurich, Milan, Madrid, Chicago, San Francisco, Los Angeles, Sydney, Hong Kong, Singapore. We find that many of these, too, are divesting themselves of production functions, which may however relocate at the periphery of the metropolitan area together with decentralized office functions not needing the proximity of the center. Otherwise, so far, these centers retain the highest-level functions in their very cores—though this too might change.

What is interesting, particularly when we turn to Europe, is the next level in the urban hierarchy. In the United States, where it is much simpler because of that uniform continent-wide economy of which I spoke, researchers have termed this level the regional nodal level. It includes such well-established regional centers as Boston, Minneapolis-St. Paul, Atlanta, Houston, Dallas-Fort Worth, Denver, Phoenix, and Seattle. You may notice that many of these are in the less industrialized, less thickly-settled regions of the north, south, and west. That is no accident, because in the United States these places function as local high-level service centers for very widely spread regions. They used to be railroad centers and now they tend to be the locations of hub airports.

But when we look at Europe, this level is much more complex. In the first place, it includes some capitals of the smaller nation states (and by that, I mean small in population): Stockholm, Oslo, Copenhagen, Amsterdam, Brussels, Lisbon. It also includes the well-established provincial capitals in larger nations, such as Manchester and Bristol, Lyon and Marseille, Hannover and Munich, Bologna and Florence, as well as some in nations of large area but small populations, like Goteborg. Generally, recent research has revealed, cities in both these sub-groups have performed very well. They may have been losing population through out-movement but they demonstrate little evidence of serious economic problems. (And in the United States, I may add, they perform better as a group than the national nodal centers.) There must be an explanation; it may lie partly in economies of scale, but it seems more probable that it consists mainly in the kind of region, or nation, that these places serve. Most of them are areas that do not bear the scars of the first industrial revolution, but are well-balanced economically, including a generous representation of either high-tech or high-style industries for which demand has been growing.

Unfortunately, there is an exception. Those cities in this category that are older industrial cities have not done so well. American researchers call them either manufacturing cities or functional nodal cities, meaning manufacturing headquarters cities. They have tended to lose manufacturing or port employment and have not compensated sufficiently in the producer services category, partly or even mainly because the regions they serve are depressed.

They include places like Liverpool and Newcastle, Essen and Dortmund, Lille and Clermont Ferrand, Cleveland and Pittsburgh, Detroit and Buffalo. They tend to be disproportionately concentrated in certain regions of each country, basically the ones that were developed on the basis of resource endowments between one hundred and two hundred years ago. To some degree, they are losing their economic *raison d'être*. That is rather strong, because—as already noticed—many of them are aggressively seeking to develop alternative economic bases. But there is an element of truth in it.

Below this level, of course, is another and very important one: what can be called the county town. These are the places that serve as administrative and also marketing centers for their surrounding districts: their county, Kreis, department, or Lan. They typically have populations ranging between 50,000 and 200,000, more than that if the surrounding sphere of influence is included. Generally these places, too, have done well in recent decades. The reason, again, is that their regions have done well. They tend to be semi-rural, not old-industrialized, and to have been successful in attracting a range of expanding activities such as high-tech industries, tourism, retirement, and specialized services. The towns themselves have grown because here are concentrated the service functions that have expanded, both in the public sector (local government, health services, higher and further education) and in the private sector (retailing and local professional and business services). Many of these towns now have a university or polytechnic in addition to a major hospital, a local radio station, and so on. Most of them in Europe are of considerable antiquity, and have retained a certain medieval charm which they have sought to enhance and exploit; so they are attractive places to live and to work in.

Overlapping with this hierarchical classification of cities is another categorization: these are the city regions that have specialized in providing particular kinds of services. An obvious example is the university city which also is the center for local administration, such as Oxford or Cambridge, Marburg or Heidelberg, Bologna or Padua, Lund or Uppsala. They overlap especially with the county level of the hierarchy, since they generally tend to be small in size.

This roughly describes the main elements of the urban system as it exists now. I want to conclude by speculating on the main changes that might occur over the next two or three decades. The aim, as I said at the outset, is to distinguish the elements of constancy from the elements of disjuncture.

We can distinguish three major sources of change:

1. Globalization and the formation of continental trading blocks
2. The shift to the informational economy

3. The changing significance of the central city
4. The changing significance of rural areas
5. The changing role of technology

Globalization and the Formation of Continental Trading Blocks

The Single European Market, and its likely extension to include first northern Europe, and secondly east central Europe, must have profound effects upon the European urban system. To find proof of that, consider the effect of the rise and fall of empires on the system in the past. Berlin owed its meteoric rise during the 19th century to the unification of Germany, the course of which—first through a customs union, second through political unification—uncannily presaged the achievement of European unity a century or more later. (It took 37 years from the formation of the Zollverein to the establishment of the Second German Empire; it will have taken 36 from the Rome Treaty to the achievement of the Single Market, and presumably a few years beyond that for the United States of Europe.) Vienna owed its equally catastrophic decline in the 1920s to the collapse of the Hapsburg Empire; it is still one of the very few major metropolitan areas in Europe that is actually smaller than it was in 1914. And clearly, Brussels owes much of its dynamism during the last four decades to its role as *de facto* capital of Europe.

However, we need to remember the basic question: what will change, and what will remain constant? These special cases apart, we have to recall the remarkable stability of the entire system. Despite nearly four decades of a Common Market, the individual urban systems of the different European nations are still remarkably distinct and different, even idiosyncratic: they reflect the very different histories of each nation. Thus the sharply primate systems of the United Kingdom and France and Austria, reflecting a long history of centralized rule, contrast sharply with the much flatter hierarchies of Germany or Italy, reflecting late unification; the equally flat system of the Netherlands, in which a number of cities crowd on the top rung of the ladder, is of course a result of a long trading history and a deep suspicion of centralized power. These different systems are not going to disappear in a day. What we can predict, perhaps, is the following.

First, one or more cities—call them Eurocities—are likely to become relatively more important after the Single Market, and even more so in the event of political unity. The most likely candidate is Brussels, but this is not absolutely certain: Bonn may well press its claims in the aftermath of the return to Berlin, and is extremely well placed in the economic heart of the community. And certain key functions, such as a European Central Bank, are likely to be located in an existing financial center, which logically means London or Frankfurt.

Second, the unification of Germany and the new links with the eastern nations, whether or not these are cemented in some form of association or membership with the community, are likely to give much greater weight to cities of east central Europe. This is because for forty years the existence of the Iron Curtain brought about a quite artificial void in this part of Europe: the cities, cut off from their natural trading and cultural links, simply atrophied. The key players, of course, are Berlin and Vienna, which seem destined to capture some of the importance they enjoyed before 1939 if not before 1914. In particular, Berlin can hardly help developing some of the historic ties it had with its former German possessions in western Poland, if only through weekend tourism; and Vienna is almost certain to do the same in relation to western Slovakia and northern Hungary. We should expect to see both cities become natural airport hubs, as well as important junctions on the new European high-speed rail system.

The result of these two shifts, taken together, is to create a new triangle of power in the middle of Europe. A new Eurocenter, in the area Brussels-Bonn-Frankfurt, will be balanced by major regional nodes connecting east and west. The question thus arises: if we have such eastern nodes, why not also northern and southern nodes? Copenhagen, Milan, and Madrid could well enhance their position as points of articulation for their respective regions, since they would be sufficiently distant from the central region to perform the kind of role that in the United States is filled by major regional centers such as Denver or Atlanta. But one should be ever mindful, here, that the nation states will remain significant units for most purposes: more important than the American state governments, which are powerful enough.

The Shift to the Informational Economy

We should expect this shift to continue, so that cities will increasingly define themselves in terms of the range and level of the information they handle. This being so, we should not expect many major changes except for the rise of the Eurocenter and the new regional centers. London is unlikely to lose its role as global city, though it might have to share it with a future home of Eurofed. Among the second-order cities, or national centers, the critical question will be whether any of them enhance their regional roles. The major commercial or governmental cities of the most populous countries are likely to cement their role or, in the case of Berlin, to augment it: a critical question will be whether the German banks return to Berlin, which in turn is related to the Eurofed riddle. Logically, I am tempted to say, Bonn and Frankfurt would become Eurocities while Berlin became national/regional center; history is, however, seldom so logical.

The Changing Significance of the Central City

All this discussion has of course referred to cities and their regions, taken as aggregates. It has begged the question of what may happen to the distribution of activities within those regions. I have produced plenty of evidence, especially but not exclusively from the United States, for the proposition that the general tendency has been for both people and activities to decentralize. That I believe will continue to be the case, because technology and land economics will work together in that direction. But I should not like to be misunderstood: despite the general trend, absolute levels of activity in some city centers may well continue to increase. That is because their general dynamism will outrun the tendency to deconcentrate. It would be idle to doubt, for instance, that central Berlin will experience a huge increase in employment over the next two decades; the same may well be true of every capital city in east central Europe. But even these places are likely to see strong decentralizing tendencies. The attention of developers and architects is on places like the Potsdamer Platz; I would be looking out beyond the Berlin boundaries, in Land Brandenburg around the Autobahn ring, for some of the most dynamic action.

However, there is another factor. That is the role of central cities as depositories of history and of culture. Even in the United States, where the tendency was always to seek new opportunities at the urban fringe, and where in consequence there were quite special problems of urban blight and decay, there has been a certain renaissance of the central city as a place of tourism. Places like Baltimore's Quincy Market and Waterfront, or Baltimore's Inner Harbor, have become major tourist attractions in their own right. These places, ironically, were not long ago among the least desirable in the entire city; now, cleaned up, their buildings house boutiques and discotheques. And we can see the same kind of revitalization exercise along many European waterfronts, from Liverpool to Genoa, from London to Gdansk. What this should tell us is that old cities have a special fascination, especially for those who live and work in the relative blandness of the suburbs. The industrial past, the past of cotton mills and iron foundries and warehouses, is now as exotic as windmills and old farmhouses. So these depressed industrial cities can occupy a new kind of market niche, as tourist places.

One must not exaggerate this, of course. Every city cannot aspire to becoming a tourist mecca. Nevertheless, it is possible to imagine a future wherein most kinds of activities—not merely manufacturing and warehousing, but also many producer services—migrate to suburban locations, while a range of specialized services—tourism, boutique shopping, education, culture—finds a special place in the traditional centers.

The Changing Significance of Rural Areas

At the end of the 1970s, an intense debate broke out among American urbanists about the so-called Clean Break with the Past. A geographer, Daniel Vining, claimed that a 200-year-old pattern of migration had been reversed: people were now leaving not merely the central cities, but the metropolitan areas, and were returning to their rural roots. Other students of migration found that, although about a half of the so-called nonmetropolitan gain was simply a border effect, whereby people were moving just beyond metro boundaries, the other half involved migration into quite remote rural areas. For this, a number of factors seemed to be involved: the growth of rural boomtowns based on mining, forestry, and other primary resource exploitation; the rapid development of rural tourism, whether in ski resorts or national parks; retirement migration into rural areas that were perceived as quieter, safer, and cheaper than the cities; and a whole variety of odd factors, ranging from the growth in rural college enrollment to ex-hippies turned entrepreneurs.

Vining did some comparative international work on the phenomenon, but ended up with comparisons at a much coarser spatial scale, concluding that there was a migration out of so-called national core regions; this is not quite the same thing. Meanwhile, William Frey, a demographer, concluded that during the 1980s the growth of the metro areas resumed: it appeared that the clean break was a flash in the pan. However, it does appear from the 1990 census that some odd migration reversals are taking place. Blacks, who migrated from southern farms to northern cities in the 1950s and 1960s, seem to have returned in large numbers to the South in the 1980s. A substantial number seem to be retirees returning to their roots, particularly now that life in the South is so much better. Another part may be poor people hit by the depression of basic industry in big northern cities, who have decided that living and child-rearing is simply cheaper in the South.

Why, you may ask, am I dwelling on the American experience when I am supposed to be talking about European cities? Because, very possibly, the same phenomena could occur here. There, Black migrants are returning home, even while new waves of migrants are arriving in the cities of the south and west. Here, too, older generations of guest workers could decide that this was the time to take their savings and their pensions to their ancestral farms, even while new migrant waves are coming in from the east or south. Indeed, it is probable: overwhelming experience suggests that a substantial proportion of people move on retirement, that many do so in search of cheaper living costs, and that some seek to return to ancestral settings. So it would be very surprising if some of the older migrants, who came into Germany or Sweden in the 1950s and 1960s, were not taking the road home.

The Changing Role of Technology

There is one factor that I have kept until last. That is the role of technology. In the past, major shifts in urban population distribution were effected by new technologies such as the steam engine, electric power, and the internal combustion engine. Rather remarkably, we have seen no fundamental advance in urban transportation technology since the 1880s, which saw the birth of the automobile, the electric train, and the streetcar. Some are suggesting that it is high time for another breakthrough, perhaps in propulsion (the electric car is a popular prediction), perhaps in automatic vehicle guidance on so-called smart streets.

It is difficult to strike the right balance between imagination and sobriety here. The fact, not generally remembered now, is that one hundred years ago and even later, electric cars were generally expected to be the general model, while the internal combustion engine was thought an aberration; but the gasoline engine won, and there has been no great breakthrough in battery technology to bring a sudden upset. Again, we should recall that a quarter of a century ago the media were full of the coming age of the automated car, but it never happened. Against that, the technological optimists will say that there is now strong and even irresistible pressure for the electric car coming out of the regulators in California, and that the motor manufacturers are simply having to respond; within twenty years, maybe a fifth of the new cars sold there will be electric. Again, electronics in and on the car and the street have made enormous progress since the 1960s, and it is now perfectly practicable to drive to your destination guided by an on-line electronic map; while fully automated urban transit systems are running successfully in Lille, London, Vancouver, Kobe, and other places. So it is not that fanciful, any more, to imagine all this brought together in the form of electric cars taken to their destinations on electronic guideways. Nor is it at all fanciful to imagine these vehicles being charged for their use of roadspace, since Oslo is already doing it and Stockholm looks like it might do so shortly.

The question is what all this might do to the form of cities. Paradoxically, it might greatly increase the capacity of streets, particularly arterial streets, thereby allowing an increase in automobile dependence and weakening the viability of traditional public transportation. Indeed, the possibility is that it would become an alternative form of public transportation: the new system might provide an energy-efficient, non-polluting form of universal mobility. But a great deal would depend on its extent, and in particular on what kind of access it provided to low-density suburbs. If it proved technically or economically impossible to achieve this, it might encourage the development of more compact urban forms based on the new guideway systems.

Frankly I do not know the answer, and I am sure that no one else yet does so. Meanwhile we can be sure that one technical breakthrough is already with us, and that is high-speed ground

transportation. During one generation, the maximum speed of public ground transportation has risen from about 80-100 kilometers an hour, to 300 kilometers an hour; during the coming decade it is likely to rise yet further, to about 350 km./hr. This is truly the only breakthrough in ground transportation this century, and is comparable in importance to the coming of the commercial jet airplane in the 1950s.

We can be certain that, like all previous breakthroughs, it will have important consequences. The most obvious is that cities served by the new systems will benefit at the expense of those which are not, as one can already see on the original TGV-SE corridor between Paris and Lyon. The second is that the major impact of the new trains will be in the time and distance band where they enjoy the maximum advantage over the automobile and the airplane—that is, approximately between 250 and 700 kilometers, or a journey of between one and three hours.

If we put these two propositions together, we can immediately see that the trains will favor the existing major cities at the top of the European hierarchy—that is, the global, national, and regional cities—but particularly in what is often called the golden triangle at the heart of the European Community, the corners of which are approximately Birmingham, Marseille, and Venice. More accurately, it is now likely to become a golden quadrilateral with Berlin as the fourth corner. At the center of this geometrical figure—that is, at the very core of Europe—that smaller figure between Brussels, Bonn, and Frankfurt is likely to acquire a unique nodality, since it will be accessible within a two- or three-hour train journey from so many major cities in the extended Community. We might even call it the magic circle.

Further, as the French have well realised in their latest regional plan for Paris, a key element in the future equation is likely to be the point of interface between the new trains, carrying the shorter and medium-distance traffic, and the longer-distance air services serving journeys of more than about 800 kilometers. The main beneficiaries here are the airports for which TGV connection is already firmly planned: Paris Charles de Gaulle, Brussels, Amsterdam, Frankfurt. The cities served by these airports are likely to benefit likewise. And it will not escape your attention that again, these happen to be the cities in the magic circle.

Some Final Reflections

What does all this say for policy? I would not presume to tell you what would be a correct Swedish response. But I will try to sum up on what I think are the most important points I have tried to make.

The first point hardly needs underlining: it is the enormous inertia of history. It takes a very long time, perhaps centuries, perhaps even millennia, to bring about major change in an urban system such as Europe's. The great cities of this continent were already great one thousand years ago, are great now, and will doubtless be great in another thousand years' time.

Second: insofar as there are levers of change, two appear particularly important. One is technology. New means of transportation and communication, in particular, can subtly affect the advantages that one city has over another. Railways made a difference, so did motorways and the jet airplane; so now will the high-speed train and advanced telecommunications. But observe the effect of inertia, again: much of the time, the effect of the new technologies is to cement the positions of the already-established places. These are the places that get connected first, these are the places with the best quality of service, and so success breeds success.

The other is international politics and in particular the rise and fall of nations. Great cities, in particular, are very sensitive to the power of the political units they serve, be they small principalities, nation-states, or empires. We have just seen the collapse of the last great colonial empire, thirty years later than that of the others, which was an oddity because it was land-based. But we have been seeing, in its place, the rise of a different kind of empire: a voluntary union of nations forming a single market and eventually, no doubt, a single federal entity. The places that are designated the administrative and financial centers of this new empire will certainly prosper as a result, as ancient Rome and 16th-century Madrid and 19th-century London did in their time. But we should notice that this is above all an economic union, and that great cities may prosper as economic command and control centers even although they have lost a formal political role: look at London, thirty years after dismemberment of the British Empire. Here, the race is a far more open one: the outcome will not be determined simply as a result of the decisions that locate, or relocate, the community's institutions.

Technology and politics together will produce a new map of urban Europe. It will look uncannily like the old one. But certain places will augment their advantage, and chief among these will be two groups. The first are the key cities of the magic circle. Membership in that circle is partly predetermined by geography, but the precise shape of the figure may change according to events, personalities, and even pure luck. The second are what one can call the new regional centers: cities that are located unambiguously outside the magic circle, but are well placed geographically to connect with it either by high-speed trains, or air service, or preferably by both. There are clearly a number of competitor places for this category, and the outcome is not yet certain. I think it may well depend on a number of factors that might go one way or another: the emerging pattern of the high-speed train system, the real probability of airline deregulation and the consequent development of

new companies with new strategic hub airports, and finally the sheer ability of a city to sell itself to international investors.

And that really is the final point to underline: geography creates probabilities, but the outcome is not certain. Because the old resource-based industries are in decline, because the future lies with the development of the informational services, competition between cities is much more open than it was. One of the most fascinating recent features, for the student of urbanism, is the development of what can variously be called advertising, or public relations, or image-building on the part of cities. Cities now in effect market themselves, and project an image of themselves, just like rival brands of automobile. One result, as some observers point out, is the rise of what they call the post-modernist city, a place where image and illusion counts for more than reality and may indeed conceal the reality. Be that as it may, cities now make their own futures in a way that was never quite true before, within a world that is increasingly competitive on a global scale. The future, therefore, is at least partially open—and perhaps we shall see some surprises.