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**The Pattern of Urbanisation
in Western Europe 1960-1990**

Report for the Directorate General XVI of the
Commission of the European Communities

as part of the study
*'Urbanisation and the Function of Cities
in the European Community'*

contracted to the
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0 Executive Summary

This report studies major trends and changes in the urban system in Europe over the last thirty years (1960-1990). It examines the present state of urbanisation and considers the cycles and dynamics of urban development, urban growth and urban decline and current and future issues of urban development in the twelve countries of the European Community, including the united Germany, and in Austria and Switzerland. Its findings and conclusions, however, are generally valid for the whole of Europe.

The report argues that the large cities and the many small towns of Europe play a vital role for the economic and social development of Europe as a whole. It highlights imbalances in the urban system in Europe which threaten to increase in the future. These imbalances, although rooted in the history of the countries of Europe, result from the growing internationalisation of the economy accelerated by the emerging Single European Market.

A number of urban issues which are raised in this report require attention and continuous and careful monitoring and cushioning intervention at the national, regional and local levels of policy making and, within the constraints given by the subsidiarity principle, also at the Community level.

The report is a first deliverable of the study 'Urbanisation and the Function of Cities in the European Community' commissioned by the Directorate General for Regional Policy (XVI) of the Commission of the European Communities in preparation of a Community document on the use of territory and regional policy within the Community at the beginning of the next century ('Europe 2000'). Much of this report is preliminary and exploratory. Its findings and hypotheses serve as a point of departure for the remaining work and may be complemented or modified by later results and conclusions.

Background Trends 1960-1990 and Beyond

Throughout human history cities have been pacemakers of change. History's great cultural achievements, technological innovations and political movements originated in cities. Cities are the incubators of new economic activities and lifestyles. Yet at the same time cities are also themselves subject to the secular and global trends they help to generate. The patterns of urbanisation in Europe therefore cannot be understood without taking account of the dominant background trends in fields such as population, migration, lifestyles, the economy, transport and communications, and environment and resources (see Table I).

In summary, the future of the urban system in Europe will be co-determined by a multitude of powerful and partly contradictory trends. Given the stability of political structures and behavioural patterns, but also the growing awareness for the need to protect the environment, it is useful to take account of these trends as a possible framework of urban development in Europe in the 1990s and beyond.

Table I
Background trends of urbanisation.

<i>Field</i>	<i>Background trends</i>	<i>Implications for cities</i>
Population	Decline of birth rates; ageing of the population.	Unbalanced demand for public infrastructure; high demand for health and social services; urban decline in the North and North-West.
Migration	Continuing rural-to-urban migration in peripheral countries; international migration South-North and East-West growing.	Housing and employment problems in target and gateway cities in prosperous regions.
Households/ Lifestyles	Decreasing household size; higher labour force participation of women; reduction of work hours; new life styles.	New social networks, neighbourhood relations, locations and mobility patterns; need for new services and new housing, land and transport policies.
Economy	Reorganisation of production and distribution; polarisation of firm sizes; liberalisation, deregulation, privatisation; internationalisation.	Increased competition between cities; innovation-oriented local economic policy; technology centres and parks; however, also intra- and interregional disparities, social tension and eroded public services.
Transport/ communications	Technological change stimulates personal mobility and goods movement; road transport dominant; growth of high-speed rail, air transport, telecommunications.	Dispersed urban development is further stimulated; efficient public transport in small and medium-sized cities difficult; polarisation between European core and periphery continues.
Environment/ resources	Transport and industry-generated pollution, energy conservation, urban sprawl important; industrial pollution in South European countries and East Germany urgent.	Cities in all European countries are affected; car restraint, anti-pollution, energy conservation, land use control policies are required.

Patterns of Urbanisation 1960-1990

The present urban system of Europe is the evolutionary outcome of more than two millennia of activities of people living in or migrating to Europe. They founded, built and expanded human settlements at suitable locations and made them into cities, centres of culture, trade and industry. Cities flourished because of their natural resources or agricultural hinterlands, the skills of their citizens or their strategic trade location or because they became political or ecclesiastical centres of power, information and communication.

Urban Europe in a Global Perspective

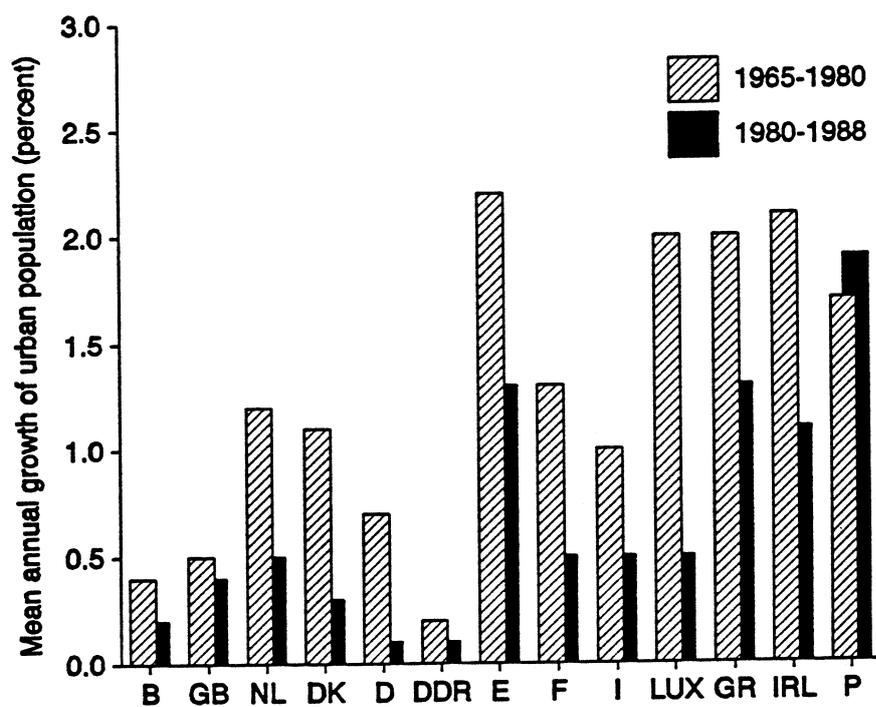
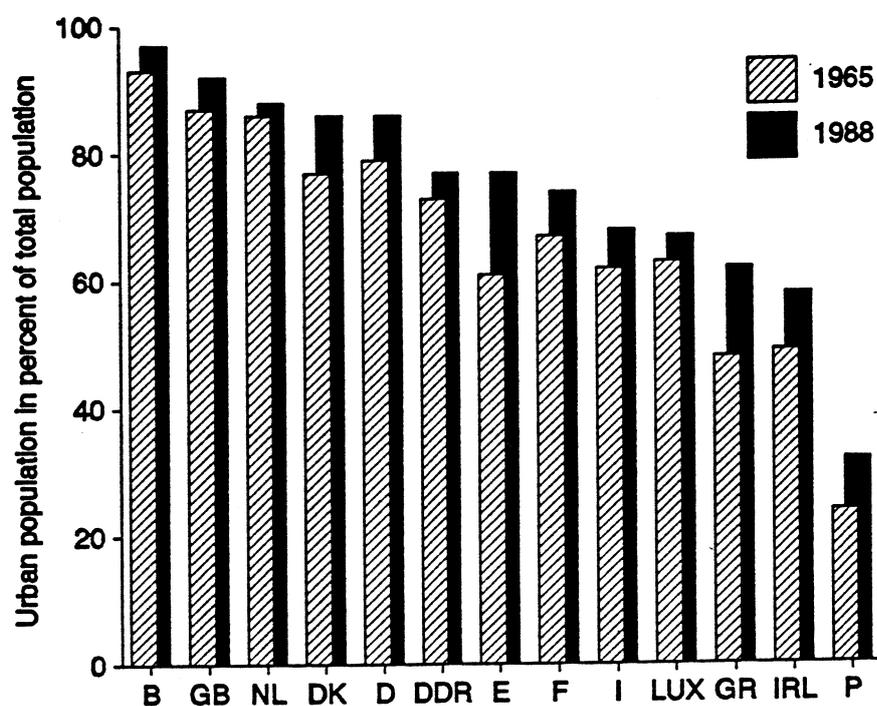
According to UN estimates towards the end of this century 50 percent of the world population and 80 percent of the population in industrialised countries will live in urban agglomerations. However, in the year 2000 only three of the 20 largest cities will be in industrialised countries and *none of them in Europe*. It is useful to be aware that compared with urban systems in other continents and nations the urban system in Europe is relatively balanced and compared with the average African, Asian or South American city even the most serious problems of the cities in the Community appear light. Worsening living conditions in Third World cities may encourage or even force people to migrate to the gateway cities of the continent. Consequently it is crucial for the future of the cities in Western Europe that the living conditions in the cities of the Third World are improved.

European Level

The state of the urban system in Europe in 1960 reflected the historical processes which had transformed Europe into its cultural, economic, physical and political shape. Overall, the urban system has not changed very much since then. However, during the last three decades - a relatively short time in the history of Europe - technological and political innovations have facilitated and accelerated the internationalisation of regional economies in Europe. This in turn has strengthened or weakened the role and function of cities in Europe as well as in their national or regional contexts, depending upon a variety of factors.

- o ***The urbanisation process:*** After the decline of the cities of the Mediterranean in the wake of the fall of the Roman Empire, the urban system of Europe reemerged in the 10th century. From then on until modern times it remained relatively stable. Growth of cities was slow and, apart from devastations by wars, epidemic diseases or natural disasters, so was urban decline, e.g. when trade routes changed such as in the case of Venice, the port cities of Flanders or the Hanseatic League. However, starting in the second half of the 18th century, an unprecedented wave of urban growth swept over the continent.
- ***The economic transition.*** This primary phase of urbanisation first took place in the industrial cities of the British North-West in the second half of the 18th century, and during the following one hundred years spread to the continent, first to the countries of North-West Europe, to the Netherlands, to Belgium, North-West France and to Germany. It took well into this century before massive industrialisation started in Northern Italy and after World War II, in Southern

Figure I
Degree of urbanisation (top) and urban growth (bottom), 1965-1988.

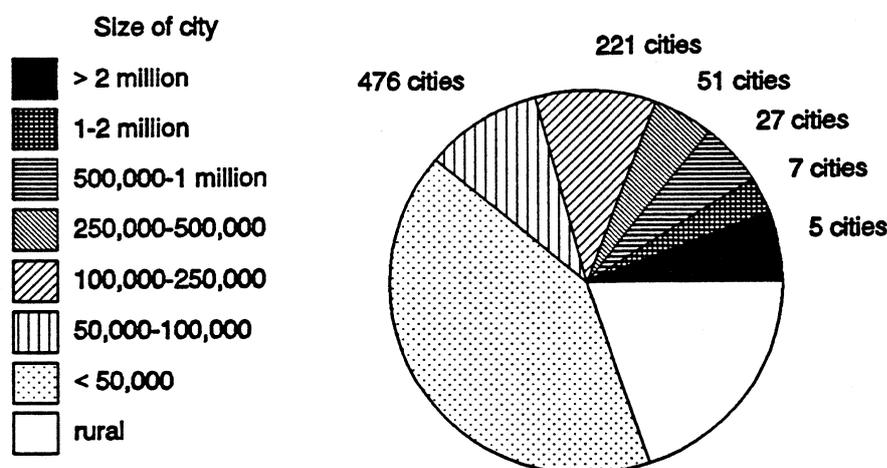


Sources: World Bank, 1990; United Nations, 1987; Statistisches Bundesamt, 1990.

Germany and Southern France. Large regions in the Mediterranean countries of the Community are only now passing through this primary phase of the economic transition.

- *The demographic transition.* Growing affluence and advances in medicine and hygiene in the early 19th century reduced mortality, in particular infant mortality, with the effect that population growth accelerated and more people moved into the cities to find jobs in the growing industry. The sequence of declining mortality and subsequent declining fertility, the demographic transition, ended the period of urban growth, and where there was no international immigration, cities started to decline in population.
 - *The urban transition.* The wave-like diffusion of the economic and demographic transitions from the North-West of Europe to its South-West, South and South-East helps to explain the different phases of urbanisation coexisting in Europe at one particular point in time. In the North-West, where both the economic and demographic transition have almost been completed, deindustrialisation and deurbanisation is found, except where the next phase of the economic transition, the shift from manufacturing to services has already been achieved. In the regions of the third wave of industrialisation, the South-East of England, the South of Germany, the North of Italy and Southern France, the post-industrial city is emerging. At the same time in parts of Spain, Portugal, Southern Italy and Greece some cities still replicate the growth period of early industrialisation and urbanisation.
- o Urbanisation levels:* By 1965, only Greece, Ireland and Portugal had a level of urbanisation below 60 percent. Belgium and the United Kingdom had the highest level at 93 and 87 percent. By 1988, Greece had exceeded the 60 percent mark with Ireland just behind at 58 percent. The most significant rate of growth of the urban population between 1980 and 1988 was observed in Portugal, Spain and Greece (see Figure I).

Figure II
Urban population in the EC by city size in the 1980s.



Sources: Census data; Statistisches Bundesamt, 1988.

-
- o **City sizes:** In the mid-1980s, 90 cities in the European Community had a population of more than 250,000. However, eight out of ten Europeans live in smaller communities (see Figure II). During the last three decades cities in Europe have continuously grown beyond their administrative boundaries. Thus it has become more difficult to define the actual boundary between city and countryside. Efforts to capture the sphere of influence of an urban economy by the concept of *functional urban region* give a different picture of the urban system: four out of ten Europeans live in urban agglomerations; if major metropolitan areas with a population of 330,000 are taken into account, every second. What general urbanisation figures do not show is the degree of balance of the urban system. In 1960, for example, in Austria, Greece and Ireland more than half of the urban population lived in the largest city, i.e. in Wien, Athinai or Dublin, whereas in the Netherlands, Belgium, Italy, Germany and Spain the primacy rate is below 20 percent. There is a trend away from the large cities except in the former GDR, Greece, Italy and Spain where the capital city has continued to increase its dominance. A similar picture emerges if all cities with a population of over 500,000 are taken into account.

 - o **City hierarchies:** At present the actual hierarchy of cities in Western Europe is as follows (see Figure III):
 - There are Paris and London, undoubtedly the only two global cities of Western Europe at the top of the hierarchy.

 - They are followed by conurbations such as Rhein-Main (Frankfurt), København/Malmö, Manchester/Leeds/Liverpool, the Randstad (Amsterdam/Rotterdam), the Ruhrgebiet (Dortmund/Essen/Duisburg) and Rhein (Bonn/Köln/Düsseldorf).

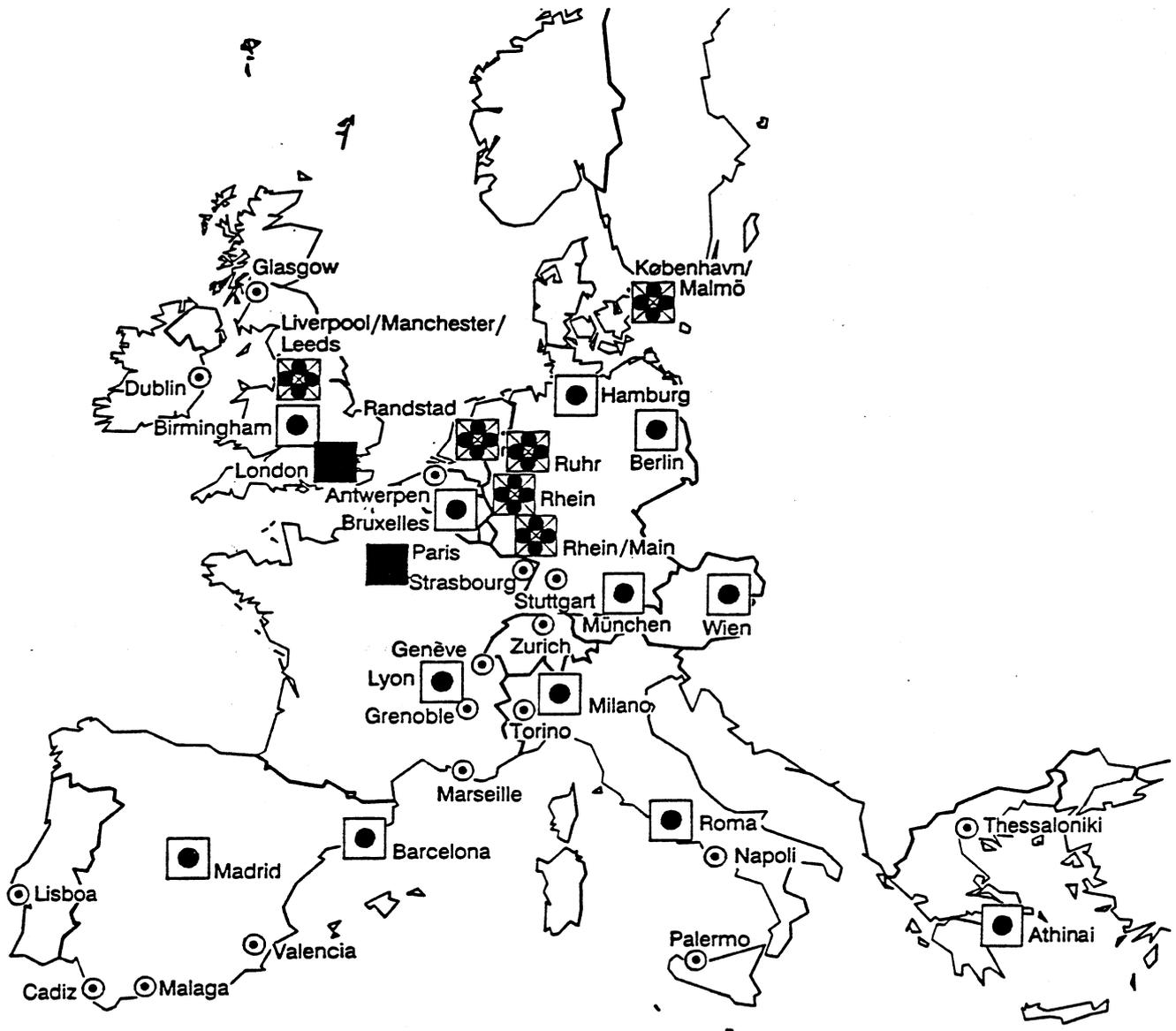
 - A similar importance on the European scale have a number of larger European cities ('Euro-Metropoles') such as Athinai, Bruxelles, Birmingham, Wien, Lyon, Milano, Roma, Madrid, Barcelona, Hamburg, München and Zürich. These cities perform essential economic, financial or political and cultural functions for Europe as a whole. After the re-unification of Germany Berlin, too, will undoubtedly become again a city of major European importance and, in the long run, may even become a candidate for a global city.

 - A third category are national capitals and other cities of European importance such as Dublin, Glasgow, Lisboa, Strasbourg, Stuttgart, Palermo, Torino and Napoli. These cities are completing the network of cities of European importance although their function is mainly a national one.

 - Below this level, and depending on national definitions of central places which exist in a few number of European states (e.g. Denmark, Netherlands, Austria or Germany) various levels of lower urban hierarchies follow.

 - o **Urban decline and urban growth:** In recent years cities in North-West and Central Europe have lost population through outmigration, either because as a consequence of economic decline no jobs were available or, in the case of economic success, because households were driven out of the city by more profitable land uses. Most cities in Southern Europe, on the other hand, have continued to grow. There the informal labour market has absorbed the migrants still arriving from the countryside. However, several large cities have not followed this simple pattern. London has lost population, while Paris has showed moderate growth. Düsseldorf, København and Frankfurt have declined, whereas München and Bonn have gained.
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Figure III
The urban system in Western Europe.



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-  Global metropolis
-  Conurbation of European importance
-  Euro-Metropolis
-  Cities of European importance

- o Recent spatial trends:** The development of the urban system in Europe during the last three decades has been determined by the simultaneous existence of cities in different phases of the urbanisation process. Under the influence of the demographic, economic and technological trends summarised in Table I, this has resulted in three distinct spatial trends: the growing disparity between cities in the core and at the periphery of Europe, the divergence between the North and South of Europe and an emerging East-West divide.
- *Core vs. periphery in Europe.* The rapidly growing internationalisation of regional and national economies has tended to favour cities in the European core (Belgium, Germany, Netherlands, Central and Northern France, South-East England) over those at the periphery (Scotland, Ireland, Greece, Portugal). Cities in the core of Europe have comparative advantages in terms of accessibility, available services and diversity of communication and culture.
 - *North vs. South in Europe.* There is a clear divide between the 'North' and the 'South' of Europe. Population growth in the cities and urban regions of the affluent North - which also includes parts of Central Europe (Germany, Austria and Switzerland) - has virtually come to a halt, whereas the cities in the South continue to grow as they are still in an earlier phase of industrialisation and urbanisation.
 - *West vs. East in Europe.* The unexpected opening of Eastern Europe has recalled an old spatial dichotomy, the East-West divide. It may well supersede the North-South divide and become the dominant political issue of the next decades. Some German cities (Berlin, Hamburg, Hannover) will benefit from the new geopolitical situation, but also cities in Denmark, Austria and Northern Italy. In few years from now the future development of Berlin may make a reassessment of spatial trends in Europe necessary.

There is little evidence that urban polarisation between centre and periphery, North and South, and East and West in Europe can be easily reduced. In the past, regional policy efforts at the European and national level to narrow the gap between centre and periphery, between North and South have only partially been successful (e.g. in Spain), although by creating jobs, providing public services and improving living conditions in assisted areas they have contributed much to stop the further widening of regional disparities.

- o City Networks:** Alarmed by increasing-world wide competition, more and more cities in Europe respond to initiatives of forming transnational urban networks. Through networking cities are able to establish beneficial connections, improve flows of information, develop best practise, pool financial resources and share development costs of innovative projects. Whereas traditional city networks have operated on a national basis only, (as the influential *Deutscher Städtetag in Germany*) or with very general objectives (such as the *Union of Local Authorities in the UK*, the *Union of Capitals of the European Community* or the *Council of Local Authorities and Regions in Europe*), the emerging new transnational urban networks (such as the *Eurocities Group*, *POLIS*, the *Automobile Cities Group* or the *Commission des Villes* or the recently established *Network of Small and Medium-sized Cities*) are more action-oriented. The European Commission assists such networks by supporting their efforts of communication and mutual information, of identifying and realising joint projects and of transferring knowledge and experience among each other.

National/Regional Level

The pattern of urbanisation in Western Europe differs from country to country. Some distinct features of the urban system in Europe in 1990 after more than three decades of economic growth and political continuity are sketched and illustrated below.

o National urbanisation patterns: As on the European level, both a core-periphery and a North-South dichotomy exist in many of the countries of the community albeit sometimes under a different perspective:

- *Centre vs. periphery in individual countries.* In five of the countries under review (France, United Kingdom, Ireland, Greece and Austria) one large metropolis dominates the national urban system. The historical centralisation of power in Paris is well known, but London, Dublin, Athinai and Wien exert a similar dominance. The dominance of the metropolis has also shaped the transport network which links the whole country to the banks, public and private institutions of national importance and to the court or central government, but tends to neglect links between other cities and regions across the country.
- *South vs. North in individual countries.* In contrast to the divergence between the industrial North and the developing South of Europe, in a number of European countries a divide between the prosperous South and the declining North became a national issue during the last decade. The term 'South-North divide' indicates uneven economic development and growing spatial regional disparities within a country. Recent developments such as growing agglomeration diseconomies in the 'South' and first signs of successful restructuring in the 'North' seem to have stopped the deepening of the gap between South and North, at least in Britain, France and Germany. The 'success stories' of Leeds, Lille, Dortmund and Glasgow have improved some of the previously negative images of 'Northern' cities. Whether their economic success is sustainable and can be replicated in other smaller and less favoured cities remains to be seen.

o Functions of cities: Cities perform a multitude of service and industrial or political and cultural functions. Cities internationally known as financial or cultural cities may in general still have a considerable number of industrial jobs. And most industrial or port cities have also regional and national service functions. Therefore any functional categorisation of cities in Europe can only be an effort to describe the *dominant* function of cities in the European urban system (see Table II). On the other hand there is a new trend that requires careful monitoring: There is growing evidence that certain modern industries prefer certain types of cities.

Intraregional/Urban Level

The polarisation and spatial restructuring has affected not only whole urban regions, but also the relationship between cities and their hinterlands and the spatial organisation of human activities *within* urban regions:

o Urbanisation, suburbanisation and deurbanisation: The urbanisation process is a sequence of phases: In the *urbanisation phase* urban growth occurs predominantly in the core. In Central Europe this is the pre-war city. The reconstruction period after the war more or less replicated the pre-war pattern. Urbanisation still continues in Southern and Eastern Europe. In the *suburbanisation phase* the suburbs grow

Table II
Functional types of cities.

<i>City type</i>	<i>Characteristics</i>	<i>Examples</i>
Global cities	Accumulation of financial, economic, political and cultural headquarters of global importance.	London Paris
Growing high-tech/services cities	Modern industrial base, national centre of R&D, production-oriented services of international importance.	Bristol Reading München
Declining industrial cities	Traditional (monostructured) industrial base, obsolete physical infrastructure, structural employment.	Metz Oberhausen Mons Sheffield
Port cities	Declining shipbuilding and ship repair industries, environmental legacies (e.g. in oil ports), in the South burdened by additional gateway functions.	Liverpool Genova Marseille Antwerpen
Growing cities without modern industrialisation	Large informal economy and marginalised underclass, uncontrolled development and deteriorating environment.	Palermo Thessaloniki Napoli
Company towns	Local economy depending to a high degree on single corporation.	Leverkusen Eindhoven
New towns	New self-contained cities with overspill population in the hinterland of large urban agglomerations.	Milton-Keynes Runcorn Evry
Monofunctional satellites	New urban schemes within large agglomerations with focus on one function only (e.g. technopoles, airport cities).	Sophia-Antipolis Roissy Euro-Disneyland
Small towns, rural centres, urban belts	Smaller cities and semi-urbanised areas in rural regions, along coasts or transport corridors with weak economic potential.	All over Europe
Tourism and culture cities	Local economic base depending on international tourism and cultural events of European importance.	Salzburg Venezia Avignon
Border and gateway cities	Hinterland divided by national border; gateways for economic migrants and political refugees.	Aachen Thessaloniki Basel

faster than the core. Residential development in the core declines for lack of space, jobs are still in the centre but gradually follow people. In the *deurbanisation phase* development further shifts to the urban periphery and beyond to the small and medium-sized towns at the less urbanised fringe. The core city loses more people and jobs than the suburbs gain, i.e. the total urban region declines. Counter- or deurbanisation tendencies can be found primarily in the highly urbanised countries in North-West and Central Europe including Northern Italy, whereas in the Mediterranean basin the urbanisation phase is still sustained by higher birth rates and rural-to-urban migration. Deurbanisation must not be confused with lack of success as some of the most successful cities in Europe, e.g. Amsterdam, Lyon and Milano are in the phase of deurbanisation. Obviously cities in countries with declining overall population are more liable to become deurbanising.

- o Reurbanisation:* The results of the deconcentration process are both positive and negative: Certainly suburban living represents the preferences of large parts of the population. However, the consequences of urban dispersal are less desirable: longer work and shopping trips, high energy consumption, pollution and accidents, excessive land consumption and problems of public transport provision in low-density areas. This makes access to car travel a prerequisite for taking advantage of employment and service opportunities and thus contributes to social segregation. Moreover, the counterpart of suburbanisation is inner-city decline. All over Europe therefore cities have undertaken efforts to revitalise their inner cities through restoration programmes, pedestrianisation schemes or new public transport systems. In some cases these efforts were remarkably successful. Besides cities in the Netherlands, Germany and Scandinavia, Italian cities such as Bologna and Florence are examples for this trend. Recent figures indicate that the exodus from the inner city may have passed its peak and that there may be a 'reurbanisation' phase, which is, however, more a qualitative phenomenon.
- o Intraregional disparities:* Under market conditions both suburbanisation and reurbanisation aggravate existing social differences within urban regions. In the global cities London and Paris, but also in cities like Bruxelles, Frankfurt, München and Milano, this process has led to massive real estate speculation and exorbitant increases of land prices and building rents which threaten to make the central areas of these cities unaffordable as places to live for the vast majority of the population. There is a real danger that this will be the dominant pattern of urban development for big cities in Europe in the 1990s.

The description of the pattern of urbanisation in Western Europe during the last three decades has shown a great diversity of developments of cities in different national and regional contexts. Yet on the basis of long-term social and economic trends, a few cautious predictions about the future of the urban system in Europe in the next decade can be made.

The growing division of labour in the West European economy is paralleled by a growing division of labour between cities and regions. This results in two powerful trends which currently dominate the development of the urban system in Europe:

- *Spatial polarisation:* The internationalisation and integration of the European economy, the emerging high-speed transport infrastructure and the ongoing transformation of economic activities through technological shifts in the production and distribution systems increase the relative advantage of cities in the European core over cities at the European periphery.

- *Functional specialisation:* More and more cities in Europe have become specialised centres for particular industries, be it for special types of manufacturing (e.g. car production, mechanical engineering), for specialised services (e.g. financing) or for industries that comprise both production and services (e.g. cultural industries) or which are linked to historical endogenous potentials (e.g. tourism). With growing specialisation, the city develops a unique 'label' or image, and this helps to attract further specialised economic activities and skilled labour force, which in turn stimulates the expansion of the particular specialised functions.

Cities in Europe in the 1990s

The last decade of the 20th century will not stop these two dominant trends. On the European as well as the national level, the few prosperous, successful cities will continue to flourish economically and culturally, while the large number of small and medium-sized cities will struggle to attract more public and private capital and investment for promoting their economic development. Assuming that the Single European Market will be fully completed by the end of 1992 and that no energy or environmental crisis, no war and no major political disturbances will occur, the present urban pattern in Europe will not fundamentally change, but will become even more pronounced under the influence of the two trends. Table III summarises the most likely consequences of this development and the key issues arising from them.

Table III
Key urban issues in the 1990s.

<i>Level</i>	<i>Key urban issues</i>
European	Dominance of large cities Polarisation through high-speed transport infrastructure No borders, new hierarchies? East-West or North-South? Pressure on European gateway cities Cities in the European periphery: forgotten?
National/ regional	Further decline of industrial cities? Port cities under pressure? High-tech and garrison cities: victims of disarmament? Just-in-time urban regions? Rurban belts: the ubiquitous city Unguided growth: large cities in the South Cities at the national periphery: tourism and second homes?
Intraregional/ urban	The future of urban form Declining urban infrastructure and services Urban poverty Urban land markets: a time bomb Urban transport: the reappearing problem Urban environmental problems

o European level: During the forthcoming decade the urban system in Europe will continue to be affected by technological and structural economic change, which is likely to be reinforced and accelerated by the Single European Market. In particular the new advanced long-distance transport networks for moving people and goods across Europe will have considerable impacts on the urban system in Europe. Also the repercussions of the recent geopolitical changes on the continent will substantially alter the socio-political context of regional and urban development in Europe. The most relevant urban issues resulting from these changes which have to be considered by urban policy making at the European level are the following.

- *Dominance of large cities.* The dominance of the larger cities in Europe will further increase. The need to compete with other cities in Europe for European and non-European capital investment will continue to favour the larger high-tech industrial and service cities. These cities will continue to grow, often far beyond their administrative boundaries as they offer attractive jobs for skilled workers and provide the high-quality services and cultural and leisure facilities the post-modern society wishes to have within easy reach.
- *Polarisation through high-speed transport infrastructure.* The emerging European high-speed rail network complemented by the existing rail networks linking the medium-sized cities to the larger metropolitan areas will reinforce the dominance of large cities. The urbanised and semi-urbanised hinterland of large cities will continue to expand beyond the one-hour commuting distance. Smaller and medium-sized cities in the hinterland of the metropolises will benefit from the international accessibility of their cores. The accessibility to international airports will continue to be a key factor for regional and urban development. Economic development of small and medium-sized cities in the 'grey' or traffic shadow zones between the future high-speed transport and communication corridors is likely to fall behind unless they can offer attractive local resources or non-ubiquitous potentials and are assisted under national or international programmes.
- *No Borders, new hierarchies?* Some of the cities at inner-European borders may benefit from the Single European Market (e.g. Aachen, Strasbourg, Nice, Liège, Arnhem). They can expand their hinterland and increase their trade, if local decision makers take up the new challenge. The recent political developments in Eastern Europe will in the long run improve the position of cities which before the war had traditional links to East European markets (e.g. Hamburg, København, Nürnberg). This may weaken the position of other, mainly peripheral, cities in North-West and South Europe which may become further peripheralised. The unification of Germany will bring new impetus to some cities in that country (e.g. Hannover or Braunschweig) which in the past three decades have stagnated because of their peripheral location in Western Europe. Also cities bordering East European countries will economically benefit from the new geopolitical situation in Europe. They may regain traditional links and markets and widen their regional hinterland. Cities in East European countries (e.g. Praha, Budapest) may in the long run regain their pre-war position in the league of European cities.
- *Pressure on European gateway cities.* Gateway cities will experience increasing pressure by immigration flows from Eastern Europe, Africa and the Middle East. Existing facilities (e.g. schools, hospitals) will not be able to absorb the additional people and the local economy will be burdened by the growing number of unskilled or semi-skilled workers coming into the city. The transitional character of gateway cities will worsen their international image. Social and political tensions

in these cities are bound to increase. Also cities with large international airports (e.g. Paris, Amsterdam, Frankfurt) and cities bordering Eastern Europe (e.g. Thessaloniki, Frankfurt/Oder or Trieste) or North Africa (e.g. Malaga, Cadiz or Palermo) may function as European gateway cities.

- *East-West or South-North?* The greatest challenge of the next decade will be to overcome the wide gap in economic prosperity between the cities in Western and Eastern Europe. The extent of the problems of East European cities has only become apparent after the political change in East Germany. Their local and regional labour markets offer few opportunities, their public infrastructure is obsolete, their environmental conditions are desolate, their housing stock is far below West European standards and, due to decades of central planning, local governments are almost incapable of managing their own development. This East-West divide of Europe will gradually gain political importance over the North-South divide. This may bring about a shift in investment priorities and trade flows as there is evidence that East Germany or Hungary for example are as attractive to international investors as the peripheral regions in Southern Europe.
 - *Cities at the European periphery: forgotten?* With increasing importance of the accessibility to the large cities in the core of Europe, cities at the periphery of the continent will have a difficult stand. They will have to offer additional attractions to promote themselves as locations for capital investment and industrial development or for international conferences and conventions.
- o National/regional level:* Also the urban systems in individual European countries will be affected. First, the traditional national urban networks will change. Previously dominant large cities may lose their national importance. Cities in border regions may gain new importance and more peripheral cities in declining rural regions may continue to decline. New types of urban regions and networks of cities will evolve. Semi-urbanised regions ('rurban belts') tend to further expand along national transport corridors. Lastly, changes of national defence policy in the wake of the East-West détente will have economic impacts on some cities. More specifically, national and regional governments will be confronted with the following key urban issues:
- *Cities at the national periphery: tourism and second homes?* Cities at the national periphery will struggle to keep their relative position in the national urban system. Smaller and secondary cities outside the large urban agglomerations will feel the widening gap between centre and periphery unless their regional environment offers attractive alternatives to living in the crowded larger cities. Particularly cities in the more peripheral regions of Italy, Greece, Portugal, Ireland or Scotland can expect to benefit from growing national and international tourism and second-home development, but only if they succeed in preserving their environmental quality and refrain from offering sites to industries searching for cheap labour and less strict environmental standards. This, however, requires prudent policies to avoid negative financial, economic and infrastructural implications for the resident population.
 - *Further decline of industrial cities?* Unemployment will continue to be a major problem in declining industrial cities. Despite the success of some cities in restructuring their local economies and modernising their urban structure, many others will still struggle. Although increasing environmental awareness has brought about public and private support for environmental regeneration meas-

ures, much remains still to be done. The simultaneous existence of economic decline and a poor environment and a bad image makes it difficult for such cities to escape from the vicious circle of disinvestment and physical degradation. Small and medium-size industrial cities at unfavourable locations or depending on coal mining or steel production will have particular difficulties to meet the requirements of the international investors. They are likely to remain among the most disadvantaged among the European cities.

- *Port cities under pressure?* Port cities that have been unsuccessful in modernising and specialising their infrastructure will be in danger of further decline. They will be affected by the growing competition of the large European ports and their attractive services and efficient transport links to the continental hinterland. If such cities have to carry the additional burden of being gateway cities for economic migrants (e.g. from North Africa or South-East Europe) the arising problems may easily exceed their problem-solving capacity.
 - *High-tech and garrison cities: victims of disarmament?* Due to new geopolitical conditions in Europe (and despite the recent Gulf war) the growth of cities which are the locations of heavily subsidised defence industries and defence-related R&D facilities may stagnate. This may be similarly true for cities with large military installations, which threaten to lose their economic base.
 - *Just-in-time urban regions?* Just-in-time production complexes will affect the spatial structure particularly in regions where car production is concentrated. Such regions in Germany, Italy, Spain or England are already now gradually being dominated by the infrastructural requirements of the automobile industry and their forward and backward linkages. Although these regions may flourish at times of economic prosperity, they may become heavily affected in times of recession. To a lesser extent just-in-time production is also affecting other industrial regions.
 - *Rurban belts: the ubiquitous city.* Rurban belts along national transport corridors and between the economically prosperous urban regions will grow further and become more densely settled. They will become favourite locations for spill-over industries and population driven out from the inner cities or attracted by lower land prices and a better natural environment. Rurban belts will also be prime locations for national transport interchanges and goods handling and distribution centres. This development will negatively affect the regional environment and often exceed the capacity of public utilities and social facilities.
 - *Unguided growth: large cities in the South.* Unguided urban development will continue to be characteristic for growing large cities in the South. Because of financial constraints, shortage of skilled manpower and opposition against state intervention into land development, local governments in these cities will not be able to cope with the complex urban management tasks rapid growth will bring about. The simultaneous existence of the formal and a large informal economy makes it difficult for these cities to control their expansion, so squatting and strip development are the rule.
- o Intraregional/urban level:* Many urban problems originate from a city's overall economic performance and hence position in the European or national urban hierarchy, but are actually felt on the intraregional or urban level. Prosperous cities will be better able to cope with rapid change by renewing their physical stock, technical and social infrastructure and services than declining cities or cities that grow in population without economic growth. Affluent cities will have the resources to

provide housing and resources for immigrants and to cushion unemployment and other adjustment problems arising from economic change. Rapid change, however, has its price. In particular in the economically most successful cities, market-driven urban development today can, without prudent and effective public control, mean land speculation, segregation or displacement of social groups, physical decay of inner-city residential neighbourhoods with or without eventual gentrification, increasing spatial division of labour, congestion, pollution, noise and waste of energy, natural resources and land by excessive mobility and urban sprawl.

Therefore, the key issues for local policy making and planning on the intraregional/-urban scale will be the following:

- *The future of urban form.* The two European global cities, London and Paris, will continue their 'megaprojects' such as the Docklands and *les grands travaux*. Cities like Bruxelles, Frankfurt and Barcelona, and possibly Berlin, will make efforts to live up to their growing European importance by creating a skyline of high-rise buildings, by glamorous convention and cultural facilities and by expanding their networks of urban motorways and metros. In most other cities the pace of change is likely to be slower.
- *Declining urban infrastructure and services.* Whereas affluent cities will be able to generously improve their infrastructure and expand their services, the less affluent cities in Europe will be faced with growing problems of ageing infrastructure. The reasons for this likely development are the growing squeeze on cities to reduce their taxes for enterprises and the widespread tendency of national governments to cut public subsidies and to promote economic deregulation and privatisation of formerly public services.
- *Urban poverty.* Another mounting burden of local government finances will be the costs of urban poverty. The common tendency in almost all European countries to reduce government involvement in social security and to restrict the eligibility for welfare benefits to those in extreme need will further increase the number of households below the poverty line, and they will concentrate in cities. In large cities urban poverty often turns into homelessness.
- *Urban land markets: a time bomb.* In particular for successful cities with growing economies, increasing land values will be a dominant issue of the 1990s. Inflated land prices that are no longer related to the value that can be generated on land render the provision of land for public infrastructure practically impossible and lead to the displacement of less affluent segments of the population. They make the inner-city unaffordable as a place to live for local people with low incomes. First signs of this harmful process can be observed in London, Paris and Madrid, but also in München and an increasing number of other European cities.
- *Urban transport: the reappearing problem.* In the face of seemingly ceaselessly growing car ownership, urban transport is reappearing as another fundamental urban question. The available road space in urban areas has become the ultimate constraint to the apparently insatiable demand for more and more mobility. In the short run it is necessary to apply a complex mix of 'synergetic' policies encompassing traffic management and regulation, taxation and pricing, street design and pedestrianisation. In the long run, however, only a reversal, or at least a halt of the trend to ever expanding urban areas and increasing spatial separation of homes and workplaces will reduce the need for further growth of urban mobility.

- *Urban environmental problems.* The quality of the urban environment will continue to rise as one of the core issues of urban development in the 1990s, not only because it is becoming more and more important as a locational factor for industry. In particular in prospering, successful cities, growing traffic volumes, uncontrolled land-use development and negligence of environmental concerns by private enterprises and households may seriously endanger the quality of the urban environment. In the fast growing cities of the South lack of public finances seems to be a prime bottleneck for a thorough improvement of the deficient infrastructure. in the fields of sewerage, waste disposal and energy generation. In East Germany, years of neglect have created environmental problems of yet unknown magnitude. However, there are also encouraging examples that through civic pride and local commitment and through intraregional cooperation and exchange of experience a balance between ecological objectives and economic interests can be achieved.

Summary and Further Work

The emerging overall picture of the future of cities in the Community is one of great hopes but also of large risks.

On the one hand, there are the positive impacts of continued economic growth, the removal of barriers through further advances in European integration, the emerging new European infrastructure and the opening of the borders to Eastern Europe. Always under the proviso that the next decade will not be overshadowed by major military conflicts or economic turbulences, London and Paris, the Euro-Metropolises and the major European conurbations and cities of European importance in the European core and the smaller and medium-sized cities in their hinterland can look forward to a bright prospect of prosperity fuelled by unprecedented levels of exchange of people and goods.

On the other hand, there is the risk that the success of these favoured cities might go at the expense of the much larger number of more peripheral cities. The most likely groups of losers are cities that will not be linked to the new high-speed transport infrastructure, cities at the European or national periphery or cities that do not succeed in liberating themselves from their industrial past and finding their own particular niche in the wider European market. This is the negative side of the polarisation and specialisation *megatrends* and it is in direct conflict with the stated equity goals of the Community regional policy.

And there are the negative side effects of growth itself. Even the apparent winner cities may become losers if they do not manage to cope with the undesirable consequences of economic success such as exploding land prices, traffic congestion, environmental degradation and urban sprawl. The spread of urban poverty even in otherwise prosperous cities should be taken as a warning that the 'success' of some cities may have come about by relying too much on principles of efficiency and competition without concern for the less able that need protection and support.

It is not the remit of this study to come up with policy recommendations. That will be done in later phases of this project. However, even at this early stage some lessons can be drawn from the analysis as to what are the most important factors that make some cities prosperous and some lagging behind. Clearly two groups of factors can be identified: *Tangible factors such as* 'location' itself as well as transport and communications

infrastructure clearly remain important. Other tangible factors are tautological as they are themselves synonyms for success: the availability of modern industries and services, efficient public facilities and urban management, a diversified housing market, good educational opportunities, a rich cultural life, and an intact urban environment. *Intangible factors* have to do with local attitudes, spirit, and people. Wherever a group of creative people (or a charismatic individual) succeeded to bring together the relevant private and public actors in a city, innovative solutions were found, barriers for progress overcome and an atmosphere of optimism and confidence created that spread over the whole city and stimulated the kind of future-oriented decisions that are the secret of self-reinforcing success and the progressive image a city needs to present itself on the marketplace. If there is any single factor of urban prosperity that really counts it is this entrepreneurial, competitive spirit.

But before taking this home as the final conclusion, it is good to note that this kind of success is entirely built on the principle of *competition*. Prosperous, i.e. economically successful, cities are those that have survived better in the nation-wide, and more and more European-wide, competition between cities. To be sure, the hope is that this competition is *not* a zero-sum game where any gain is a loss elsewhere, but that at the end of the day *every* city will be better off. Yet in reality some cities gain only very little and some gain a lot, and these winner cities are called successful.

So what makes cities successful? From the point of view of a Community regional policy the question may need to be rephrased. If a reduction of disparities between the regions, and hence also cities, in the Community is the primary goal of regional policy, it may be necessary to study how the - in general indispensable and desirable - competition between regions and cities in Europe can be complemented by an element of *cooperation* and mutual help among regions and cities. The support of cooperation between border regions and city networks by the Community are steps into that direction.

These considerations may also suggest a different and more 'cooperative' *Leitbild* for urban development in Europe than the 'Blue Banana' which is the pure expression of the competition between the regions in Europe. The 'European Grape' (Figure 16), may be more suited to represent the polycentric structure of the urban system in Europe and the fundamental *similarity in diversity* of the interests and concerns of its members cities.

As indicated at the beginning, this report is the output of the first phase of a larger study on urbanisation and the function of cities in the European Community.

Ongoing work in the study includes case studies of 28 cities of different characteristics and a number of thematic case studies on topics such as the changing role of capital cities, East West urban links, the *Third Italy*, cultural policy and urban development, the future of smaller cities and linkages and networks between European cities. Other phases of the project deal with the changing European urban hierarchy and cities in regions, city structures, roles and internal dynamics. The project will conclude with building scenarios and policy implications.

Due to its position in the overall project, much of this report is preliminary and exploratory. Its findings and hypotheses have served as a point of departure for the remaining work and, because of this, may be complemented or even in parts modified by later results and conclusions.

1 Introduction

This report studies major trends and changes in the urban system in Europe over the last thirty years (1960-1990). It examines the present state of urbanisation and considers the cycles and dynamics of urban development, urban growth and urban decline and current and future issues of urban development in Europe.

Europe in this report is narrowly defined. It covers the twelve countries of the European Community, including the united Germany, and Austria and Switzerland (Figure 1). Thus it deliberately excludes a number of other European countries in Scandinavia, and in Central, Eastern and South-Eastern Europe. However, its findings and conclusions are generally valid for the whole of Europe, although urban development in the former socialist countries of Eastern Europe shows some distinctively different features which are not discussed in this report.

Trends and changes in the urban system in Europe system over the last three decades and during the forthcoming decade are described in four sections, discussing

- essential demographic, social and economic background trends in the urban system in Europe (Chapter 2),
- patterns of urbanisation at the global, European, national/regional and regional/urban levels between 1960 and 1990 (Chapter 3), and
- foreseeable urbanisation trends during the decade 1990-2000 (Chapter 4).

The report argues that the large cities and the many small towns of Europe play a vital role for the economic and social development of Europe as a whole. It highlights imbalances in the urban system in Europe, which threaten to increase in the future. These urban imbalances, although rooted in history of the countries of Europe, result from the growing internationalisation of the economy accelerated by the emerging Single European Market.

A number of urban issues which are raised in this report require attention and continuous and careful monitoring and cushioning intervention at the national, regional and local levels of policy making and, within the constraints given by the subsidiarity principle, also at the Community level.

The report is a first deliverable of the study 'Urbanisation and the Function of Cities in the European Community' commissioned by the Directorate General for Regional Policy (XVI) of the Commission of the European Communities to the Centre for Urban Studies of the University of Liverpool. The study is to provide resource information for a Community document now in preparation which aims to highlight the trends and pressures that are likely to shape the use of territory and regional policy within the Community at the beginning of the next century ('Europe 2000').

Ongoing work in the study includes case studies of 28 cities of different characteristics and a number of thematic case studies on topics such as the changing role of capital cities, East West urban links, the *Third Italy*, cultural policy and urban development, the future of smaller cities and linkages and networks between European cities. Other phases of the project deal with the changing European urban hierarchy and cities in regions, city structures, roles and internal dynamics. The project will conclude with building scenarios and policy implications.

Due to its position in the overall project, much of this report is preliminary and exploratory. Its findings and hypotheses have served as a point of departure for the remaining work and, because of this, may be complemented or even in parts modified by later results and conclusions.

Figure 1
The countries covered in this report.



2 Background Trends 1960-1990 and Beyond

Throughout human history cities have been pacemakers of change. History's great cultural achievements, technological innovations and political movements originated in cities. Cities are the incubators of new economic activities and lifestyles. Yet at the same time cities are also themselves subject to the secular and global trends they help to generate. The patterns of urbanisation in Europe therefore cannot be understood without taking account of the dominant background trends in fields such as population, migration, lifestyles, economy, transport and communications, and environment and resources (cf. Masser et al., 1990).

2.1 Population

During the last three decades the countries of Western Europe went through various stages of the *demographic transition* (the change of a population from higher to lower levels first of mortality and then of fertility). In the 1960s all countries now in the European Community experienced a post-war peak in fertility. However, towards the end of the decade birth rates in virtually all European countries declined sharply and eventually stabilised well below reproduction level. This phenomenon was not restricted to the affluent countries of North-West Europe but was followed, though from a higher initial level, by the less industrialised countries of the South. Today total period fertility rates in the Community range from a record low of 1.36 children per woman in West Germany to 1.65 in Spain. If these levels of fertility prevail, - and there is presently no reason to assume otherwise - most countries, and most cities, in the European Community will not grow in population by natural increase in the future.

At the same time there has been a marked decrease in mortality in all countries. This trend has not been sufficient to offset the decline in birth rates, but has contributed to the progressive ageing of the European population. Again all countries of the Community are affected though to a different degree. Between 1960 and 1990 the proportion of persons over 65 years has increased from 12 to 15 percent in West Germany but only from 6 to 8 percent in Greece. However, the full impact of the ageing trend will only be felt after the year 2000. It is estimated that in 2020 more than one fifth of the German population will be over 65. Obviously, the ageing of the population will have severe impacts on the available labour force and on health and social services that need to be provided in cities.

Despite fertility rates below reproduction level, the countries of the European Community are still growing in population. Current growth rates are much less than in the 1960s when the countries of today's EUR 12 grew by 24 million to 320 million people. In the 1970s and 1980s growth slowed down to 14 million and 11 million, respectively. In some countries such as Belgium, West Germany, Denmark and Great Britain, population has stagnated or even decreased in some years, while it has continued to grow in France, Greece, Ireland, the Netherlands, Portugal and Spain. With nearly one percent annual population growth, Ireland has by far the fastest growing population in the Community. Today the Community has a population of 342 million.

2.2 Migration

Migration is the expression of disparities in living conditions between the countryside and cities or between regions or countries. Rural-to-urban migration and its more recent counterpart, overspill migration from agglomerations to their suburban hinterland, are themselves part of the urbanisation process and will be treated in sections 3.2.1 and 3.4.1, respectively. However, interregional and international migration critically determine the population balance of regions and countries and hence the future of the urban system in Europe.

Much of the population growth of the 1960s and 1970s was due to international migration, and the Community would have experienced a substantial decline of population during the last decade without migration. In the 1960s the northern countries attracted large numbers of workers for their rapidly growing economies (see 2.4), mostly from Mediterranean countries outside the EUR 9 such as Portugal, Spain, Yugoslavia and Greece and, in the case of the United Kingdom, Commonwealth countries. As these migrants primarily settled in cities, the 1960s were a period of rapid urban growth through migration. In the 1970s the follow-up of the energy crisis reduced the demand for foreign labour, and restrictions on Commonwealth immigration came into effect in Great Britain, but even today work-related immigration into the major receiving countries are substantial and wholly or in part compensate for the lack of natural population increase of countries and cities. In West Germany, for example, in 1985 more than one million migrants entered the country from non-EC countries, more than twice as many as from EC countries, 640,000 came into France and 400,000 into Britain.

The future of international migration in Europe is much less certain than the purely demographic trends. With certainty the pressure on the EC countries to accept more immigrants from their less affluent southern neighbours, where the demographic transition has not yet started, will grow considerably. With few exceptions such as Yugoslavia, the non-EC Mediterranean countries are expected to double or treble their population by 2020 without a corresponding growth in their economy. In addition, the recent developments in Eastern Europe might well incite a new wave of population movements of unknown magnitude and direction, except that they will concentrate on cities. The political decisions affecting international immigration will therefore have a decisive impact on the future of cities in Europe.

2.3 Households and Lifestyles

In all European countries average household size has fallen dramatically over the last three decades. In 1960 the average household in most European countries had between 3 and 3.5 members, while in 1990 it had only between 2.5 and 3. However, there is still a wide range of average household sizes between countries such as Ireland with 3.5 and Denmark with 1.8 persons per household. In addition, average household size varies between city and countryside. In most inner cities in Europe, the average household today has less than two persons.

The reasons for this development, though related to the decline in birth rates and the growing proportion of old people, are not purely demographic but social and economic. Social factors are the decline of the three-generation family, the reduction in marriages and the concomitant increase of divorces and hence single or one-parent households.

Economic factors are the increasing overall affluence and the growing economic independence of women and young people and, in the peripheral countries of Europe, the ongoing decline in agricultural employment stimulating rural-to-urban migration.

Smaller households are both cause and effect of higher labour force participation of women. The increase in labour force participation of women has been particularly strong in southern countries where it used to be low. On the other hand, there is a trend to lower activity rates in affluent countries where social security schemes make it unnecessary for old people to work for their livelihood.

Smaller households and new patterns of labour force participation give rise to new lifestyles which have a profound impact on urban form. Smaller households require more floor space per person and tend to prefer inner-city locations. In many inner cities up to 80 percent of all households are *singles*: workers, unemployed, students or old people who depend on cheap run-down housing and public transport. This has affected transport and locational behaviour of citizens and the structure of cities. *Yuppies* ('young urban professionals') and *dinks* ('double income no kids'), however, prefer luxury flats and up-market shops and restaurants and hence are the driving force behind recent phenomena such as 'gentrification' of inner-city housing areas and downtown shopping centre revival (see 3.4.2).

Another aspect of the ageing society, but more importantly of new technologies in manufacturing and services (see 2.4), is a marked reduction of work hours and a concomitant increase in free time, a trend common to all European countries despite still large differences in hours actually worked. One of the effects is the growing amount of time and money devoted to leisure activities fuelling the expanding entertainment and tourism industries in cities and the trend to second homes in the countryside or European holiday regions, another one the growing attention paid to home ownership and quality of life of residential neighbourhoods. A third effect of increasing time budgets is a growing inclination to trade off commuting time against the quality of the residential environment. This trend, in quantitative terms, is dominant over the back-to-the-city movement described above, so the net effect is a further dispersal of urban regions.

2.4 Economy

The process of economic restructuring can be observed in all countries of the Community. Agriculture and manufacturing employment decline while service employment is growing, and this process is likely to continue in the future, notably in the South where agriculture's share of total employment is still large.

However, the shift in sectoral composition is only one aspect of the transformation of the economic system. Behind it are more fundamental changes in the organisation of production and distribution from the era of mass production and *economies of scale* ('fordism') to flexible and responsive production processes facilitating *economies of scope* ('post-fordism'). The new flexibility is made possible through vertical integration and synchronisation by computer control and telecommunications (see 2.5) of all steps of the process from supply to delivery in complex logistic chains involving numerous spatially dispersed supplier firms ('just-in-time delivery') and extensive distribution networks. The implications for the demand for transport and for the settlement system at large are far-reaching (see 2.5 and 3.4.1).

Another aspect of economic change is a polarisation of firm sizes. On the one hand there is a small number of large corporations which increasingly become transnational. They have a tendency to concentrate high-level knowledge-based tasks in a few key cities in European core regions while carrying out low-skilled standardised production tasks in peripheral regions in order to exploit labour cost differentials. On the other hand there is a fast growing number of small companies. It has been shown in many countries that much of the employment growth in recent years has been created by small and medium-sized firms with innovative product and service ideas. To promote the establishment of innovation-oriented small companies, *technology centres* or *technology parks*, *enterprise zones* or *technopoles* have been set up in many European countries (see 3.3.2).

A third major dimension of economic change are policies directed at removing barriers to free trade and releasing the full potential of entrepreneurship such as market liberalisation, deregulation and privatisation of public companies. In the European context, this results in a growing internationalisation of national economies. Large corporations had already for a long time established transnational networks of production and services, however during the last three decades new and faster forms of communication and transport have made it possible also for small and medium-sized firms to expand beyond their traditional markets in order to survive in the wider competition. The future Single European Market will require, encourage and facilitate this development.

However, despite the growing internationalisation and integration of the national economies in Europe there remain large disparities in economic strength between the countries and regions in the Community. Even if adjusted for purchasing power, the most affluent countries of the community (Denmark, Germany, France and Luxembourg) produce more than twice as much GDP per capita than the group of less industrialised member states (Greece, Ireland, Portugal, Spain) - and this ratio increases to 9:1 if individual regions are compared. The unequal economic development in Europe is also expressed by the differences in unemployment in the countries of the Community, although different social security systems make a comparison here particularly difficult. Yet the clearly above-average rates of unemployment in Ireland and Spain underline the speed of structural adjustment going on in these countries, whereas the below-average unemployment rates in Greece and Portugal - if they represent more than a statistical abnormality - seem to indicate that the transition from an agricultural to an industrial economy has yet to acquire full momentum in these countries. The implications for future international migration within the Community are obvious (see 2.2).

2.5 Transport and Communications

In all European countries the industrialisation process has been accompanied by an enormous growth in demand for transport and mobility. The increasing internationalisation and spatial division of labour in manufacturing (see 2.4) has vastly increased the volume of goods transport and a substantial further rise will be due to the Single European Market. Personal mobility in terms of total distance travelled has more than doubled in Western Europe between 1960 and 1990.

This growth has been made possible through the almost total victory of the truck and the car over their less successful competitors, railways and other forms of public transport. Today trucks transport more than 70 percent of all goods shipped, and the car accounts for more than 80 percent of all passenger travel in Western Europe. Car ownership has grown steadily in all countries in close correlation with the growth in

GNP with no saturation yet in sight. In spite of this common trend, the differences in car ownership between the countries in the Community are still large ranging from 127 cars per 1,000 population in Greece to 426 in West Germany (in 1985).

The success of the truck is mainly due to its door-to-door speed, flexibility and reliability as modern market economies depend on logistic systems linking supply, production and distribution in efficient, unbroken logistic chains. The success of the car is due to its unsurpassed flexibility and comfort and the freedom it offers in the choice of a residential or work location, which made suburban living possible (see 3.4.1). However, the price to be paid for the benefits of the truck and the car are their energy inefficiency and the congestion and pollution they produce on motorways and in cities and the land consumption and environmental problems of urban sprawl (see 2.6).

Transport policy in the countries of the Community has in the past favoured road construction over improvement of the railway infrastructure. The network of European motorways, many of them toll roads, makes even remote regions accessible by truck or car. Railway construction has been largely restricted to metro and commuter rail lines in the largest cities, while many unprofitable rural lines have been abandoned. The few exceptions of significant rail investment are the intercity train systems in Italy, Great Britain and West Germany and, most notably, the TGV in France. In the future, however, high-speed rail systems as the TGV and the German ICE as well as the new Channel Tunnel, will bring the major European centres even closer together and reinforce their advantage over less favoured, more peripheral cities and regions.

Air transport has been the fastest growing transport mode for both goods and passengers. At a time of increasing world-wide exchange, the proximity of an international airport is an invaluable asset for a city. However, feeder flights from regional airports have found a rapidly expanding market and will in the future compete with high-speed rail services. More and more airports have been linked to inner cities by rail and may even become nodes in the emerging high-speed rail network. Several large international airports have themselves become crystallisation points of specialised urban development ('airport cities', see 3.3.2).

Telecommunications in combination with computerisation has revolutionised goods and passenger transport, production and distribution (see 2.4) and all kinds of services. Without telecommunications the globalisation of financial and other markets responsible for the emergence of global cities (see 3.3.2) would not have been possible. However, also smaller less central cities are becoming linked to the European urban network through telecommunications. The consensus is that telecommunication technology, though it has the potential to equalise communication opportunities, tends to reinforce the existing hierarchy of cities because the most advanced services are introduced in the largest centres first.

The impacts of telecommunication technologies on the internal organisation of cities are only slowly becoming visible. Surprisingly, the introduction of computer networks has only in few cases led to a spatial dispersal of high-level service activities such as banking from the city centres. Also, as suggested earlier, the expected substitution of physical travel by telecommunication has not yet materialised; it seems that telecommunications also tend to increase the demand for face-to-face contacts. Similarly, the expected substitution of work trips by *teleworking* and of shopping trips by *teleshopping* has only minimally become reality. However, the 'logistic revolution' taking place in manufacturing and distribution has already led to a substantial increase in intraregional goods transport and is certain to continue to do so in the future. Certainly it will

also have a strong impact on the location of manufacturing industries. Most experts agree that in the long run it will favour suburban locations at the expense of the core and thus reinforce the current decentralisation tendencies in metropolitan areas (see 3.4.1).

2.6 Environment and Resources

Before the mid-1970s, ecological issues did not receive much attention in urban policy making and planning in Europe. During the energy crisis it was realised that the growth orientation followed in the 1960s could not be continued without depleting the resources, destroying the natural environment and endangering the quality of life in cities. Since then ecological considerations have played a steadily increasing role in urban policy in Europe.

Urban environment problems are to a large part transport-related. Transport consumes about 25 percent of all final energy and is responsible for between 60 and 95 percent of carbon monoxide (CO) and carbon dioxide (CO₂), between 30 and 60 percent of nitrogen oxides (NO_x) and nearly all lead emissions. Automobile exhaust fumes are a serious threat to sculptures and buildings in historical town centres. Cars using less petrol and exhaust control technologies such as the catalytic converter have reduced energy consumption and air pollution per kilometre travelled. However, the rapid growth of car ownership and the trend to larger and faster cars have eradicated these savings. The growing number of cars and the shift to more car travel have choked many cities with nearly all-time congestion and cars parked everywhere. Another negative impact of urban transport is traffic noise. According to OECD statistics (OECD, 1986), between 30 and 50 percent of all people in Western Europe are exposed to noise levels of more than 55 dBA outdoors of their residence. Finally, road traffic accidents, though almost halved during the last two decades, continue to kill between 10 (Netherlands) and 20 (Greece) people per 100,000 population each year. About three quarters of all road accidents and one third of all fatal road accidents occur in built-up areas.

Cities have reacted in various ways to the growing negative impacts of growing car traffic. The Netherlands pioneered car restraint methods including low-speed areas, parking restrictions and pedestrianisation that quickly spread to West Germany, Britain and Scandinavia. In other countries the fight about the future role of the automobile in cities is still going on. The other obvious approach to make urban transport ecologically less harmful is to promote public transport. Many cities have invested in improvements to their existing public transport system or in new public transport systems, or have experimented with new fare schemes to attract more passengers. The problem with public transport is that it is impossible to maintain acceptable levels of service in low-density suburbs without subsidies.

Other serious environmental problems plaguing cities are industrial air, water and soil pollution, the disposal of solid wastes and energy conservation. Industrial pollution is most severe in old industrial regions where the legacy of the industrial past can be overcome only through a slow and costly process, in particular where former industrial land is found to be contaminated. Water pollution has also been a problem of many fast growing tourism cities on Mediterranean coasts (see 3.3.2). Waste disposal is the problem coming more and more to the fore with growing affluence. With increasing knowledge about the dangers of traditional disposal techniques, ecological solutions to the waste disposal problem are becoming increasingly complex and expensive, in par-

ticular in densely settled metropolitan areas. Energy conservation is increasingly becoming important not only as a means to save oil but because of the need to reduce the emission of CO₂.

Another environmental concern of many cities is land consumption. In densely populated Europe land is becoming a precious non-renewable resource. However, all human activities tend to require more land. Modern production technologies demand single-floor, open plans with ample expansion space and truck access on all sides. Modern logistics replace warehousing by road transport and so together with the growth in car ownership contribute to higher demands for road space both on motorways and in cities. Modern retail facilities use vast amounts of land for shopping malls and car parks. More affluent and smaller households consume more floor space per person both in inner city and suburban locations (see 2.3), so the land necessary for housing increases even in countries with declining population. In countries with functioning planning systems, land use restrictions and greenbelt policies have been applied to preserve open areas in the suburbs. However, even here frequently lack of cooperation between core city and neighbouring communities has resulted in leapfrog development at the urban periphery. Countries with the highest growth in urbanisation have been least successful in protecting the countryside around expanding cities against urban sprawl.

Since the unification of Germany it has become apparent that environmental problems in East Germany, in particular problems of air, water and soil pollution, are much greater than anticipated. It will require a major effort to overcome the consequences of years of neglect and lack of investment.

2.7 Summary of Background Trends

In summary, the future of the urban system in Europe will be co-determined by a multitude of powerful and partly contradictory trends. Table 1 is an attempt to highlight the most important of them and their likely impacts for cities:

In the field of *population*, the decline of birth rates and the ageing of the population confront cities with serious problems of inter-generational adjustment and public service provision. Interregional and international *migration* from peripheral to core regions and from the South of Europe to the North present difficult problems especially for target and gateway cities in prosperous regions. Smaller *households* and new *lifestyles* transform social networks, neighbourhood relations and location and mobility patterns in cities; cities have to respond by new services and new forms of housing policy, land management and transport planning.

The restructuring of the *economy*, specifically the reorganisation of production and distribution and the internationalisation of markets increase the competition between cities and regions and foster regional innovation and creativeness, but may aggravate intra- and interregional disparities. Liberalisation of economies enhances individual prosperity but may also deepen social tensions and inequality. Deregulation and privatisation generate new and more efficient services, but may endanger public service provision in cities.

Rapid technological change in *transport* and *communications* stimulate personal mobility and goods movement - primarily on roads; this makes the provision of public transport in cities more difficult; the growth in high-speed rail and air transport contribute

Table 1
Background trends of urbanisation.

<i>Field</i>	<i>Background trends</i>	<i>Implications for cities</i>
Population	Decline of birth rates; ageing of the population.	Unbalanced demand for public infrastructure; high demand for health and social services; urban decline in the North and North-West.
Migration	Continuing rural-to-urban migration in peripheral countries; international migration South-North and East-West growing.	Housing and employment problems in target and gateway cities in prosperous regions.
Households/ Lifestyles	Decreasing household size; higher labour force participation of women; reduction of work hours; new life styles.	New social networks, neighbourhood relations, locations and mobility patterns; need for new services and new housing, land and transport policies.
Economy	Reorganisation of production and distribution; polarisation of firm sizes; liberalisation, deregulation, privatisation; internationalisation.	Increased competition between cities; innovation-oriented local economic policy; technology centres and parks; however, also intra- and interregional disparities, social tension and eroded public services.
Transport/ communications	Technological change stimulates personal mobility and goods movement; road transport dominant; growth of high-speed rail, air transport, telecommunications.	Dispersed urban development is further stimulated; efficient public transport in small and medium-sized cities difficult; polarisation between European core and periphery continues.
Environment/ resources	Transport and industry-generated pollution, energy conservation, urban sprawl important; industrial pollution in South European countries and East Germany urgent.	Cities in all European countries are affected; car restraint, anti-pollution, energy conservation, land use control policies are required.

to the polarisation between cities in the European core and in peripheral regions. Problems of *environment* and *resources*, in particular transport-generated air and noise pollution, waste disposal, the need for energy conservation, and urban sprawl will affect cities in all European countries; industrial pollution in Southern Europe will become an especially urgent problem.

It is useful to point out that these trends are not pre-determined by 'natural laws' that make them inevitable. Without exception, they are the products of political decisions and individual human behaviour and hence open to change and learning. However, given the stability of political structures and behavioural patterns, but also the growing awareness for the need to protect the environment, it is useful to take account of these trends as a possible, and with some caveats also most likely, framework of urban development in Europe in the 1990s and beyond.

3 Patterns of Urbanisation 1960-1990

The present urban system of Europe is the evolutionary outcome of more than two millennia of activities of people living in or migrating to Europe. They founded, built, and expanded human settlements at suitable locations and made them into cities, centres of culture, trade and industry. Cities flourished because of their natural resources or agricultural hinterlands, the skills of their citizens or their strategic trade location or because they became political or ecclesiastical centres of power, information and communication.

The emerging urban system in Europe was rather stable. Nevertheless throughout the centuries one or the other city lost its former role and influence, be it because its resources were exhausted and transport technologies changed, because borders were drawn or removed, or just because the feudal aristocracy moved their courts to other more fashionable locations.

The state of the urban system in Europe in 1960 reflected the historical processes which had transformed Europe into its cultural, economic, physical and political shape. Overall, the urban system has not changed very much since then. However, during the last three decades - a relatively short time in the history of Europe - technological and political innovations have facilitated and accelerated the internationalisation of regional economies in Europe. This in turn has strengthened or weakened the role and function of cities in Europe as well as in their national or regional contexts, depending upon a variety of factors.

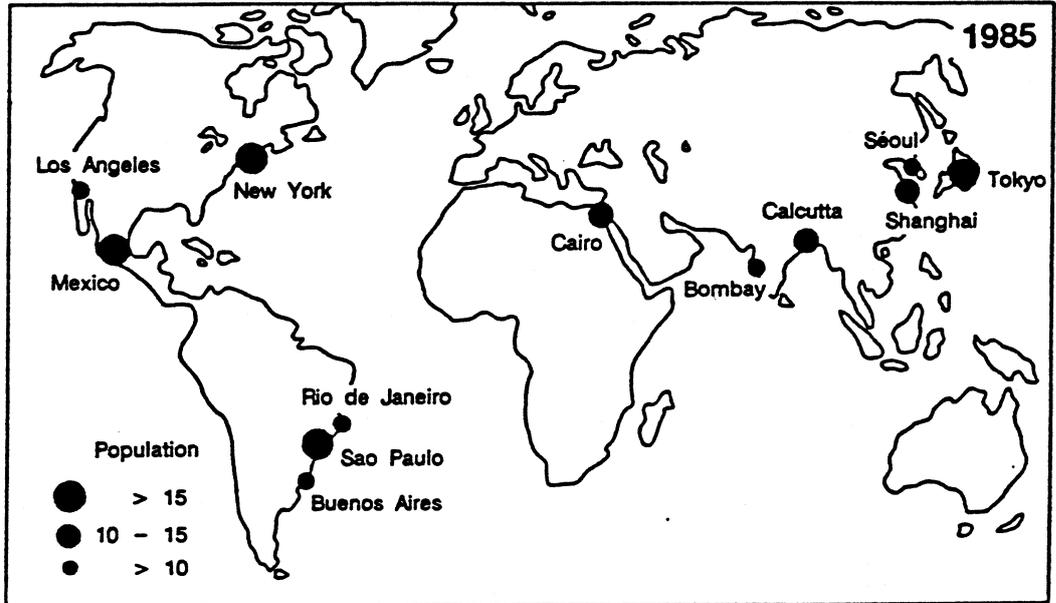
These development trends and changes will be sketched and illustrated in the following four sections, focusing on the global, the European, the national/regional and the regional/urban levels.

3.1 Urban Europe in a Global Perspective

According to UN estimates towards the end of this century 50 percent of the world population and 80 percent of the population in industrialised countries will live in urban agglomerations. While in 1950 there were only five cities with a population of more than five million, in the year 2000 there will be 57 such megalopoles.

However, behind these figures are significant regional differences. While in most industrialised countries, most notably in the world's oldest industrial regions in North-West Europe, the urbanisation process is approaching its end, metropolitan areas in the developing countries continue to grow with no immediate limit in sight. It is estimated that in the year 2000 only three of the 20 largest cities in the world will be in industrialised countries, and *none of them in Europe*. There will be 22 cities with a population of more than 10 million, among them Mexico City with 26 million, Sao Paulo with 23 million and Calcutta, Bombay and Cairo with 16 million each. Another 35 cities will have a population of between 5 and 10 million (Cliquet, 1986, see Figure 2). Urbanisation in the developing countries is by no means a replication of the earlier

Figure 2
Mega-cities with a population of more than 10 million, 1985-2000.



Mega-Cities with more than 10 million population in the year 1985

Mexico (Mexico)	18,1
Tokyo/Yokohama (Japan)	17,2
Sao Paulo (Brazil)	15,9
New York (USA)	15,3
Shanghai (China)	11,8
Calcutta (India)	11,0
Cairo (Egypt)	11,0
Buenos Aires (Argentina)	10,9
Rio de Janeiro (Brazil)	10,4
Séoul (Korea)	10,2
Bombay (India)	10,1
Los Angeles (USA)	10,0

Mega-Cities with more than 10 million population in the year 2000

Mexico	26	Buenos Aires	13,2
Sao Paulo	23	Jakarta (Indonesia)	12,8
Tokyo/Yokohama	17,1	Baghdad (Iraq)	12,8
Calcutta	16,6	Tehran (Iran)	12,7
Bombay	16,0	Karachi (Pakistan)	12,2
Cairo	16,0	Istanbul (Turkey)	11,9
New York	15,5	Los Angeles	11,2
Séoul	13,5	Dacca (Bangladesh)	11,2
Shanghai	13,5	Manila (Philippines)	11,1
Rio de Janeiro	13,3	Peking (China)	10,3
Delhi (India)	13,3	Moscow (USSR)	10,1



Source: after FORUM Europarat 1/86

experience of the industrialised countries (see 3.2.1): Whereas in the industrialised countries the rapid growth of cities in the 19th century was a necessary prerequisite and consequence of industrialisation, in the developing countries cities grow *without* the support of industrialisation. The economy develops only slowly; so family incomes do not grow and medical care remains insufficient. Hence mortality stays high and many children remain necessary for old-age support. The population continues to grow rapidly without a corresponding increase in food and jobs. More and more rural migrants come to the cities to look for work and social opportunity, but despite a large informal labour market the number of jobs is not sufficient for their growing number. The consequences are mass unemployment or underemployment, overcrowding and a growing underprovision in the fields of health services, education and transport.

It is useful to be aware of this fundamental difference between urbanisation in developed and developing countries. Compared with urban systems in other continents and nations, the urban system in Europe is relatively balanced, and compared with the average African, Asian or South American city even the most serious problems of the cities in the Community appear light. However, there is another good reason to place the reflection on urbanisation in Europe into a global context: Worsening living conditions in Third World cities, particularly in regions with strong historical links and good transport connections to West European countries, may encourage or even force people to migrate to the gateway cities of the continent. Consequently it is crucial for the future of the cities in Western Europe that the living conditions in the cities of the Third World are improved.

3.2 European Level

There will be seven aspects of the urban system in Europe discussed in this section: (i) the historical process of urbanisation, (ii) the urbanisation level reached in the countries studied, (iii) the size distribution of cities and urban regions, (iv) city hierarchies, (v) urban growth and decline in the period under review, (vi) recent spatial trends in urbanisation and (vii) city networks.

3.2.1 The Urbanisation Process

After the decline of the cities of the Mediterranean in the wake of the fall of the Roman Empire, the urban system of Europe reemerged in the 10th century. From then on until modern times it remained relatively stable. Growth of cities was slow and, apart from devastations by wars, epidemic diseases or natural disasters, so was urban decline, e.g. when trade routes changed such as in the case of Venice, the port cities of Flanders or the Hanseatic League.

However, starting in the second half of the 18th century, an unprecedented wave of urban growth swept over the continent. The year 1750 marks the beginning of industrialisation in England. Basic inventions such as the steam engine and the railway made the large-scale production of goods in mechanised factories possible. The new industries located in the cities close to their markets and developed a large demand for labour. At the same time mechanisation of agriculture made rural labour redundant and led to the first wave of rural-to-urban migration which resulted in a growth of industrial cities at the expense of the countryside. So in this period urbanisation was the consequence of the first phase of the *economic transition*, the transition from agricultural to manufacturing employment (cf. Friedrichs, 1985).

This primary phase of urbanisation first took place in the industrial cities of the British North-West in the second half of the 18th century, and during the following one hundred years spread to the continent, first to the countries of North-West Europe, Belgium, the Netherlands, North-West France and Germany. It took well into this century before massive industrialisation occurred in Northern Italy and even until after World War II before it occurred in Southern Germany and Southern France. Large regions in the Mediterranean countries of the Community are only now passing through this primary phase of the economic transition.

Growing affluence and advances in medicine and hygiene in the early 19th century reduced mortality, in particular infant mortality, with the effect that population growth accelerated and more people moved into the cities. In this second phase urban growth was even faster, many cities multiplied in size in a few decades. Dortmund in the industrial Ruhr area, for instance, grew in population from 20,000 in 1830 to 240,000 in 1895. Only much later also fertility started to decline, when social security systems made a large number of children for old-age support unnecessary, so population growth slowed down or even turned into decline. The sequence of declining mortality and subsequent declining fertility, the *demographic transition*, ended the period of urban growth, and where there was no international immigration, cities started to decline in population. The demographic transition occurred first in those countries which also first went through the economic transition and has only recently arrived in the countries of South Europe which still have much higher birth rates than their northern neighbours.

The wave-like diffusion of the economic and demographic transitions from the North-West of Europe to its South-West, South and South-East helps to explain the different phases of urbanisation coexisting in Europe at one particular point in time. In the North-West, where both the economic and demographic transition have almost been completed, deindustrialisation and deurbanisation is found except where through extraordinary efforts the next phase of the economic transition, the shift from manufacturing to services, has been achieved. In the regions of the second wave of industrialisation, the South-East of England, the South of Germany, the North of Italy and Southern France, the second phase of the economic transition is most advanced, here the post-industrial city is emerging. At the same time in parts of Spain, Portugal, Southern Italy and Greece some cities are experiencing today the growth period of early industrialisation and urbanisation (cf. Hall and Hay, 1980; Cheshire and Hay, 1989). This most recent development will be more thoroughly discussed in 3.2.6. In analogy to the terms economic and demographic transition, the shift from the industrial city to the service and post-industrial city can be called the *urban transition* (cf. Friedrichs, 1985).

3.2.2 Urbanisation Levels

By 1965, only Greece, Ireland and Portugal had a level of urbanisation below 60 percent. Belgium and the United Kingdom had the highest level at 93 and 87 percent. By 1988, Greece had exceeded the 60 percent mark with Ireland just behind at 58 percent. The most significant rate of growth of the urban population between 1980 and 1988 was in Portugal, Spain and Greece (World Bank, 1990; Table 2 and Figure 3).

Such figures give only a rough impression of the real urban situation in industrialised countries. Nevertheless, they confirm the well-known relationship between degree of urbanisation and economic development, which says that generally a low level of urbanisation is associated with a low GNP per capita, which in turn usually rises with the level of urbanisation (see Figure 4).

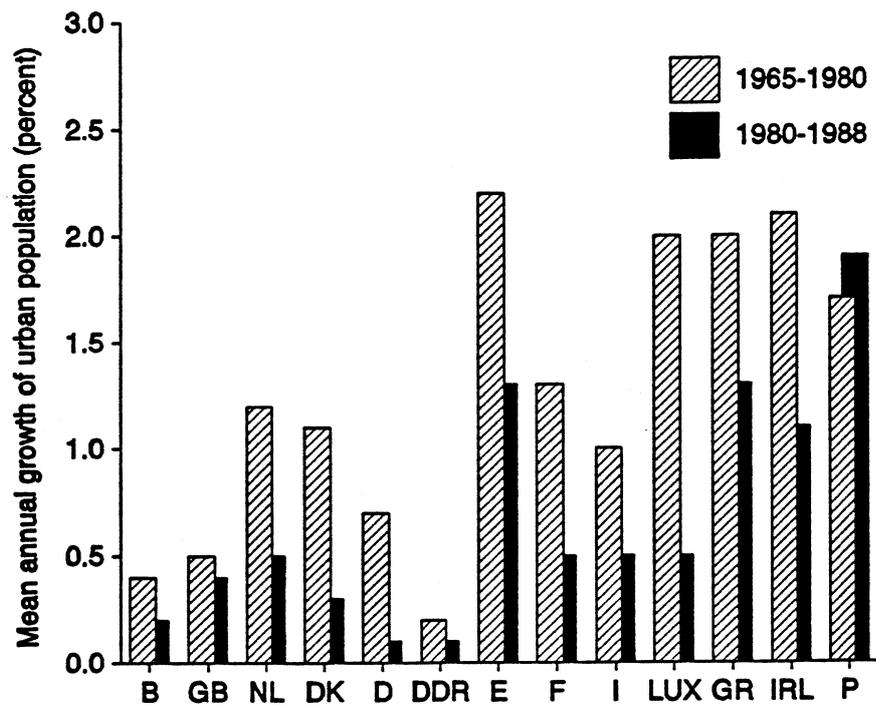
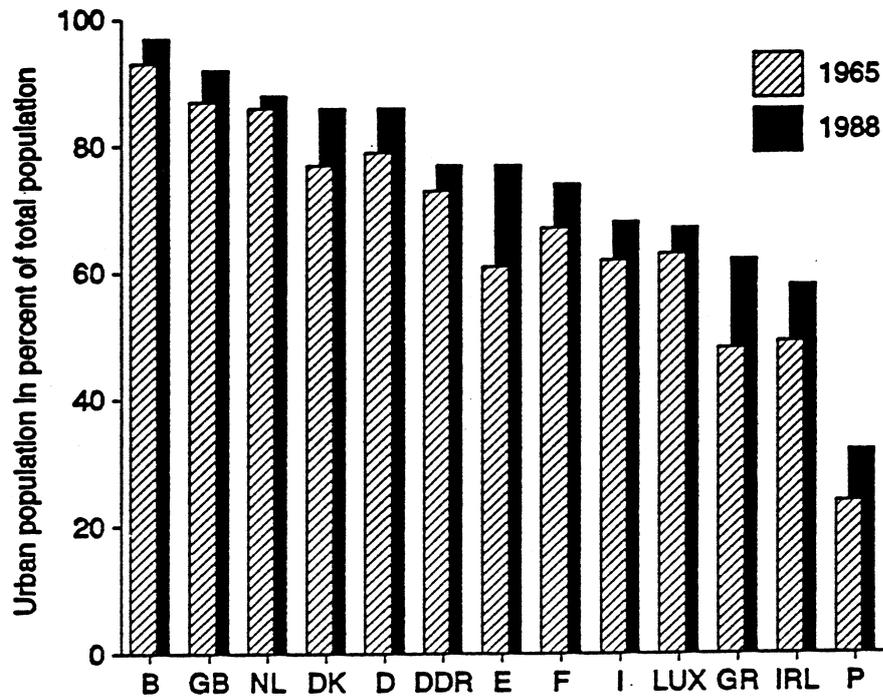
Table 2
Degree of urbanisation and urban growth, 1965-1988.

<i>Country</i>	<i>Urban population as percentage of total population</i>		<i>Urban population mean annual growth rate (percent)</i>	
	<i>1965</i>	<i>1988</i>	<i>1965-80</i>	<i>1980-88</i>
Belgium	93	97	0.4	0.2
Denmark	77	86	1.1	0.3
France	67	74	1.3	0.5
Germany, FRG	79	86	0.7	0.1
Germany, GDR	73	77	0.2	0.1
Greece	48	62	2.0	1.3
Ireland	49	58	2.1	1.1
Italy	62	68	1.0	0.5
Luxembourg	63	67	2.0	0.5
Netherlands	86	88	1.2	0.5
Portugal	24	32	1.7	1.9
Spain	61	77	2.2	1.3
UK	87	92	0.5	0.4
EUR 12	71	82	1.0	0.5
Austria	51	57	0.8	0.6
Switzerland	53	61	1.0	1.3

Note: The growth rates are calculated from World Bank estimates. Because of different national definitions of what is urban, comparisons between countries should be made with caution.

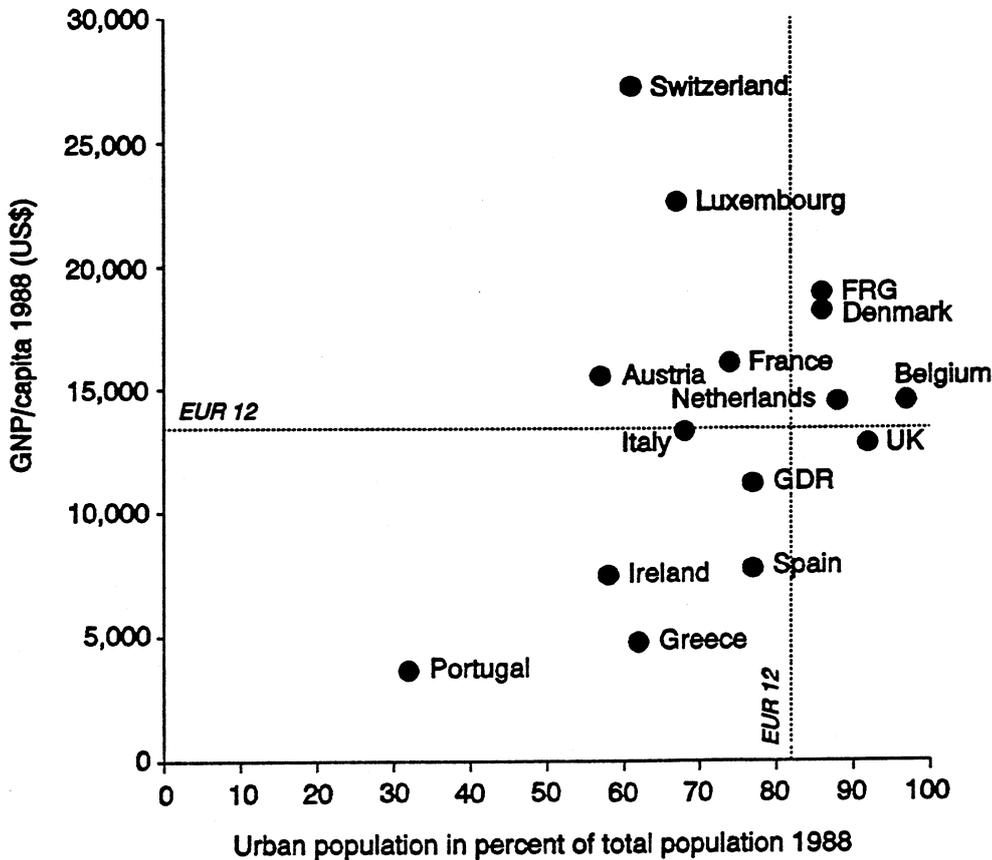
Source: World Bank, 1990; United Nations, 1987; Statistisches Bundesamt, 1990.

Figure 3
Degree of urbanisation (top) and urban growth (bottom), 1965-1988.



Sources: World Bank, 1990; United Nations, 1987; Statistisches Bundesamt, 1990.

Figure 4
Urbanisation and economic development, 1988.

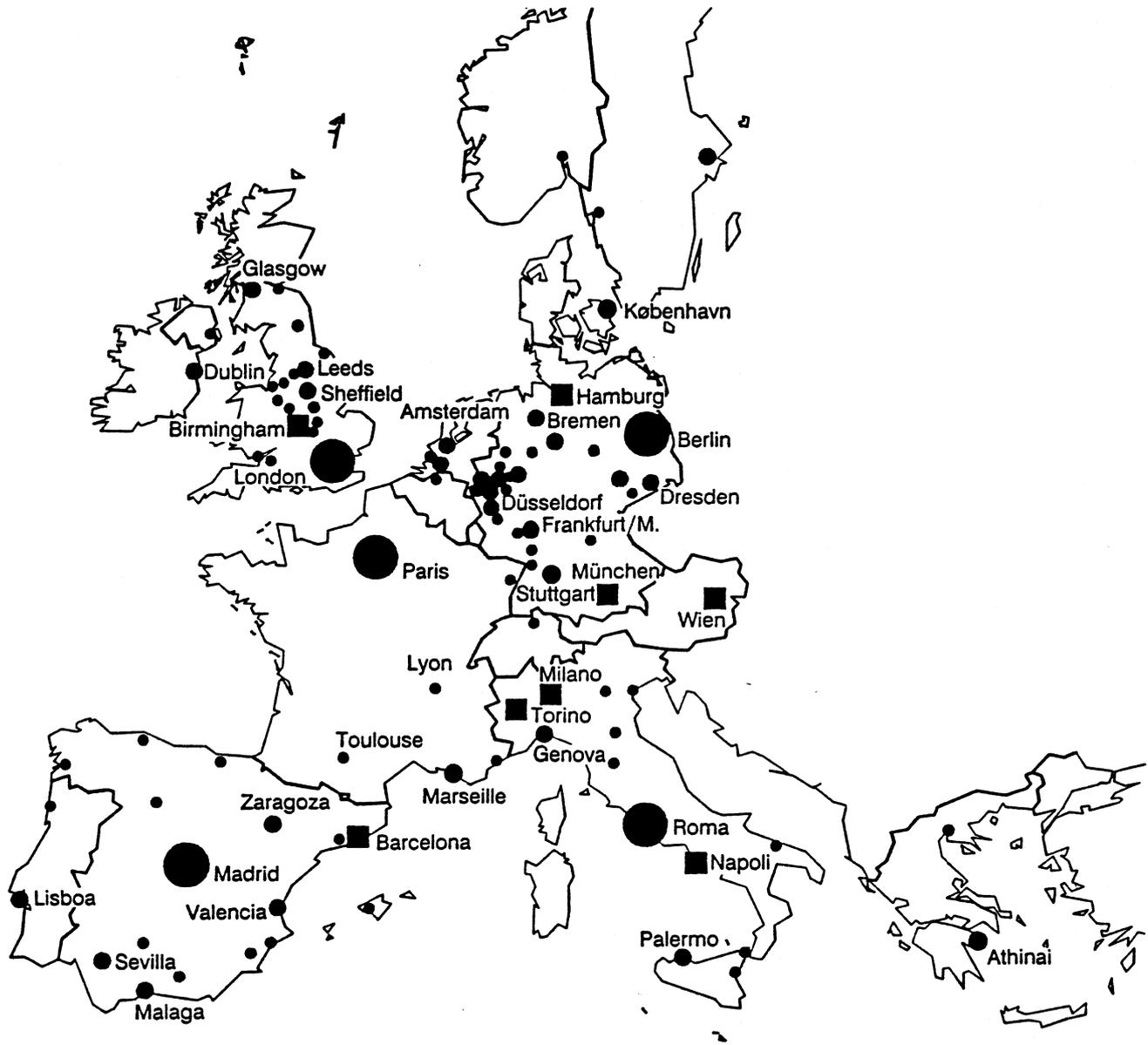


Source: World Bank, 1990; Eurostat, 1989.

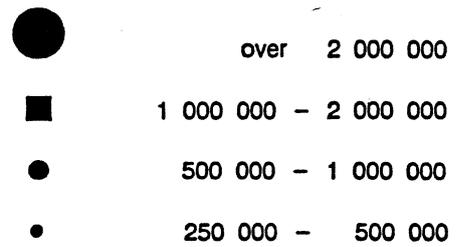
3.2.3 City Sizes

In the mid-1980s, 90 cities in the European Community had a population of more than 250,000 (see Figure 5). However, eight out of ten Europeans live in smaller communities (see Table 3 and Figure 6). During the last three decades cities in Europe have continuously grown beyond their administrative boundaries. When cities were still encircled by walls, the city and its population were clearly defined. The dismantling of the walls, the continuous evolution of transport technologies, growing affluence, changing lifestyles and the increasing costs of urban land caused suburbanisation beyond the original city boundaries (see 3.4.1). Thus it has become more difficult to define the actual boundary between city and countryside. Administrative boundaries no longer reflect the real size of a city. Paris is a pertinent example. In 1960 the city of Paris had just about two million inhabitants. Only by adding the municipalities of the region Ile-de-France, Paris becomes the metropolis of more than ten million. Some countries, Germany for example, exercised a consolidation of cities by merging suburban municipalities with the core city and so forming efficient administrative units. In other countries, core cities were unable to convince their suburban neighbours, which relied on the services of the core city, to join them and share their financial burden.

Figure 5
 Cities with more than 250,000 population in the 1980s.



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Note: This map refers to cities in their administrative boundaries.

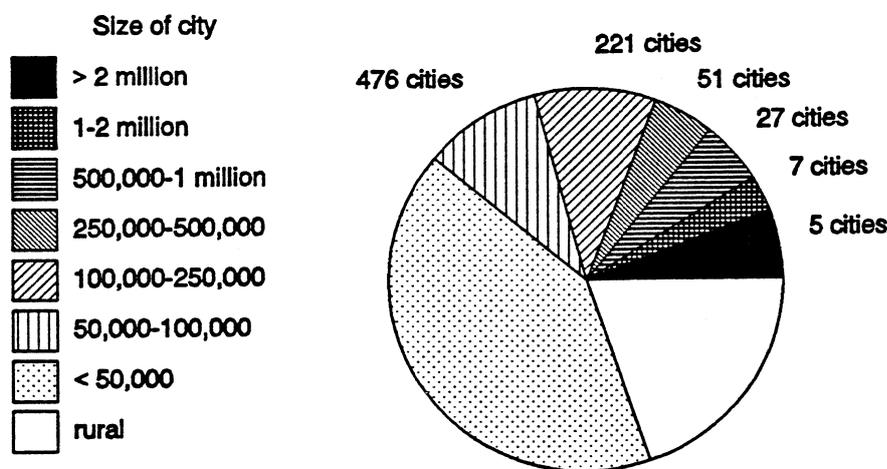
Table 3
Urban population in the EC by city size in the 1980s.

City size (population)	Number of cities	Population (million)	Percent of EUR 12
> 2 million	5	19.1	5.7
1-2 million	7	10.0	3.0
500,000-1 million	27	17.4	5.2
250,000-500,000	51	17.1	5.1
100,000-250,000	221	33.1	9.9
50,000-100,000	476	32.2	9.6
< 50,000	appr. 5,000	139.4 ¹	41.5 ¹
Urban population		268.3	80.0
Rural population		67.1	20.0
Total		335.4	100.0

Source: Census data; Statistisches Bundesamt, 1988. ¹ estimated.

Note: Data are from 1981 (Greece, Ireland, Italy, Luxembourg, Portugal, United Kingdom), 1982 (France), 1983 (Belgium), 1984 (Netherlands, Spain), 1985 (Germany, GDR) and 1986 (Germany, FRG).

Figure 6
Urban population in the EC by city size in the 1980s.



Sources: Census data; Statistisches Bundesamt, 1988.

Reacting to such definitional problems, efforts have been made to define modern cities all over Europe by introducing the concept of the *functional urban region* (Hall and Hay, 1980). This attempt to capture the sphere of influence of an urban economy give a different picture of the present urban system in Europe (see Table 4).

Table 4
Functional urban regions with more than one million population, 1981.

Size of FUR	City	FUR ^a Pop. 1981	Core ^a Pop. 1981	City ^b Pop. 1981-1986	
> 8 million	Paris	10,073,100	8,332,300	2,181,960 (85)	
	London	9,049,500	4,902,600	6,767,500 (85)	
> 2 million	Madrid	4,817,500	3,188,300	3,217,461 (86)	
	Barcelona	4,621,600	2,449,500	1,756,905 (86)	
	Bruxelles	4,060,200	710,700	139,678 (81)	
	Rome	3,889,300	2,840,300	2,828,692 (84)	
	Milano	3,874,800	2,104,400	1,548,580 (84)	
	Lisboa	3,832,400	1,138,900	807,167 (81)	
	Napoli	3,521,400	1,363,200	1,207,750 (84)	
	Athinai	3,497,500	3,027,300	885,737 (81)	
	Stuttgart	3,354,800	582,000	561,628 (85)	
	Birmingham	2,959,900	1,659,100	1,007,500 (85)	
	Hamburg	2,805,900	1,653,000	1,579,884 (85)	
	München	2,728,800	1,299,700	1,266,549 (85)	
	Amsterdam	2,454,000	869,100	677,360 (85)	
	Frankfurt	2,281,900	628,200	595,348 (85)	
	Valencia	2,113,800	805,800	763,949 (86)	
	Oporto	2,047,200	562,300	327,368 (81)	
	Torino	2,046,400	1,170,100	1,059,505 (84)	
	Köln	2,019,300	976,100	916,153 (85)	
	> 1 million	Manchester	1,988,800	948,700	451,100 (85)
		Kobenhavn	1,911,100	690,100	478,615 (85)
West-Berlin		1,899,000	1,899,000	1,860,084 (85)	
Lyon		1,850,800	1,147,700	408,860 (82)	
Düsseldorf		1,810,500	594,800	561,686 (85)	
Rotterdam		1,774,500	758,600	571,226 (85)	
Nürnberg		1,707,200	683,200	465,255 (85)	
Bari		1,652,000	371,000	368,896 (84)	
Glasgow		1,549,400	906,400	733,794 (85)	
Antwerpen		1,509,800	377,800	486,576 (85)	
Mannheim		1,501,300	592,500	294,984 (85)	
Hannover		1,462,100	535,900	508,298 (85)	
Bielefeld		1,443,400	312,400	299,727 (85)	
Palermo		1,430,300	701,700	714,246 (84)	
Marseille		1,429,200	988,300	867,260 (82)	
Sevilla		1,415,900	653,800	673,574 (86)	
Münster		1,415,500	267,500	270,102 (85)	
Leeds		1,387,100	757,100	710,500 (85)	
Liverpool		1,380,500	747,600	491,500 (85)	
Dublin		1,378,700	525,900	525,360 (81)	
Nantes		1,376,800	429,600	242,340 (82)	
Newcastle		1,369,100	514,900	282,200 (85)	
Den Haag		1,310,000	688,000	443,708 (85)	
Bilbao		1,272,000	642,400	420,538 (86)	
Essen		1,255,800	625,500	619,991 (85)	
Bremen		1,243,800	556,100	526,377 (85)	
Bochum		1,214,300	403,000	382,041 (85)	
Duisburg		1,202,000	559,000	518,260 (85)	
Bordeaux		1,135,300	606,200	205,960 (82)	
Catania		1,121,700	380,300	379,039 (84)	
Wiesbaden		1,107,700	459,500	266,623 (85)	
Saarbrücken		1,103,600	366,100	186,229 (85)	
Rouen		1,099,900	379,900	101,700 (82)	
Karlsruhe		1,096,800	271,400	268,211 (85)	
Wuppertal		1,091,300	394,600	376,579 (85)	
Brescia		1,049,800	206,700	203,187 (84)	
Belfast		1,034,900	277,900	318,600 (84)	
> 8 million			19,122,600	13,234,900	8,949,460
> 2 million			56,926,700	27,028,000	21,147,214
> 1 million			51,981,900	22,221,100	17,483,226
EUR 12		128,031,200	62,484,000	47,579,900	

Note: Cities in Austria, Switzerland and the GDR are not included.

Sources: *a* Cheshire and Hay, 1989; *b* United Nations, 1988.

If only functional urban regions with a population of more than a million are considered, four out of ten Europeans lived in large metropolitan areas, and every second if all functional urban areas with a population of more than 330,000 are taken into account (Cheshire and Hay, 1989).

These larger cities and city regions are the driving engines of economic development in the countries of Western Europe. However, the majority of citizens in Europe still live in small and medium-sized cities. These smaller and medium-sized cities are in danger of being relative 'losers' in the international competition between cities, unless they are situated in the immediate hinterland of the metropolises to which they are increasingly functionally linked.

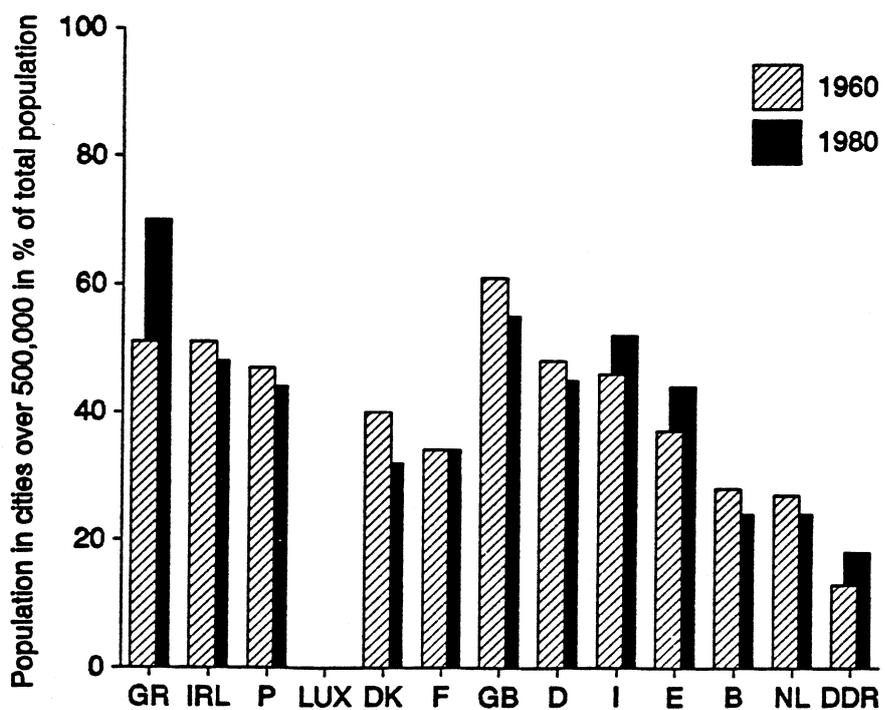
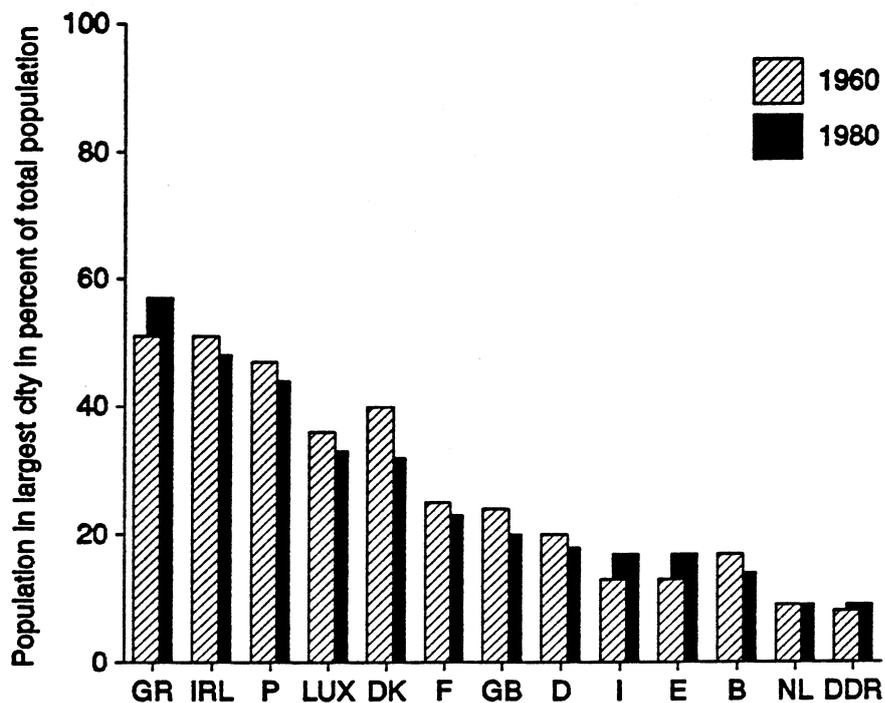
What general urbanisation figures do not show is the degree of balance of an urban system. This aspect is addressed in Table 5 which shows the relative concentration of the urban population in the largest city and in cities with more than 500,000 population of selected countries.

Table 5
Concentration of urban population, 1960-1980.

Country	Largest city	Percent of urban population			
		in largest city		in cities of over 500,000 population	
		1960	1980	1960	1980
Belgium	Bruxelles	17	14	28	24
Denmark	Kobenhavn	40	32	40	32
France	Paris	25	23	34	34
Germany, FRG	Berlin	20	18	48	45
Germany, GDR	Berlin	8	9	13	18
Greece	Athinai	51	57	51	70
Ireland	Dublin	51	48	51	48
Italy	Roma	13	17	46	52
Luxembourg	Luxembourg	36	33	0	0
Netherlands	Amsterdam	9	9	27	24
Portugal	Lisboa	47	44	47	44
Spain	Madrid	13	17	37	44
UK	London	24	20	61	55
EUR 12		17	16	44	43
Austria	Wien	51	39	51	39
Switzerland	Zürich	19	22	19	22

Sources: World Bank, 1990; United Nations, 1987; Statistisches Bundesamt, 1990.

Figure 7
Population in largest city (top) and in cities over 500,000 (bottom), 1960-1980.



Sources: World Bank, 1990; United Nations, 1987; Statistisches Bundesamt, 1990.

In 1960, for example, in Austria, Greece and Ireland more than half of the urban population lived in the largest city, i.e. in Wien, Athinai or Dublin. The uncontrolled growth of Athinai in the following decades has further increased that city's share of the total urban population of Greece to 57 percent. Portugal and Ireland, however, during these twenty years have experienced a slight decline of the concentration of urban population in Dublin and Lisboa. On the opposite end there are the much more balanced urban systems of the Netherlands, Belgium, Italy, Germany or Spain, where only a relatively low proportion of the total country's urban population lives in the largest city. In general there is a trend away from the largest city except in the former GDR, Greece, Italy and Spain where the capital city continues to increase its dominance. A similar picture emerges if all cities with a population of over 500,000 are considered. Figure 7 illustrates the same data for the countries of the European Community graphically.

3.2.4 City Hierarchies

In the past, only few efforts have been made to establish such a hierarchy of cities in Western Europe. One of the earliest suggestions was made by Walter Christaller in 1950 (Christaller, 1950). He proposed a four-tier urban hierarchy for Europe (see Figure 8). In 1979 the European Conference of Ministers of Regional Planning (CEMAT) published a map of a European network of metropolitan cities and development axes (CEMAT, 1979, see Figure 8). It shows a six-level hierarchy of metropolitan cities based on population size. Ten years later, when launching its ideas for a European spatial planning concept, CEMAT based its deliberations among others on a five-level hierarchy based again on population only (CEMAT, 1988). The most recent effort to develop a hierarchy of cities in Western Europe was made by a French group of geographers (RECLUS, 1989, see Figure 9). They classified 165 urban agglomerations in Western Europe into eight classes utilizing sixteen indicators. According to their findings, Paris and London of course ranked first, with Milano second, and Madrid, München, Frankfurt, Roma, Bruxelles, Barcelona and Amsterdam third.

At present the actual hierarchy of cities in Western Europe is as follows (Figure 10):

- There are Paris and London, undoubtedly the only two global cities of Western Europe at the top of the hierarchy.
- They are followed by conurbations such as Rhein-Main (Frankfurt), København/Malmö, Manchester/Leeds/Liverpool, the Randstad (Amsterdam/Rotterdam), the Ruhrgebiet (Dortmund/Essen/Duisburg) and Rhein (Bonn/Köln/Düsseldorf).
- A similar importance on the European scale have a number of larger European cities ('Euro-Metropoles') such as Athinai, Brussels, Birmingham, Wien, Lyon, Milano, Roma, Madrid, Barcelona, Hamburg, München and Zürich. These cities perform essential economic, financial or political and cultural functions for Europe as a whole. After the reunification of Germany Berlin, too, will undoubtedly become again a city of major European importance and, in the long run, may even become a candidate for a global city.
- A third category are national capitals and other cities of European importance such as Dublin, Glasgow, Lisboa, Strasbourg, Stuttgart, Palermo, Torino and Napoli. These cities are completing the network of cities of European importance although their function is mainly a national one.

Figure 8
 Historical city hierarchies: Christaller (1950) and CEMAT (1979).

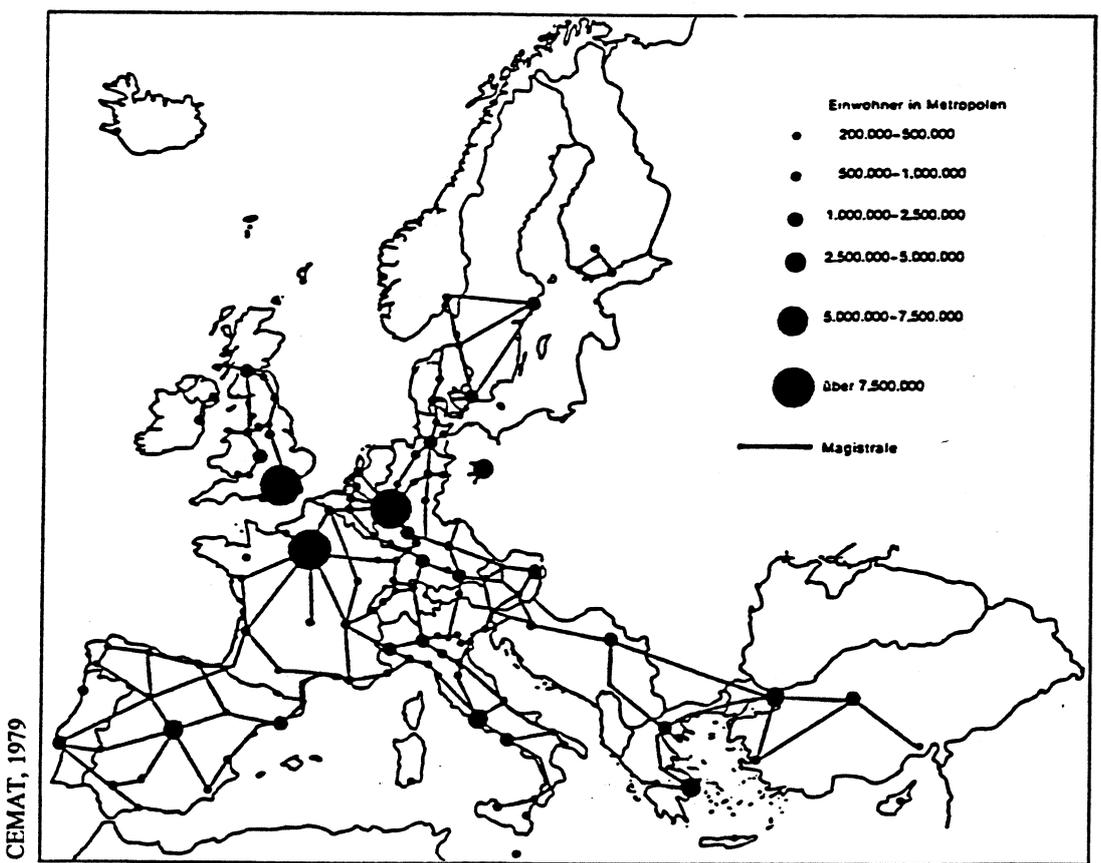
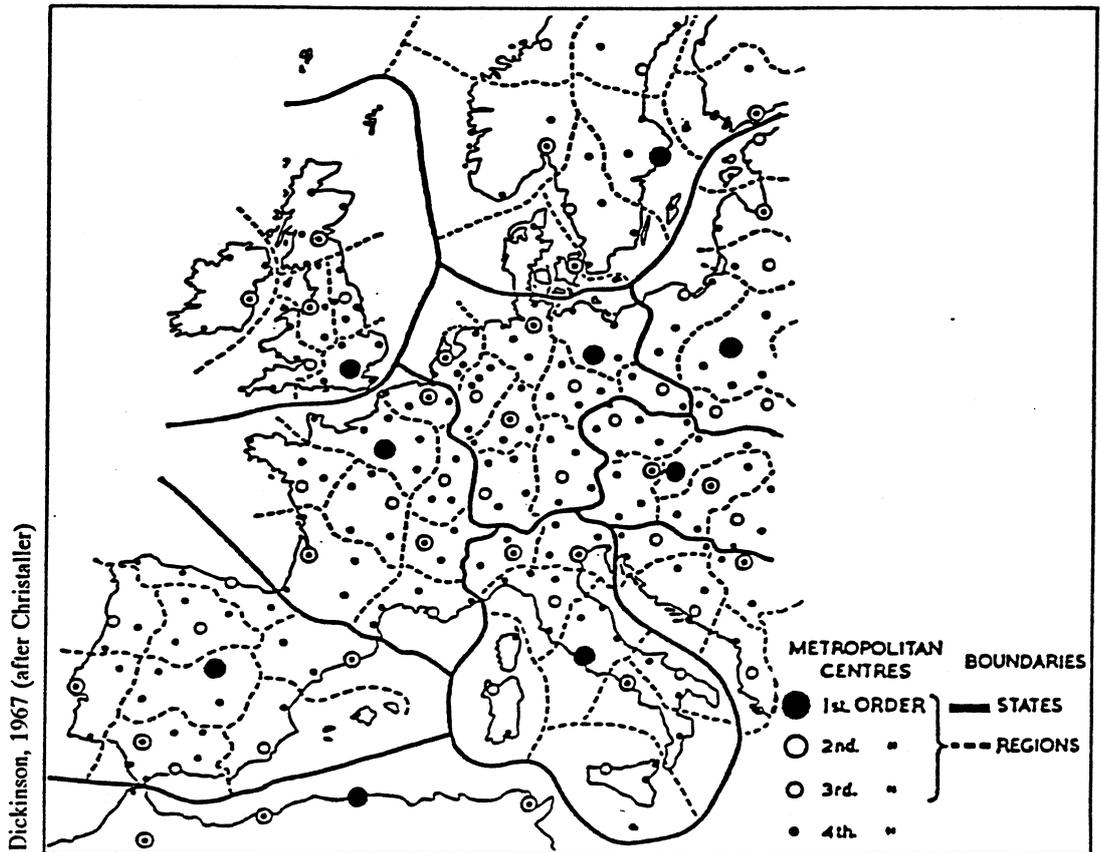
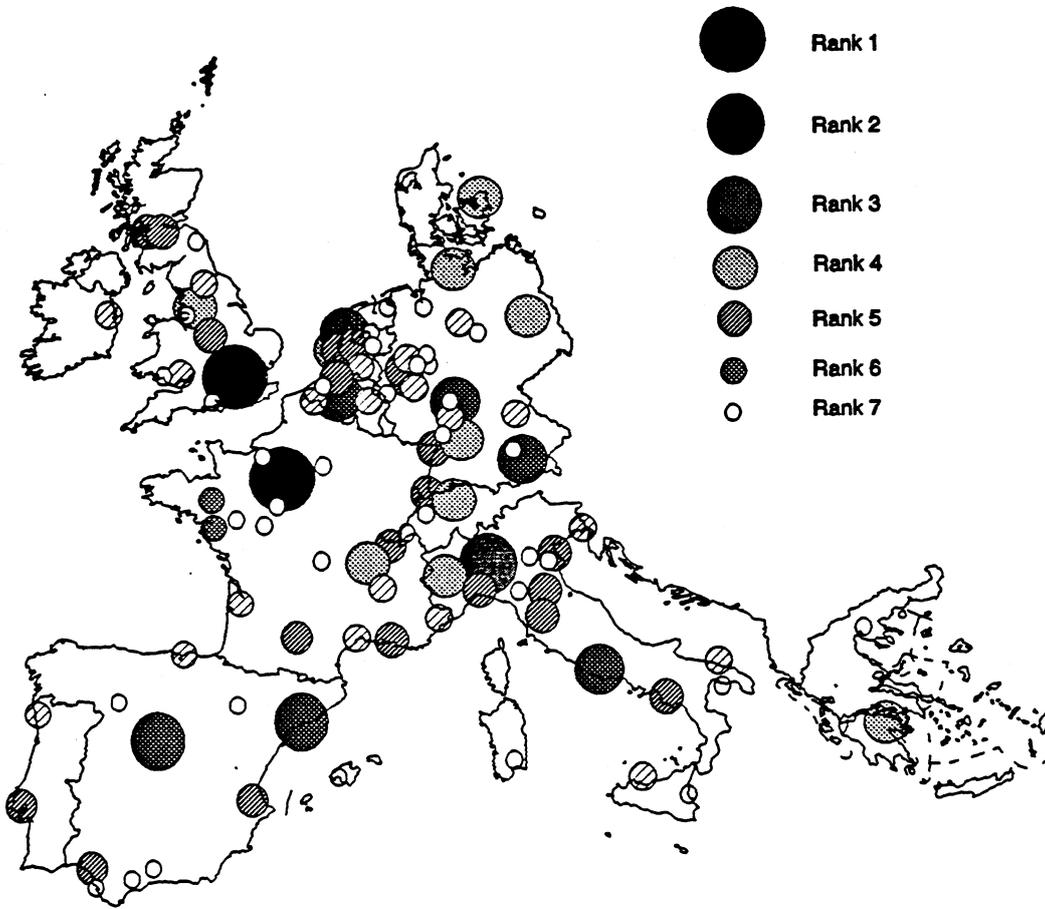
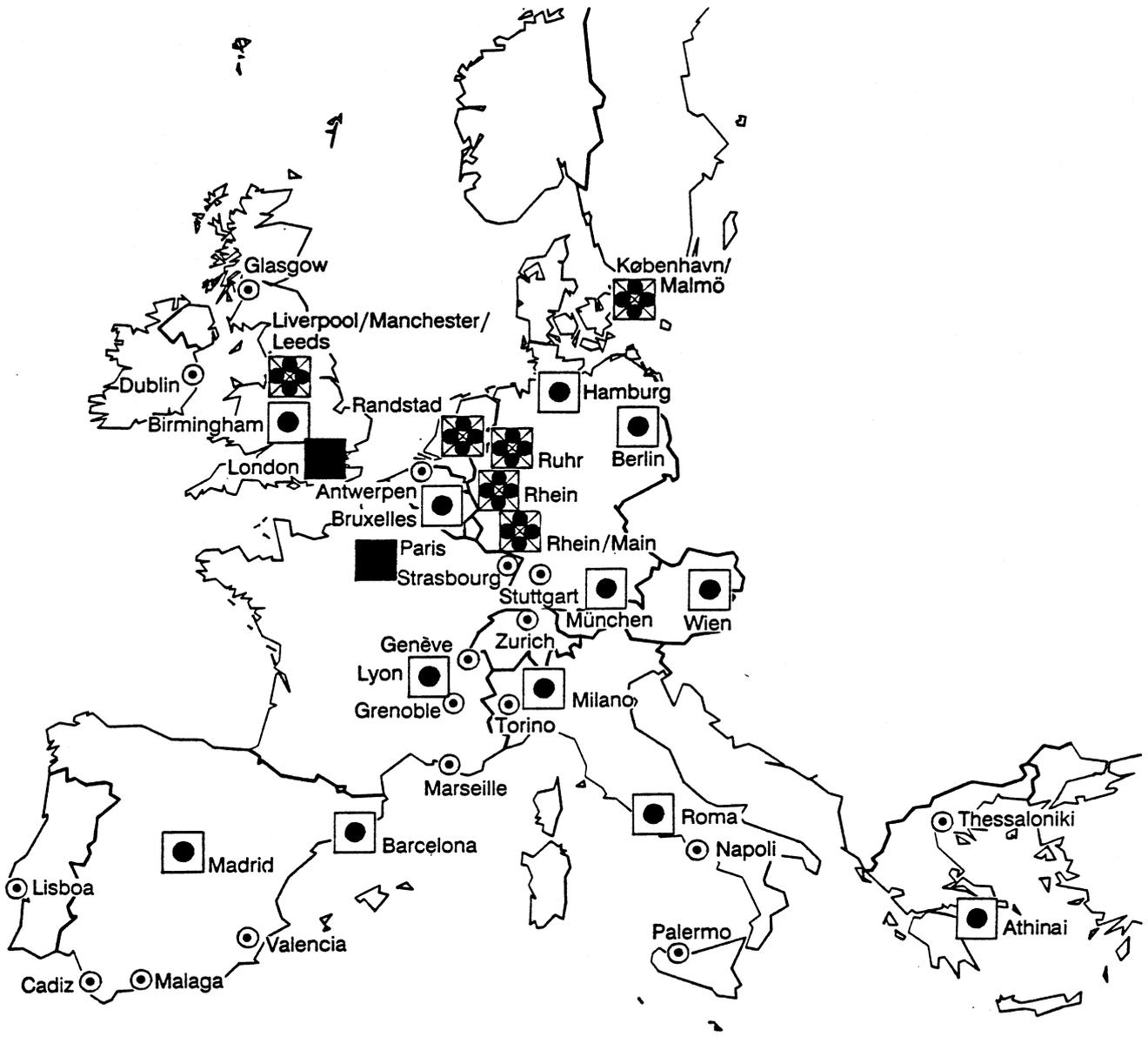


Figure 9
European cities 1989 (RECLUS, 1989).



after RECLUS, 1989

Figure 10
The urban system in Western Europe.



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-  Global metropolis
-  Conurbation of European importance
-  Euro-Metropolis
-  Cities of European importance

- Below this level, and depending on national definitions of central places which exist in a few number of European states (e.g. Denmark, Netherlands, Austria or Germany) various levels of lower urban hierarchies follow. These thousands of small and medium-size cities serve as development, service or relief centres of national, regional or subregional importance and are essential for providing equal living conditions for the majority of the population in the countries of Europe.

The growing integration of Europe will gradually replace national urban hierarchies by one integrated urban hierarchy in Europe. This may in the long run change the rank of one or the other city in the hierarchy, in particular of cities located near present inner-European borders (e.g. Aachen, Liege, Maastricht, Strasbourg). Also 'gateway' cities at the outer borders of Europe may step up in the hierarchy beyond their present rank (see 3.3.2).

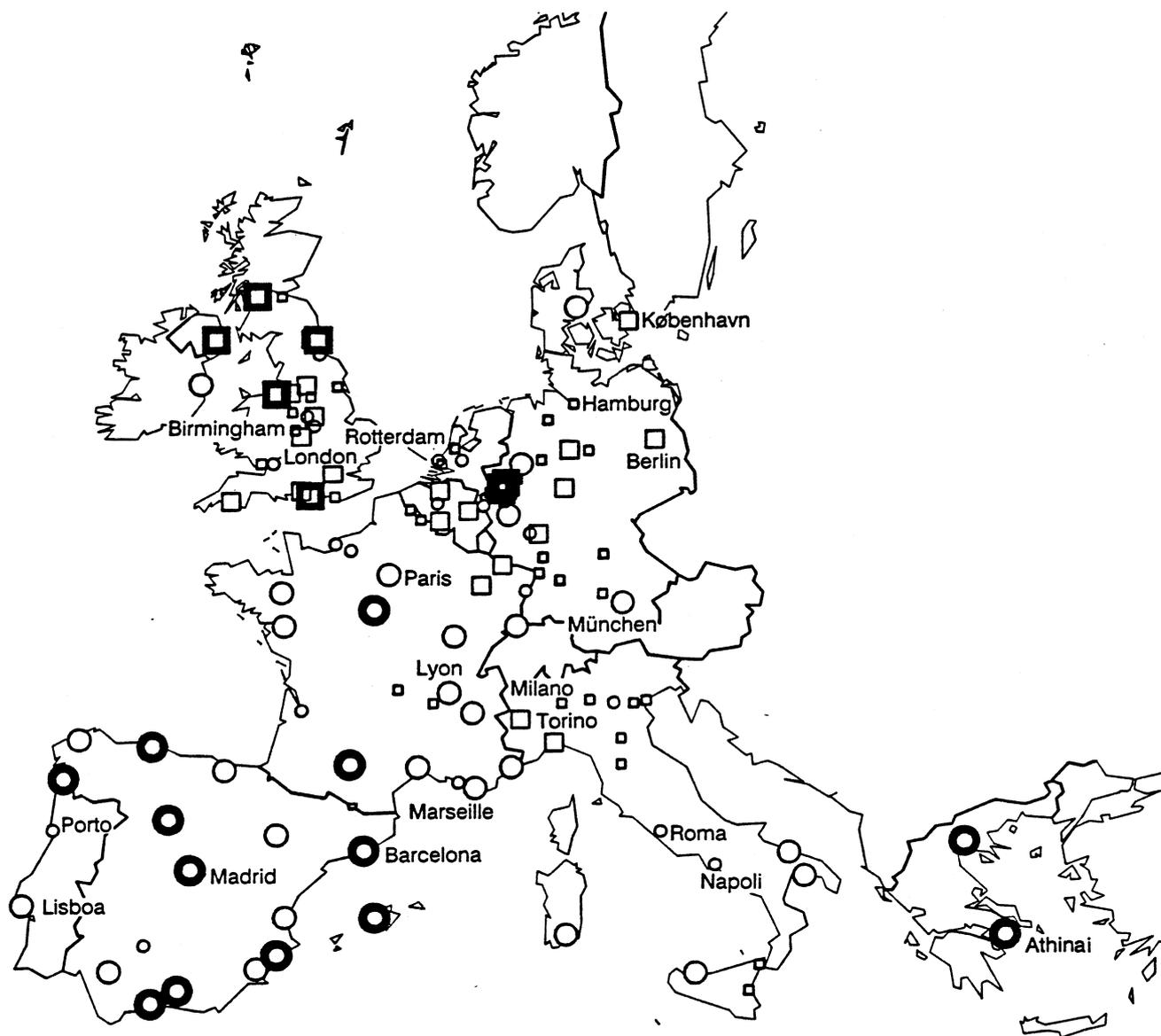
Still more important is that the growing functional specialisation of cities in Europe will bring about the formation of *functional* networks of larger and smaller cities which will gradually replace the historical 'general' urban hierarchies by a complex system of specialised urban networks. Eventually, the importance of a city in the urban hierarchy of Europe will not be determined by population size or a larger or smaller hinterland but by its function in the European, or world-wide, specialised system of cities.

3.2.5 Urban Decline and Urban Growth

The model of different phases of urbanisation coexisting in time with different phases of the economic and demographic transition (see 3.2.1) was confirmed by the study of Cheshire and Hay (1989) on urban decline and urban growth in Europe. They studied population change in 122 urban regions with a population of more than 330,000 and a core city of more than 200,000 between 1971 and 1981 and came up with the following classification (see Figure 11):

- *Severe decline*: Population decline of more than one percent per year was found in urban regions in the European North West with a pronounced industrial or port history: Sunderland, Belfast, Glasgow, Portsmouth, Essen and Liverpool.
- *Decline*: Annual population decline between one and .5 percent was found in a similar group of industrial or port cities in the North-West including Charleroi, Liège, Manchester, Duisburg, Wuppertal, Southampton, Nottingham, Newcastle, Antwerpen, Saarbrücken, Plymouth, Hannover, Coventry, Kassel, Nancy and Leeds, but also two cities in Northern Italy, Torino and Genova.
- *Moderate decline/growth*: The two central groups include 54 city regions in which population change was close to zero - too many to be listed here.
- *Growth*: Annual population growth between .5 and one percent was found overwhelmingly in Mediterranean countries: Palermo, Lyon, Taranto, Bari, Nice, Rennes, Zaragoza, Cagliari, Toulon, Mulhouse, Dijon, Montpellier, La Coruña, Nantes, Lisboa, Sevilla, Grenoble, Bilbao, Valencia and Murcia (with the two university cities Münster and Århus as notable exceptions).
- *Rapid growth*: Without exception, cities with population growth of more than one percent per year were found in Mediterranean countries: Toulouse, Barcelona, Vigo, Valladolid, Granada, Thessaloniki, Gijon/Aviles, Athinai, Orléans, Palma de Mallorca, Malaga, Alicante and Madrid.

Figure 11
Urban decline and urban growth, 1971-1981.



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- Severe decline
- Decline
- ▣ Moderate decline
- Moderate growth
- Growth
- Rapid growth

Data from Cheshire and Hay, 1989

However, several large and/or capital cities did not follow this simple pattern. London lost population, while Paris showed moderate growth. Düsseldorf, Kobenhavn, Frankfurt and Berlin declined, whereas München and Bonn gained. These exceptions demonstrate the need for a more in-depth analysis of the specialised functions of cities as it will be undertaken in Section 3.3.2.

3.2.6 Recent Spatial Trends

The simultaneous existence of cities and city regions in different phases of the urbanisation process has been characteristic of the development of the urban system in Europe during the last three decades. However, under the influence of the trends discussed in Section 2 of this report, in the late 1980s the pattern of urbanisation in Europe has become even more complex. Today three distinct trends of spatial development of European dimension can be identified: the growing disparity between the core and the periphery of Europe, the divergence between the affluent North and the developing South of the continent, and the emerging divide between West and East Europe, which could overshadow the two former ones.

Core vs. Periphery in Europe

The rapidly growing internationalisation of regional and national economies has tended to favour cities in the European core (Belgium, Germany, the Netherlands, central and northern France and South-East England) against those in the periphery (Scotland, Ireland, Greece and Portugal). Cities in the core of Europe have comparative advantages. Their accessibility (by air and train) is better, business trips to them can usually be made within a day. They offer more and better high-level services (banking, insurances, consultancy etc.). Their fairs and convention events have higher international reputation and the diversity of their cultural opportunities is greater. Consequently the number of international corporations and of subsidiaries of foreign enterprises in such cities is usually higher. Despite various efforts by European and national institutions and governments to balance urban development, the concentration of cities, both nationally and on the European level, has not come to a standstill. Also port cities that once had an important economic and communication function, have continued to lose importance to cities with international airports which today serve as the new focal points of communication and information exchange.

Both the highly urbanised triangle between London, Paris and the Rhine-Ruhr area in Germany and the densely populated and economically powerful urban corridor stretching from Amsterdam to Basel indicate to the polarisation of the urban system in Europe. This view has been reaffirmed by the widely publicised image of the 'blue banana' (RECLUS, 1989). The message of the 'banana' is that those people in Europe who live outside the highly urbanised belts are far off from where the 'real' action is.

The concentration of urban population has further increased all over Europe, in France as in Britain, in Germany as in Italy, in Greece as in Spain (see Table 5). The exodus from rural areas and smaller towns to urban agglomerations could not be stopped, not even, as it was hoped temporarily, by new information and telecommunication technologies. There are, however, exceptions: some attractive Mediterranean rural regions have seen considerable population growth and subsequent urbanisation during the last three decades.

North vs. South in Europe

Just as one on the global scale, there is also in Europe a clear divide between 'North' and 'South'. Population growth in the cities and urban regions of the North - which also includes parts of Central Europe (Germany, Austria and Switzerland) - has virtually come to a halt, whereas the cities in the South continue to grow as they are still in an earlier phase of industrialisation and urbanisation (see 3.2.4). Socio-economic indicators such as the rate of urbanisation, GNP or the share of agricultural employment underline this explanation. Economic modernisation leads to a reduction of agricultural employment, while high natural population growth results in rural-to-urban migration causing the growth of cities. This has been the case in the South, and there this process has not yet come to an end. In the North, with its stagnating demographic development (see 2.1) and affluence-generated suburbanisation (see 3.4.1), urban decline has become a fact, although some reurbanisation has taken place in recent years (see 3.4.2).

New migration flows from Eastern Europe and North Africa may change this trend again (see 2.2). In recent years cities in Germany, for example, have experienced a reversal of their population decline due to the immigration of refugees and ethnic Germans from the East, which for obvious reasons are primarily heading towards the cities. On the other hand, birth rates in Italy have fallen in recent years, and urban growth rates in this country may start to stagnate or even decline in the coming decade.

West vs. East in Europe

The unexpected opening of the once impenetrable Iron Curtain to Eastern Europe has recalled an old spatial divide, the East-West divide. It may well supersede the North-South divide and become the dominant political issue of the next decades. It has existed in the past, but due to, among other factors, suppression of information, negligence and lack of interest, the urban system of Eastern Europe and its linkage to the urban system in Western Europe has largely not been a topic for discussion or for research. Some German cities (Berlin, Hamburg, Hannover) will benefit from the new geopolitical situation, but also cities in Denmark, Austria and Northern Italy. The future development of Berlin and the deliberations concerning the future role of the forthcoming German capital in the urban system in Europe requires careful monitoring. In few years from now it may make a reassessment of spatial trends in Europe necessary.

So in summary the urban system in Europe is in a process of polarisation between centre and periphery, North and South and East and West. There is little evidence that this polarisation process can be easily reduced. In the past, regional policy efforts at the European and national level to narrow the gap between centre and periphery and between North and South have only partially been successful (e.g. in Spain), although by creating jobs, providing public services and improving living conditions in assisted areas, they have contributed much to stop the further widening of regional disparities..

3.2.7 City Networks

Alarmed by increasing-world wide competition, more and more cities in Europe respond to initiatives of forming transnational urban networks. Through networking cities are able to establish beneficial connections, improve flows of information, develop best practise, pool financial resources and share development cost of innovative projects. Whereas traditional city networks operated on a national basis (as the influen-

tial *Deutscher Städtetag*) or with very general objectives (such as the *Union of Local Authorities*, the *Union of Capitals of the European Community*), the emerging new transnational urban networks are more action-oriented.

At present there are twelve networks supported by the Commission. The best known of them is the *Eurocities* group which presently links fourteen cities (Frankfurt, Stuttgart, Mainz, Birmingham, Amsterdam, Rotterdam, Eindhoven, Lyon, Montpellier, Strasbourg, Nice, Milano, Barcelona and Lodz). They organise joint congresses, publish a joint newsletter and initiate joint projects. Other supported networks are:

- the *Commission des Villes* consisting of five subnetworks of economic and technological cooperation of small and medium sized cities,
- *POLIS*, a network of cities promoting operational links with integrated services through road traffic informatics between European cities,
- *Automobile Cities*, a network of cities and regions promoting the cooperation between cities and regions engaged in automobile manufacture,
- *Quartiers en Crise*, a network of 25 cities to share information and skills relevant to the regeneration of inner city areas, and
- *Transport Inter-Changes (UITP)*, a network spreading the latest and best practice concerning the integration of public transport systems.

The Commission acts as a catalyst to facilitate the process of networking initiated by the cities themselves, based on the expectation that the networks contribute to the overall aim of economic and social cohesion in Europe by promoting a sense of solidarity and identity of purpose between cities across the Community. The network scheme is part of the Commission's programme to promote contact and cooperation between regional and local authorities inaugurated in 1989.

3.3 National/Regional Level

The pattern of urbanisation in Western Europe differs from country to country. Some distinct features of the urban system in Europe as it presents itself in 1990 after more than three decades of economic growth and political continuity are sketched and illustrated below.

3.3.1 National Urbanisation Patterns

As a rule, the national urban system of a country reflects its socio-political system. In a very centralised political system such as the United Kingdom, France or Greece, one major urban agglomeration dominates the national urban system. In countries with federal political structures such as Germany or Switzerland regional capitals form a more balanced urban system. Countries which have adopted explicit decentralisation policies (e.g. Spain) may over time see the evolution of a more equalised national urban system. But irrespective of these differences, the core-periphery and North-South dichotomies observed already on the European level reappear also on the national/regional level, though on a smaller spatial scale and with different connotations grown out of the particular history of each country:

Centre vs. Periphery in Individual Countries

Just as on the European scale, the dichotomy between centre and periphery is an important issue *within* national settlement systems. The European countries differ widely with respect to the degree of centralisation or decentralisation of urban functions. In five of the countries under review (France, United Kingdom, Ireland, Greece and Austria) one large metropolis dominates the national urban system. The historical centralisation of power in Paris is well known, but London, Dublin, Athinai and Wien exert a similar dominance. This is illustrated by the concentration of urban population in the largest city in different countries shown in Table 5. The century-long accumulation of economic and political power, of information and communication, has led to the concentration of the best cultural institutions (e.g. theatres and museums) and educational facilities (e.g. universities) of each country in the metropolis. The dominance of the metropolis has also shaped the transport network which links the whole country to the court or the central government, the banks and all other public and private institutions of national importance, but tends to neglect links between other cities and regions across the country. The dominant metropolis also serves as principal point of exchange with the outside world, a fact which gives all other cities in the country a second-class status.

Although high-speed trains have a theoretical potential for decentralisation, they rather seem to contribute to the concentration process, although the history of high-speed trains is too short to draw final conclusions on this issue. In recent years leap-frog development has been observed in secondary cities in which the high-speed trains stop for the first time after leaving the metropolis. Reading in England, Orléans in France and Augsburg in Germany are examples for this phenomenon. Cheaper housing and living and fast access to the abundant labour market of the metropolis are the main reasons for such expansion of the metropolis to the wider hinterland.

Still another development has strengthened the polarisation process. Favoured by the easy access through international airports, by the anonymity of urban life, by family networks and a large informal labour market, the metropolis has become the prime target for international migration. Here the traditional links based on language or colonial history are still strong. What Paris is for North Africa, London is for the West Indies, India or Black Africa and Wien for Eastern and South-Eastern Europe. It is most probable that the unequal economic development of the First and Third Worlds will further increase the attractiveness of the dominant European metropolis for a growing number of migrants from Africa and Asia. Increasing social conflicts and political tensions could originate from this.

On the other hand, historical, economic and cultural legacies of the past such as scattered little feudal kingdoms, dukedoms and counties, powerful free cities and city networks have resulted in rather balanced urban systems in Germany, Italy and Spain, the Netherlands, Belgium and Switzerland. The functional division of labour between the major cities, the continuous interregional competition for national or international investment, or their role as regional capitals has very much contributed to a more balanced regional development in these countries and subsequently to the stabilising of the national urban system. Such balanced urban systems have created or strengthened regional economic circuits which are indispensable for conserving a strong regional economic base. They illustrate the advantages of federal systems and strong regional governments for achieving equal living conditions in all parts of the country.

South vs. North in Individual Countries

While on the European scale, there is a divide between the industrialised North and the underdeveloped South (see 3.2.7), in a number of European countries a divide between the prospering South and the declining North became a national issue during the last decade. The term 'South-North divide' indicates uneven economic development and growing spatial regional disparities within a country. 'South' became almost a synonym for modernity and high-tech, progress and innovation, but also for leisure and quality of life. 'North' in turn stood for obsolete infrastructure and outdated heavy industrial structures, derelict industrial plants and contaminated soils, political immobility, a politically conscious labour force and poor living conditions.

However, the South-North divide is different from country to country. In Britain, for example, it meant that new developments added to the wealth of the booming South-East, that is London and its surrounding cities and counties and widened the gap between the South-East and traditional industrialised cities in the North. In Italy modern industries developed in the regions between Venezia and Torino and not in the *Mezzogiorno*. Such a shift occurred also in France where modern high-tech industries in the South (e.g. Toulouse) attracted skilled labour at the expense of northern locations (e.g. Metz).

There is some evidence that recent developments such as growing agglomeration diseconomies in the 'South' and successful restructuring in the 'North' seem to have stopped the deepening of the gap between South and North, at least in Britain, France and Germany. The 'success stories' of cities such as Leeds, Lille, Dortmund and Glasgow have improved some of the previously negative images of 'Northern' cities. They have shown that successful cities can play a crucial role in the economic restructuring of a region. Whether their economic success is sustainable and can be replicated in other smaller and less favoured cities remains to be seen. One thing is clear, however, the likely success depends on the synergy of a number of factors including the personal involvement of public and private key actors. After a period of growing discrepancies between Southern and Northern cities, land values, for example have again a tendency to converge rather than further diverge.

3.3.2 Functions of Cities

Apart from their traditional function and role as feudal residences and political headquarters or as regional centres of production and services, the perception and image of cities is linked to the particular function they exercise or the role they play in the system of cities of the world, of Europe or of their country.

Cities perform a multitude of service and industrial, of political and cultural functions. Cities internationally known as financial or cultural cities may in general still have a considerable number of jobs in industry. And most industrial or port cities have also regional and national service functions. Therefore the following functional categorisation of cities in Europe can only be an effort to describe the *dominant* function of cities in the European urban system (see Table 6).

On the other hand there is a new trend that requires careful monitoring: There is growing evidence that certain modern industries prefer certain types of cities. Worldwide economic concentration, agglomeration economies and information and communication synergies reinforce each other and favour polarisation in a few cities at the expense of

Table 6
Functional types of cities.

<i>City type</i>	<i>Characteristics</i>	<i>Examples</i>
Global cities	Accumulation of financial, economic, political and cultural headquarters of global importance.	London Paris
Growing high-tech/services cities	Modern industrial base, national centre of R&D, production-oriented services of international importance.	Bristol Reading München
Declining industrial cities	Traditional (monostructured) industrial base, obsolete physical infrastructure, structural unemployment.	Metz Oberhausen Mons Sheffield
Port cities	Declining shipbuilding and ship repair industries, environmental legacies (e.g. in oil ports), in the South burdened by additional gateway functions.	Liverpool Genova Marseille Antwerpen
Growing cities without modern industrialisation	Large informal economy and marginalised underclass, uncontrolled development and deteriorating environment.	Palermo Thessaloniki Napoli
Company towns	Local economy depending to a high degree on single corporation.	Leverkusen Eindhoven
New towns	New self-contained cities with overspill population in the hinterland of large urban agglomerations.	Milton-Keynes Runcorn Evry
Monofunctional satellites	New urban schemes within large agglomerations with focus on one function only (e.g. technopoles, airport cities).	Sophia-Antipolis Roissy Euro-Disneyland
Small towns, rural centres, urban belts	Smaller cities and semi-urbanised areas in rural regions, along coasts or transport corridors with weak economic potential.	All over Europe
Tourism and culture cities	Local economic base depending on international tourism and cultural events of European importance.	Salzburg Venezia Avignon
Border and gateway cities	Hinterland divided by national border; gateways for economic migrants and political refugees.	Aachen Thessaloniki Basel

others. These cities then specialise their infrastructure and services to attract additional economic activities of the same kind, until the city has a 'label' or image for a particular mix of activities. This may lead in the long run to vulnerable mono-structures.

The following types of cities by function can be identified in the urban system in Europe:

- *global cities,*
- *growing high-tech/services cities,*
- *declining industrial cities*
- *port cities,*
- *growing cities without modern industrialisation,*
- *company towns,*
- *new towns,*
- *mono-functional satellites,*
- *small towns, rural centres and suburban belts,*
- *tourism and culture cities,*
- *border and gateway cities.*

These types of cities and their functions and roles are sketched in the following section of the report.

Global Cities

London and Paris are the only two cities in Europe with a really global function. They provide opportunities and facilities required by the global economy in exceptional quantity and quality. The global attractiveness of these cities is a self-reinforcing mechanism which continuously adds new economic activities to the already overburdened metropolitan region. However, the concentration of people and economic activities presents these cities with serious economic, social, environmental and infrastructural problems.

Some of the more urgent problems these cities have been confronted with during the last three decades are:

- The pressure on land for office buildings and executive housing has led to an explosion of land prices beyond economic rationality and with considerable repercussions for small and medium-sized firms, and for the majority of low and medium-income households that cannot afford the high land prices and are forced to leave inner city locations and to settle in the urban periphery.
- Traffic congestion and air pollution in Paris and London are a daily experience despite large investments in transportation and traffic management. Financial constraints of the public sector or deregulation policies, as in London, have hindered the modernisation and expansion of the public transport network.
- Favoured by the easy access through their international airports, by the anonymity of the metropolis, by family networks and a large informal labour market, Paris and London have become prime targets of international migration. This has led to a considerable increase of foreign population with immense housing, education and labour market problems. Slum quarters in outer urban districts are becoming public issues. Increasing social conflicts and political tensions are the consequence.

Both in London and in Paris the relationship between the core city and the suburban communities and the towns in the metropolitan hinterland has become a key issue. The different needs and requirements of core and periphery in the metropolitan region lead to political and administrative conflicts. Environmental concerns are usually sacrificed to demands for the global functions. Greenbelts and open land are endangered, only with spectacular 'megaprojects' are new inner urban parks created in a city like Paris.

Growing High-Tech/Services Cities

During the last three decades a number of cities in Europe community have developed into flourishing high-tech and services cities. Bristol, München, Stuttgart, Lyon, Montpellier and Toulouse are examples of such cities. For different historical, cultural, political and economic reasons they have been successful in attracting modern industries and production-oriented services. Their usually well developed higher education facilities attract other R&D facilities, and the resulting synergy is accelerating their economic development. These cities which are labelled *technopoles* in France have become thriving centres of economic development in their countries. Even smaller cities in their hinterland profit from the pull they exert on national and international capital, corporations and investors. To a significant degree these cities have profited from defense-related industries and their large government contracts and from the many technological spin-offs and R&D clusters such industries create. Their economic strength will help these cities to overcome the foreseeable decline of national defense industries.

Unconstrained by legacies of an industrial past and situated in an attractive environment, these cities have become the favourite residences and work places of the young and highly skilled labour force. Their city managers invest in culture and international events to please their citizens and to show up in the national and international media. Their growing agglomeration disadvantages (e.g. high land prices, transport bottlenecks and problems of waste disposal and environmental pollution), which are aggravated by liberal land use policies, may in the future confront these cities with serious difficulties. They will have to decide whether to intervene in the development process to preserve the quality of the urban environment or to cushion the high social costs of economic success.

Declining Industrial Cities

The notion of urban decline has been one of the favourite political issues of the last three decades. Primarily traditional industrial cities and city regions have experienced urban decline. These include Strathclyde, Merseyside, Teesside and Tyneside in the United Kingdom, the Ruhrgebiet and the Saarland in Germany, Nord-Pas de Calais and Lorraine in France and Wallonie in Belgium (see Figure 11). They have been suffering from the implications of structural economic change, changing technologies, new products and competition by newly industrialising countries and from within their own countries. Their heavy industries declined and their infrastructure became obsolete. Burdened with a poor public image, which was only partially justified by the devastated state of the built-up and natural environments, many of the declining industrial cities have experienced high unemployment resulting in outmigration of the younger and more mobile labour force and the formation of new urban underclasses, a social phenomenon which Europe had believed to have left behind.

Favourite overall economic conditions since the mid-1980s have facilitated various efforts at local, regional, national and European policy levels to initiate and manage the process of economic restructuring in many of these cities. Glasgow in particular has become known for its successful policies to promote local economic development and to improve the physical appearance of the city and for its considerable efforts in 'city marketing' which in the end contributed to improving the image of the city. Similar success stories are reported from other cities in the United Kingdom (e.g. Manchester, Bradford). Other positive examples are cities in the Ruhrgebiet in Germany, primarily Dortmund and Duisburg, where local universities and public-private partnerships played a key role in restructuring the obsolete economic base and mobilising the endogenous potential of the region. Also in Lille local and regional initiatives succeeded in changing the rather poor image of the former coal and steel region Nord-Pas de Calais through a multitude of innovative projects and activities.

On the whole the decline of some the larger industrial cities seems to have been come to a standstill (e.g. Dortmund, Glasgow, Lille) and new hope is fostering their local economic development efforts. Although structural unemployment and intra-urban disparities will continue to be a problem, the transformation of their old industrial base into a modern mix of innovative industries and production-oriented services has made much progress. The medium-sized and smaller cities are, however, still struggling to restructure their local economies and obsolete infrastructure.

Port Cities

Port cities all over Europe have been suffering most from the impacts of structural change and new transportation and communication technologies. Unless they have succeeded in modernising their shipbuilding and ship repair industries and goods handling facilities, their decline was inevitable. With the decline of their port function the entire economic base of port cities collapsed. Of the large port cities in Europe only Rotterdam has kept or even increased its importance due to its strategic location and its economically strong hinterland (Randstad, Rhein-Ruhr). Traditional links to a wider hinterland or other functions have helped other port cities such as Le Havre, Marseille, London, Athinai and Kobenhavn to keep their port function economically viable.

Others port cities like Antwerpen, Bremen, Hamburg or Duisburg had temporary signs of stagnation, but now seem to have overcome their economic weakness. This is also true for a few smaller ports like Swansea and Dundee, which are successfully transforming their obsolete port function. The economic prospects of other port cities, particularly those on the Mediterranean coast (Genova, Trieste, Thessaloniki, Oporto), in Spain (Bilbao) or in Great Britain (Liverpool) are less bright. Many of these cities will further lose their importance. Unless they succeed in specialising in particular market segments, improving their transport connections to their regional and national hinterlands, requalifying their labour force and upgrading their infrastructure and visual appearance, they are likely to be victims of the European modernisation process. In that case severe social problems and socio-political tensions will follow their economic decline.

Growing Cities without modern Industrialisation

In contrast to the declining cities in the North, most cities in the South (e.g. Palermo, Bari, Thessaloniki or Oporto) are still growing in population and in spatial size (see Figure 11). The capacity of their public infrastructure has often been exceeded, and therefore the quantitative expansion and improvement of it can hardly keep pace with the fast-growing demand. Typical features of these cities are: informal economies, uncontrolled scattered land use, environmental damage, unorganised waste disposal and a marginalised underclass with little hope for social mobility. Even where some small scale industries are present, large-scale and modern industrialisation is absent. So these cities can hardly absorb the unbroken immigration of redundant rural labour nor that of immigrant labourers from the countries of North Africa and the Middle East. The lack of economically viable small and medium-sized urban settlements in their regional hinterland is strongly felt. Endowed with an insufficient local financial base, their possibility to cope with their problems is limited.

Company Towns

There are quite a number of middle-sized cities in the countries of Europe in which the local economy is entirely depending on a single multi-national corporation. The most prominent examples are Eindhoven (Philips) in the Netherlands, Ivrea (Olivetti) and Torino (Fiat) in Italy and Ludwigshafen (BASF), Leverkusen (Bayer), Marl (CWH) Wolfsburg (Volkswagen) and Sindelfingen (Mercedes-Benz) in Germany. In such cities, the local labour market, the public infrastructure and a considerable proportion of local firms and services are highly tailored to the particular needs and interests of the dominant local corporation. Urban development there reflects the ups and downs of the all-encompassing corporation. Because of their total economic dependence, these cities are also politically dependent and have little room for autonomous action.

New Towns

After the Second World War the foundation of new towns has been considered the best recipe for coping with overspill population and for innovating the urban system. Particularly in the United Kingdom new towns have been a strong element of national urban policy until the late sixties as a response to the urgent housing needs of the urban population in large cities such as London, Glasgow, Birmingham, Manchester and Liverpool. For a long time new town policies have been favoured by generations of enthusiastic planners who wished to design a better urban environment. The more successful among the British new towns have reached considerable population and have become economic growth poles (e.g. Milton-Keynes and Warrington), while others remained dull commuter suburbs. Today there is a consensus that new town development in the United Kingdom has in part contributed to the eroding of the economic base of the core cities. Moreover, support for new towns has retarded the restructuring of traditional cities. Some of Britain's urban problems are a legacy of this policy. The few similar efforts in Germany, which were much inspired by the British example, have remained insignificant. The more successful new towns in the periphery of Paris have benefitted from the overspill pressure of the metropolis, but there are signs that they may partially become new ghettos for the urban underclass. There are only few other examples of new towns in Europe such as Louvain-la-Neuve in Belgium and the new towns in Italy inherited from the Fascist period. Other European countries have abstained from new town policies and relied on the existing urban system.

Mono-Functional Satellites

During the last two decades new nodes in the national urban system have emerged. They are urban or semi-urban developments specialising in a modern sector of the economy and aiming at bundling the synergy of spatially concentrated information and communication activities. They can be considered as a new generation of specialised satellite towns. Although these satellites have one dominant economic function they provide a wide variety of target group oriented facilities and services. Their specialisation varies: There are new centres of high-tech research and development, production and services and related education and training, such as Sophia Antipolis near Nice, which has become the most prominent example of a 'high-tech' city in Europe. Like other less prominent examples it profits from its location in a clean, attractive and leisure-oriented environment, reflecting the needs and aspirations of the post-industrial society (see 2.3).

Other mono-functional satellites are the emerging *airport cities* or *aerovilles* (see 2.5 and 3.4.1). Similar to the urban expansion in the 19th century caused by the construction of railway stations, huge urban development schemes are evolving in the neighbourhood of large international airports such as Paris, Frankfurt or Amsterdam. They comprise a mixture of airport-related industrial and commercial activities, convention centres and office facilities. Profiting from the international accessibility of the airports, the airport cities tend to become European transport interchanges comparable to the districts around inner-city railway stations, although with much larger dimensions.

In the near future a new type of mono-functional satellite will emerge in Europe: *Euro-Disneyland* in the Paris region. This is a new form of urban development combining tourism with leisure clubs, offices, convention centres and high-income housing linked to the European road and rail systems.

Small Towns, Rural Centres and Rurban Belts

A much neglected and often forgotten category of cities are the thousands of small towns in Europe. They offer new jobs for a redundant agricultural labour force and guarantee the protection of the environment in regions where otherwise urban sprawl would endanger the remaining natural resources.

- First, there are smaller towns in the hinterland of larger cities and city regions which have become the prime target for the urban population in the search for getting the best of both urban and rural lifestyles, of culture and nature, or for those households which are just looking for cheaper land for single or semi-detached houses. These small towns have undergone a substantial transformation from a central place in a rural hinterland to a suburban community and have managed to turn their backward image into a modern profile.
- Second, there are rural service centres, which provide basic public services and serve as rural market centres.
- Third, where narrow valleys limit spatial development (as in most of Austria or Switzerland and in parts of France, Northern Italy or Southern Germany) or where the coast is a favourite attraction for tourists and second homes (e.g. along the Mediterranean Sea), or along major infrastructure corridors (as for example in the Rhine and Rhone valleys), these are *rurban belts*, small relatively densely populated regions where rural economies and lifestyles mix with suburban ones.

All these smaller cities have their particular development problems. A few features, however, they have in common. Their urban management capabilities are limited, only in exceptional cases their international linkages go beyond the traditional twinning partnerships, as a rule they rely financially on transfer payments and their political lobby is weak compared to that of the larger city. Thus they are extremely dependant on regional administrations and governments.

Tourism and Culture Cities

The local economy of a particular category of European cities depends to a considerable degree on the exploitation of their cultural and touristic potential: Venice, Salzburg and Rothenburg, Chester or Santiago de Compostela are only a few examples of such cities. They draw their economic vitality from selling their history and architectural heritage, seaside location or cultural events to a growing number of European, American and Japanese tourists. Temporarily, in peak times, the crowds of tourists become a heavy burden for these cities, both for their local infrastructure and for their population.

To enhance cultural tourism, in 1983 the Community-backed *European City of Culture* scheme was established. Athinaï in 1985 was the first cultural capital, Florence, Amsterdam, Berlin, Paris, Glasgow and Dublin followed. The concept of the City of Culture reflects the importance of the international image of cities in global inter-urban competition. Its danger is that the quest for more prominent and top-quality cultural institutions and events may be met at the expense of neighbourhood cultural facilities.

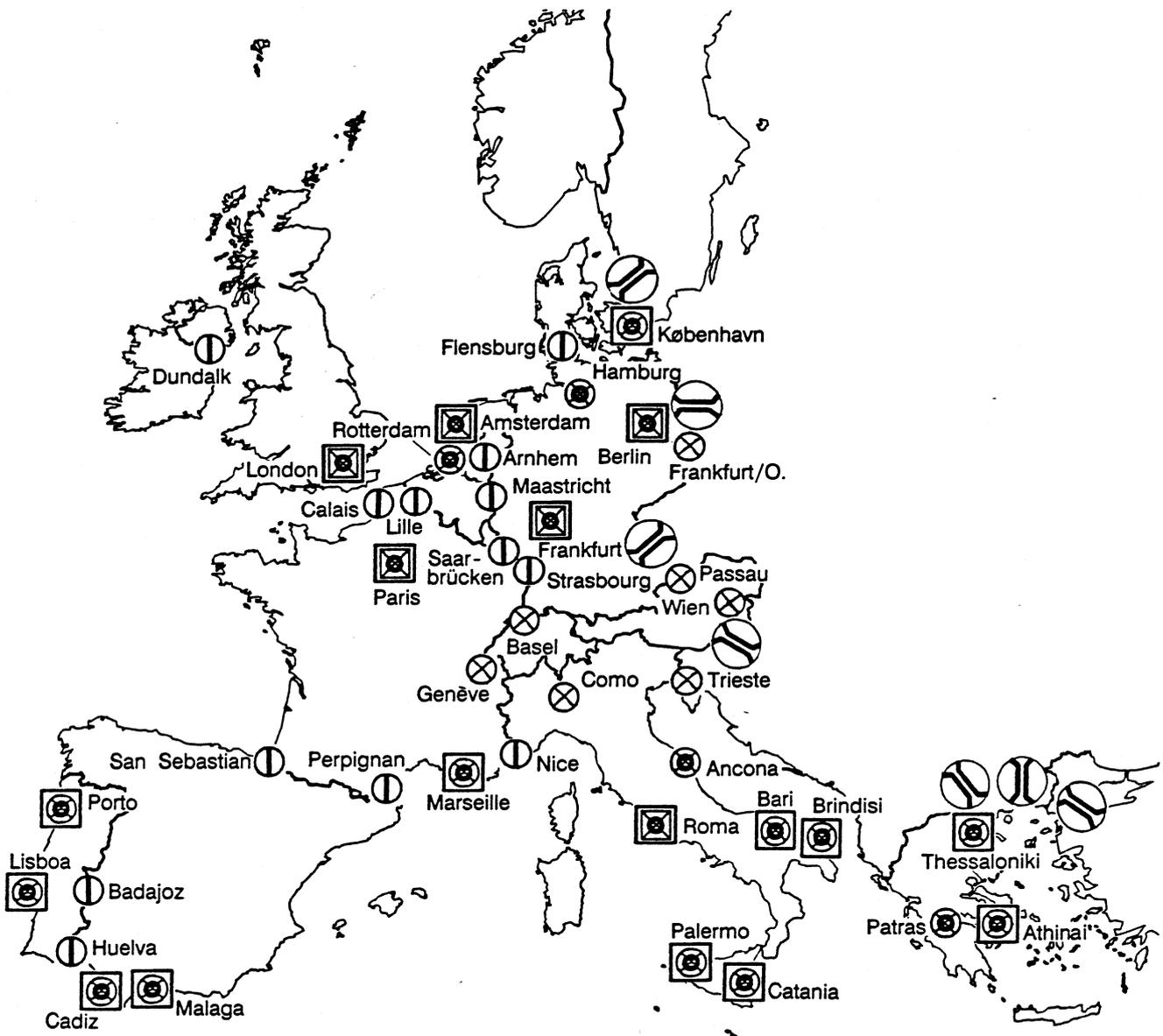
The global cities of Paris and London, but also large cities like Amsterdam, München, Roma, Florence, Berlin, Sevilla or Kobenhavn have always been favourite tourist destinations. In recent times they have profited much from the renewed interest in history, from the expansion of the international convention industry and from the growing mobility of an increasingly better educated and affluent society. Cultural tourism is an important facet of most large cities and their urban policies. For quite a number of smaller cities, it is the only major economic resource.

Border and Gateway Cities

Throughout history border cities have played an important role. They were entry points for those who travelled or migrated to a country for economic, political or cultural reasons, and exits for those who wanted to leave the country for a shorter term or for emigration. Border cities are international exchange centres of information and goods, of communication and transport. They have both an administrative (e.g. customs) and a trade function which gives them a certain national importance. When they lose their border function, such cities usually very quickly lose political interest and support.

There are two types of cities in this category (see Figure 12): cities at inner-European borders and cities at the outer borders of the Community. The former will be called *border cities* here, and the latter *gateway cities*. Most border and gateway cities had also defense functions, which determined their design and physical development. Because of their defense function they usually received national transfer payments to compensate for their exposed location and reduced hinterland, which had constrained their industrial development. Gateway cities are often negatively effected by high social costs of their frontier location (e.g. concentration of ethnic minorities, high crime rates and drug problems).

Figure 12
Border and gateway cities.



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-  European gateway city
-  Inner-European border city
-  Airport border city
-  Port border city
-  Land border city
-  European land entry point

Over years border and gateway cities (e.g. Thessaloniki, Strasbourg, Metz, Aachen, Liège or Basel) both profited and suffered from their peripheral location. The forthcoming removal of national borders within the European Community has already had an impact on inner-European border cities. Cities like Strasbourg, Nice or Aachen are aiming at exploiting their locational potential for more European or transnational functions. Traditionally sea port cities had also gateway functions. In Liverpool, Marseille, Genova, Bilbao or Bremen migrants embarked for America and international trading companies had their headquarters.

In the last three decades also cities with international airports have become the modern gateway cities. At international airports economic migrants and refugees from the Third World arrive. In London, Paris, Frankfurt or Amsterdam they try to first settle down, where they are supported by their own ethnic groups and where they usually find their first informal or formal employment.

Besides the large international airports, a few other cities in southern Europe (e.g. Thessaloniki) or seaports as Marseille or Palermo have become European gateway cities. Given the demographic development and economic conditions of the countries of North Africa, Africa south of the Sahara or of the Middle East, European gateway cities will undoubtedly face a difficult future (see 2.2).

Due to the political changes in Eastern Europe, cities at or near the borders to East European countries (e.g. Frankfurt/Oder, Wien, Trieste, Saloniki) have taken over a new role as gateway cities.

3.4 Intraregional/Urban Level

The polarisation and spatial restructuring of the urban system in Europe discussed in the preceding sections has affected not only the relative growth and decline of urban regions as a whole, but also the relationship between cities and their hinterland as well as the spatial organisation of human activities *within* city regions. This intraregional dimension of the urbanisation process in Europe since 1960 will be discussed in the following sections (cf. Masser et al., 1990).

3.4.1 Urbanisation, Suburbanisation, Deurbanisation

The 1950s and 1960s were a period of rapid urban growth all over Europe. High birth rates, continued urban-to-rural migration due to the decline in agricultural employment and a first wave of international labour migration from Southern to Northern Europe resulted in a massive urban expansion (see 3.2.4).

However, in the 1970s the growth of the urbanisation rate in most European countries started to decline (see 3.2.1). After almost 200 years of continuous growth cities in particular in North-West and Central Europe were facing a decline in population and later also in employment first in their inner cores, later also in their suburbs and eventually in the whole city region.

Van den Berg et al. (1982) describe this reversal of the urbanisation process as the final phase in a sequence of *phases of urban development*:

- In the *urbanisation phase* urban growth occurs predominantly in the core, where nearly all jobs and most residences are. The lower-density suburbs wholly depend on the core.
- In the *suburbanisation phase* the suburbs grow faster than the core. Residential development in the core declines for lack of space. The majority of workplaces is still in the centre, but gradually jobs followed people. Eventually the core starts to lose population and later jobs, but the total city region still grows.
- In the *deurbanisation phase* development further shifts to the urban periphery and beyond. The core city loses more people and jobs than the suburbs gain, i.e. the total city region declines.

In North-Western and Central Europe the urbanisation phase produced the pre-war city. The reconstruction period after the war more or less replicated the pre-war pattern. The urbanisation phase still continues in Southern and Eastern Europe sustained by higher birth rates and rural-to-urban migration. For the period 1960 to 1970, van den Berg et al. classified 30 percent of cities in their sample as 'urbanising' (see Table 7). In 1970-1975 this proportion was only 18 percent; only in Poland, Hungary and Bulgaria the majority of cities were still in the urbanisation phase.

The suburbanisation phase can be found in virtually all European countries. In Central Europe decentralisation of population started in the 1960s and 1970s, mostly in the form of new satellite towns or large high-rise suburbs or just urban sprawl. Decentralisation of economic activities started in the late 1970s, first by retail and services, later also by manufacturing. However, here too the process had different momentum in North-Western and Central as compared with Southern and Eastern Europe. In the period 1960-1970, suburbanisation was the dominant pattern in 9 of the 14 countries studied. More than 80 percent of all cities suburbanised in Great Britain, the Netherlands, West Germany, Switzerland, France and Austria (see Table 7).

Only some countries in North-West and Central Europe have reached the third, the *deurbanisation phase*. In this phase urban growth leapfrogs beyond the outer suburbs of the city region to the small and medium-sized towns in the still partly rural hinterland which offer an attractive combination of urban and rural lifestyles taking advantage of the high accessibility of the near-by agglomeration but without its high costs and other disbenefits. These secondary centres compete with the traditional centre, and where they pull away enough population and jobs, the old agglomeration actually declines. In the period 1960-1970 this was still relatively infrequent, only 14 percent of the cities in Great Britain and the Netherlands and 4 percent in West Germany showed *deurbanisation*. In Belgium, however, already in the 1960s three of the five cities studied declined. In the 1970s *deurbanisation* spread to Sweden, Denmark, Italy and Austria.

To present more recent evidence on urban concentration and deconcentration in Europe is not easy because of lack of data. Limited information from several sources is contained in Table 8:

The upper part of the table shows declining urban regions. Between 1981 and 1985 the Glasgow region lost 46,000 people. In the 1970s, four of the nine regions were still growing, though in Lyon and Milano the core cities started already to decline in the 1970s. The shift from rapid growth to decline in Barcelona and Lisboa is remarkable. With the exception of Lisboa, all declining cities continue to decentralise, i.e. are in the

Table 7
Urbanisation, suburbanisation and deurbanisation, 1960-1975.

Country	No. of cities	Percent cities 1960-1970 in phase of			
		Urbanisation	Suburbanisation	Deurbanisation	Reurbanisation
Belgium	5	-	40	60	-
UK	43	-	86	14	-
Netherlands	7	-	86	14	-
FRG	27	-	96	4	-
Switzerland	7	-	100	-	-
France	22	5	95	-	-
Austria	7	14	86	-	-
Italy	17	23	77	-	-
Denmark	5	40	60	-	-
Poland	17	41	59	-	-
Yugoslavia	8	62	38	-	-
Sweden	6	67	33	-	-
Hungary	6	83	17	-	-
Bulgaria	8	100	-	-	-
Total	185	30	73	7	0

Country	No. of cities	Percent cities 1970-1975 in phase of			
		Urbanisation	Suburbanisation	Deurbanisation	Reurbanisation
Belgium	5	-	-	100	-
Sweden	7	-	33	67	-
Switzerland	7	-	57	43	-
Netherlands	7	-	57	43	-
UK	43	-	74	24	2
Denmark	5	20	60	20	-
Austria	7	14	72	14	-
Italy	17	6	62	12	-
France	22	9	91	-	-
Poland	17	53	47	-	-
Hungary	6	83	17	-	-
Bulgaria	8	100	-	-	-
Total	150	18	63	18	1

Note: Dominant phase printed in **bold**.

Source: van den Berg et al., 1982, 87 and 89.

Table 8
Suburbanisation and deurbanisation, 1970-1990.

City	Mean annual rate of population change (%)							
	1970-1980				1980-1990			
	Core	Ring	FUR	Type	Core	Ring	FUR	Type
Glasgow ^a	-2.1	0.2	-0.6	D	-1.3	-0.2	-0.6	D
Kobenhavn ^b	-2.1	1.9	-0.0	D	-0.7	-0.2	-0.4	D
Barcelona ^c	0.1	3.1	1.2	S	-0.6	-0.2	-0.4	D
Bruxelles ^d	-1.3	-0.7	-0.7	D	-0.6	-0.3	-0.4	D
Amsterdam ^e	-1.4	1.9	-0.5	D	-0.9	0.8	-0.4	D
Lisboa ^c	0.6	5.4	3.6	S	0.5	-0.7	-0.3	R
Dortmund ^d	-0.6	0.3	-0.2	D	-0.6	0.1	-0.3	D
Lyon ^f	-1.9	2.9	0.7	S	-1.4	0.5	-0.3	D
Milano ^g	-0.8	1.3	0.2	S	-1.4	1.2	-0.0	D
München ^e	0.0	2.1	0.9	S	-0.3	0.6	0.1	S
London ^b			-1.0	D			0.2	S
Dublin ^g	-0.8	5.3	1.7	D	-0.9	1.7	0.4	S
Madrid ⁱ	0.1	8.2	2.0	S	-0.8	3.1	0.4	S
Paris ^j	-1.2	1.2	0.6	S	-0.2	0.9	0.7	S
Napoli ^k	-0.1	1.7	0.9	S	-0.2	1.2	0.8	S

a 1975-1981-1985 b 1970-1980-1987 c 1970-1981-1986 d 1970-1980-1986
e 1970-1980-1985 f 1970-1981-1986 g 1971-1981-1986 h 1971-1981-1985
i 1970-1981-1985 j 1968-1982-1990 k 1971-1981-1987

S suburbanisation D deurbanisation R reurbanisation

Sources: Eurocities data, census data, other statistics.

deurbanisation phase. In Lisboa the data indicate that the core city grows while the suburbs decline, a phenomenon requiring explanation. The six city regions in the lower part of the table grow, though their core cities decline, i.e. they are in the suburbanisation phase. Remarkably, the London region recovered from decline in the 1970s, and in Paris decline of the core city has slowed down. To find London, Paris and München among the growing regions sheds doubt on the theory of urbanisation phases as obviously successful cities cycle back to suburbanisation rather than reurbanisation.

It might be useful to stress that deurbanisation must not be confused with urban decline in the sense of lack of success. As Table 8 shows, some of the most successful cities in Europe are in the phase of deurbanisation, e.g. Amsterdam, Lyon or Milano. Obviously, too, cities in countries with a declining overall population are more liable to become deurbanising.

The common experience of all cities, however, is spatial deconcentration. The evolution of transport systems made the expansion of cities over a wider and wider area possible. In particular the diffusion of the private automobile brought low-density suburban living into the reach of not only the rich. Suburbanisation was not caused by the car but is a consequence of the same changes in socio-economic context and lifestyles that were also responsible for the growth of car ownership: increases in income, in the

number of working women, smaller households, more leisure time, and a related change in housing preferences. Yet the car certainly contributed to pushing people out of city centres through congestion, lack of parking space and noise and pollution, as did housing shortage and high land prices.

Offices and light industry and retail started to decentralise later, following either their employees or their markets or both, or taking advantage of attractive suburban locations with good transport access, ample parking and lower land prices; in particular greenfield shopping centres have become a threat to inner-area retail, and 'airport cities' tend to draw service activities away from traditional centres. Still more recently, also manufacturing industries, taking account of new tendencies in plant layout, organisation of production and logistics, have started to prefer low density, environmentally attractive suburban locations with good road access, ample space for expansion and still moderate land prices (see 2.4 and 2.5).

3.4.2 Reurbanisation?

The results of the deconcentration process are both positive and negative: Certainly suburban living represents the preferences of large parts of the population. However, the consequences of urban dispersal are less desirable: longer work and shopping trips, high energy consumption, pollution and accidents, excessive land consumption and problems of public transport provision in low-density areas. This makes access to car travel a prerequisite for taking advantage of employment and service opportunities and thus contributes to social segregation. Moreover, the counterpart of suburbanisation is inner-city decline.

All over Europe therefore cities have undertaken efforts to revitalise their inner cities through restoration programmes, pedestrianisation schemes or new public transport systems. In some cases these efforts have been remarkably successful. Besides cities in the Netherlands (e.g. Delft), Germany (e.g. Celle) and Scandinavia (e.g. Roskilde), Italian cities such as Bologna and Florence are examples for this trend. Recent figures indicate that the exodus from the inner city may have passed its peak and that there may be a 'reurbanisation' phase.

Again a note of caution is appropriate. If the term reurbanisation is understood in quantitative terms as a *reversal* of the decentralisation of population and employment, no instances of true reurbanisation are likely to be found. What actually is taking place is a superposition of two counteracting trends, the continuing outward movement of traditional suburbanisation and the inward movement of a relatively small number of very mobile households whose location preferences may change quickly. In addition, the new back-to-city movement at least in part consists of people with relatively high incomes who tend to occupy large flats and so consume more housing space than the former poorer tenants they replaced. The displacement of lower-income households by more affluent ones ('gentrification') is one of the problematic aspects of the otherwise desirable reurbanisation phenomenon. Because of the displacement effect, a permanent upward turn of inner-city population and employment can only be expected where substantial increases of floor space in the city centre have occurred. Without that the reurbanisation actually taking place in European cities is a *qualitative* phenomenon, i.e. a replacement of one social group through another.

The renaissance of inner-city living and shopping demonstrates the vitality of the European city with its history and cultural heritage as well as the increasing diversity of urban lifestyles in Europe. Never before have the urban centres of Europe attracted so many visitors to their historical monuments, museums and theatres, never before have there been so many new shopping arcades, boutiques and restaurants, new office buildings, hotels and convention facilities. Historical buildings and traditional residential neighbourhoods are carefully restored everywhere. A journey through urban Europe today is a fascinating series of discoveries.

3.4.3 Intraregional Disparities

However, this is only the bright side of a two-sided coin. Just as in the competition between cities and regions, intraregional spatial change involves equalising and polarising tendencies. On the one hand the exodus of people and jobs from the centre reduces the difference in density between core and periphery. On the other hand, under market conditions, both suburbanisation and reurbanisation tend to aggravate existing social differences within urban regions.

Suburbanisation had already a significant impact in terms of social segregation. Households leaving the inner city for the suburbs tended to be the younger and economically more active; the older and less mobile remained in the old inner-city housing areas. Disinvestment and neglect produced the 'rent gap' which now, with the advent of a new prosperity phase, has made the rehabilitation and upgrading of these run-down housing areas profitable. However, this means the replacement of the original low-income residents by more affluent tenants who are able to afford the higher rents and the destruction of the little remaining cheap housing with the effect of the spatial marginalisation of those who are already socially marginalised.

On the top level of the urban hierarchy, in London and Paris, but also in cities like Bruxelles, Frankfurt, München and Milano, this has in conjunction with a new boom in the demand for hotels, offices and convention facilities, led to massive real estate speculation and exorbitant increases of real estate prices and building rents which threaten to make the central areas of these cities unaffordable as places to live for the majority of the population.

If these trends continue uncontrolled, the 'successful' metropolis is likely to be divided into three different 'cities' (see Siebel, 1984):

- The most visible city is the 'international' city with airport, hotels, banks, office buildings and luxury flats and its prospering downtown shopping zone, but also high-class residential areas usually in the western parts of the city.
- Hidden behind the international city is the 'normal' city for the native middle class in the low-density suburbs and high-rise housing areas at the urban periphery.
- In the shadow remains the 'marginalised' city for the old, the poor and the unemployed and the migrant workers in the run-down inner-city housing areas, in most cities east of the traditional centre, and in devalued underutilised transition zones at the urban fringe.

Reurbanisation and gentrification are likely to accelerate this partition. Where gentrification expands the 'international' city, the poor are further pushed out into the worst segments of the urban housing market which in the future tend to be the low-quality high-rise housing areas of the 1950s and 1960s. There is a real danger that this will be the dominant pattern of urban development for big cities in Europe in the 1990s.

3.5 Summary of Patterns of Urbanisation

The description of the pattern of urbanisation in Western Europe during the last three decades has shown a great diversity of developments of cities in different national and regional contexts. Sometimes it appears that there are only few commonalities between cities in the North and in the South, between cities in the European core and at the periphery of the continent or between large and small cities.

However, the presentation has also demonstrated that it is possible, through a comprehensive analysis of the spatial, economic, social and cultural factors affecting urban change, to explain and interpret the sometimes seemingly contradictory phenomena by relating them to long-term social, economic and technological trends. Under this perspective the many individual developments urbanisation in different countries, regions and local settings all become manifestations of a very small number of underlying trends which are linked to the social, economic technological developments.

The fundamental megatrend at work shaping the spatial structure of Europe is the increasing *spatial division of labour*. The functional separation of human activities over space is the logical outcome of many of the trends sketched in Chapter 2. To name but a few, the fragmentation of the family, the growth in labour force participation and the related growth in income, the logistic revolution in production and distribution, the availability of cheap and efficient transport for everyone, the mass diffusion of the automobile and the explosive growth of air travel, the emerging European high-speed rail infrastructure and the quantum leap in telecommunications now taking place - they all combine to remove the necessity to have things close together.

More concretely, in terms of the pattern of urbanisation in Western Europe, the growing division of labour in the West European economy, which will be accelerated by the Single European Market, is paralleled by a growing division of labour between cities and regions. This results in two powerful trends which currently dominate the development of the urban system in Europe:

- *Spatial polarisation*: The internationalisation and integration of the European economy, the emerging European high-speed transport infrastructure and the ongoing transformation of economic activities through technological shifts in the production and distribution systems all work together to increase the relative advantage of cities in the European core over cities at the urban periphery. On the European as well as the national level, the gap between the few prosperous, successful cities, which are linked to the global and European decision centres through efficient transport and communications networks on the one hand and the large number of small and medium-sized cities and city regions at the European periphery that are not able to participate in the competition for private capital and public investment because of their remote location or unfavourable natural or industrial endowment on the other hand is continuously becoming deeper.

- *Functional specialisation:* More and more cities and city regions in Europe have become specialised centres for particular industries, be it for special types of manufacturing (e.g. car production, mechanical engineering), for specialised services (e.g. financing) or for industries that comprise both production and services (e.g. cultural industries) or which are linked to historical endogenous potentials (e.g. tourism). Specialisation is not necessarily connected with a monostructured economy. Quite to the contrary, the availability of a broad mix of economic activities and services is essential for effective functional specialisation. The larger the city region, the more the synergy of activities and opportunities contributes to further specialisation. With growing specialisation, the city develops a unique 'label' or image, and this helps to attract further specialised economic activities and skilled labour force which in turn stimulates the expansion of the particular specialised functions.

If these two trends are indeed 'megatrends' which have shaped the pattern of urbanisation in the past and if the social, economic and technological trends on which they are based can be relied upon as being relatively stable in the short and medium-term, a few cautious predictions about the future of the urban system in Europe in the next decade can be made. This will be done in the next Chapter.

4 Cities in Europe in the 1990s

The last decade of the 20th century will not stop these two dominant trends. Assuming that the Single European Market will be fully completed in 1993 and that no energy or environmental crisis, no war and no major political disturbances will occur, the present urban pattern in Europe will not fundamentally change, but will become even more pronounced under the influence of the two trends.

In this concluding section of the report, the most likely consequences of this development and the key issues arising from them will be outlined. Again, the discussion starts at the European level and proceeds to the national/regional and intraregional/ urban levels. Table 9 summarises these key issues.

Table 9
Key urban issues in the 1990s .

<i>Level</i>	<i>Key urban issues</i>
European	Dominance of large cities Polarisation through high-speed transport infrastructure No borders, new hierarchies? East-West or North-South? Pressure on European gateway cities Cities in the European periphery: forgotten?
National/ regional	Further decline of industrial cities? Port cities under pressure? High-tech and garrison cities: victims of disarmament? Just-in-time urban regions? Rurban belts: the ubiquitous city Unguided growth: large cities in the South Cities at the national periphery: tourism and second homes?
Intraregional/ urban	The future of urban form Declining urban infrastructure and services Urban poverty Urban land markets: a time bomb Urban transport: the reappearing problem Urban environmental problems

4.1 European Level

During the forthcoming decade the urban system in Europe will continue to be affected by technological and structural economic change, which is likely to be reinforced and accelerated by the Single European Market. In particular the new advanced long-distance transport networks for moving people and goods across Europe will have considerable impacts on the urban system in Europe. Also the repercussions of the recent geo-political changes on the continent will substantially alter the socio-political context of regional and urban development in Europe. The most relevant urban issues resulting from these changes which have to be considered by urban policy making at the European level are the following.

Dominance of Large Cities

The dominance of the larger cities in Europe will further increase. The need to compete with other cities in Europe for European and non-European capital investment will continue to favour the larger high-tech industrial and service cities. These cities will continue to grow, often far beyond their administrative boundaries as they offer attractive jobs for skilled workers and provide the high-quality services and cultural and leisure facilities the post-modern society wishes to have within easy reach.

The future role of re-united Berlin in the urban system in Europe is yet unclear. The city may return to its pre-war dominance as the capital of the unified Germany. It may happen that bank headquarters will move from Frankfurt to Berlin or that the city will become a centre of East-West cooperation in Europe. It is also possible that Berlin will become the location of European or international agencies. However, during the next decade Berlin is unlikely to join Paris and London as a global metropolis.

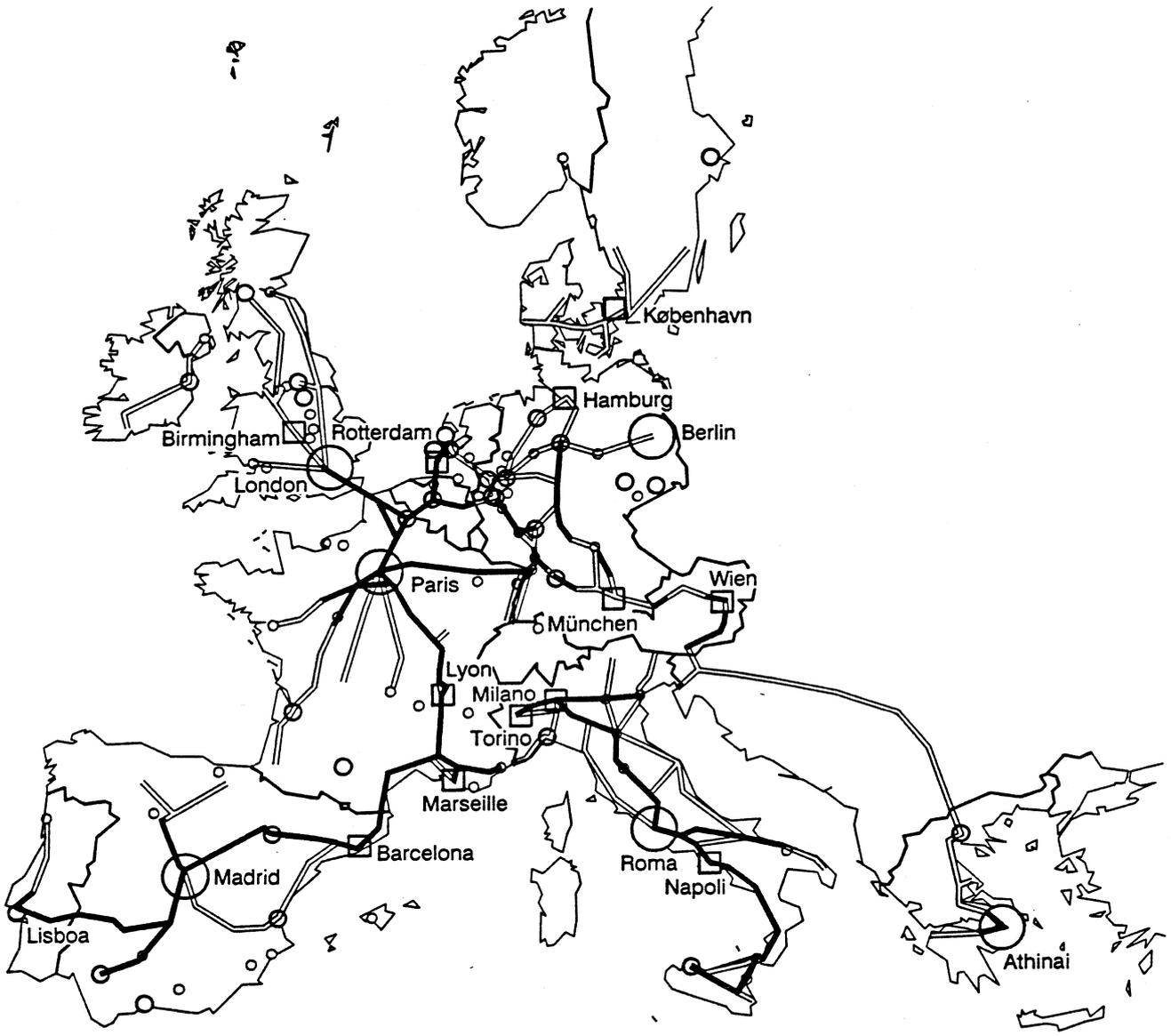
Polarisation through High-Speed Transport Infrastructure

The emerging European high-speed rail network complemented by the existing slower rail network linking the medium size cities to the larger metropolitan areas will reinforce the dominance of the large cities (see Figure 13). The urbanised and semi-urbanised hinterland of large cities will continue to expand beyond the one-hour commuting distance. Smaller and medium-size cities in the hinterland of the metropolises will benefit from the international accessibility of their cores.

The accessibility to international airports will continue to be a key factor for regional and urban development. Depending on the quality of feeder services, the hinterland of international airports extends up to 200 km (see Figure 14). Cities outside this radius may have difficulties in attracting high-tech jobs and skilled labour, unless they can offer other locational factors to attract international economic activities.

Economic development of small and medium-size cities in the 'grey' or traffic shadow zones between the future high-speed transport and communication corridors is likely to fall behind unless they can offer attractive local resources or non-ubiquitous potentials and are assisted under national or international programmes.

Figure 13
The future high-speed rail network.

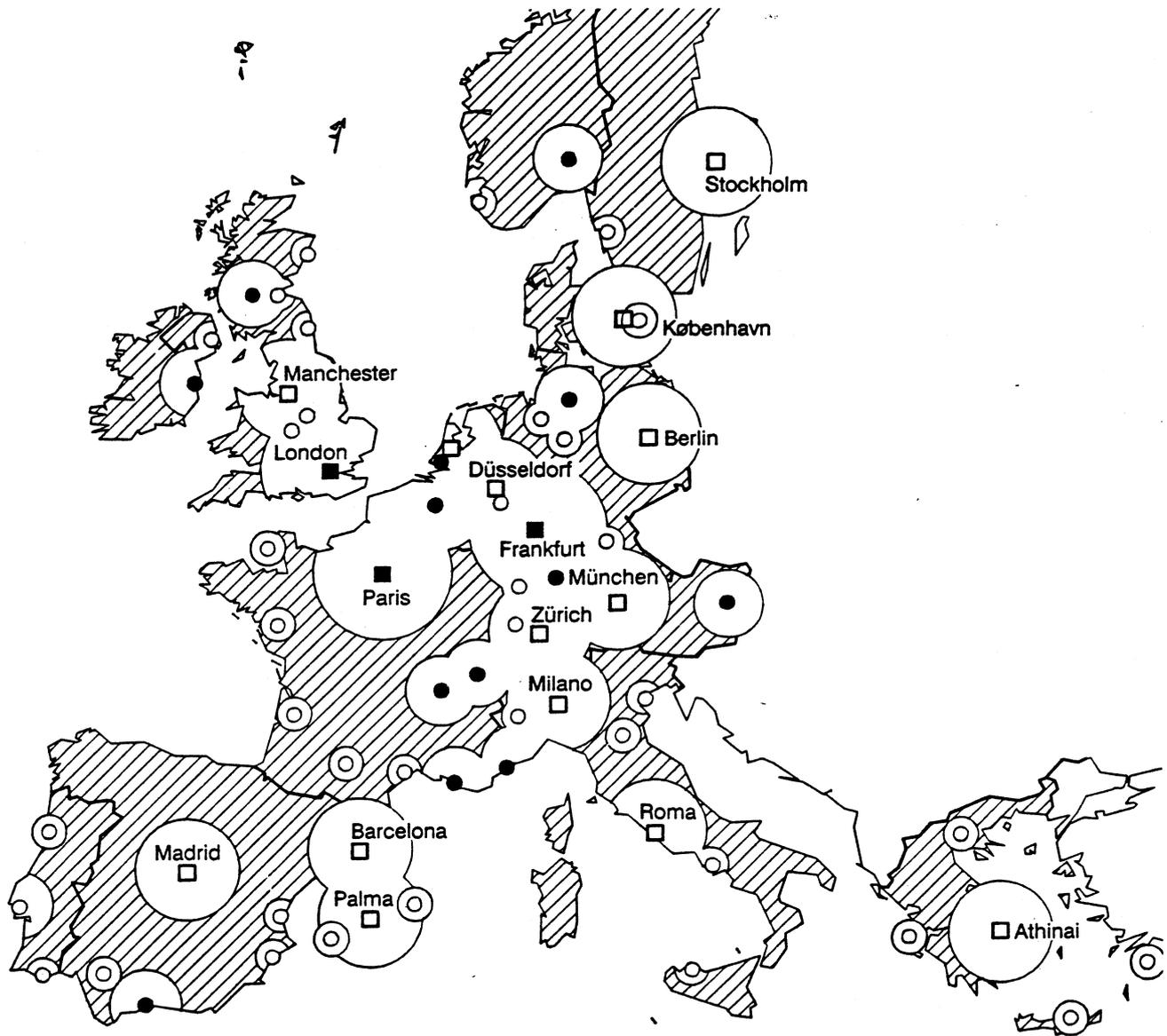


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— New lines
= Upgraded lines

Source: Community of European Railways, 1989

Figure 14
International airports.



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	million passengers 1989	hinterland (km)
■	25	200
◻	7 - 25	150
●	3,5 - 7	100
○	1 - 3,5	50

Source: ADV German Airports Association, 1989

No Borders, New Hierarchies?

Some of the cities at inner-European borders may benefit from the Single European Market (e.g. Aachen, Strasbourg, Nice, Liège, Arnhem). They can expand their hinterland and increase their trade if local decision makers take up this challenge.

The recent political developments in Eastern Europe will in the long run improve the position of cities which before the war had traditional links to East European markets (e.g. Hamburg, København, Nürnberg). This may weaken the position of other, mainly peripheral, cities in North-West and South Europe which may become further peripheralised.

The unification of Germany will bring new impetus to some cities in that country (e.g. Hannover or Braunschweig) which in the past three decades have stagnated because of their peripheral location in Western Europe. Also cities bordering East European countries will economically benefit from the new geopolitical situation in Europe. They may regain traditional links and markets and widen their regional hinterland. Cities in East European countries (e.g. Praha, Budapest) may in the long run regain their pre-war position in the league of European cities.

Pressure on European Gateway Cities.

Gateway cities will experience increasing pressure by immigration flows from Eastern Europe, Africa and the Middle East. Existing facilities (e.g. schools, hospitals) will not be able to absorb the additional people and the local economy will be burdened by the growing number of unskilled or semi-skilled workers coming into the city. The transitional character of gateway cities will worsen their international image. Social and political tensions in these cities are bound to increase. Also cities with large international airports (e.g. Paris, Amsterdam, Frankfurt) and cities bordering Eastern Europe (e.g. Thessaloniki, Frankfurt/Oder or Trieste) or North Africa (e.g. Malaga, Cadiz or Palermo) may function as European gateway cities.

East-West or South-North?

The greatest challenge of the next decade will be to overcome the wide gap in economic prosperity between the cities in Western and Eastern Europe. The extent of the problems of East European cities has only become apparent after political changes in East Germany. Their local and regional labour markets offer few opportunities, their public infrastructure is obsolete, their environmental conditions are desolate, their housing stock is far below West European standards and, due to decades of central planning, local governments are almost incapable of managing their own development. These push factors and the pull factors of West European cities will combine to encourage temporary or permanent migration of the more mobile and skilled labour force to the West once free mobility and better information are available.

This East-West divide of Europe might gradually gain political importance over the North-South divide. This may bring about a shift in investment priorities and trade flows as there is evidence that East Germany, Czechoslovakia, Hungary and their East European neighbours may be more attractive to international investors than the slowly developing regions in Southern Europe.

Cities at the European Periphery: Forgotten?

With increasing importance of the accessibility to the large cities in the core of Europe, cities at the periphery of the continent will have a difficult stand. They will have to offer additional attractions to promote themselves as locations for capital investment and industrial development or for international conferences and conventions.

Even larger cities in the periphery of Europe such like Palermo, Dublin or Oporto are handicapped by their relative distant location. Unless deliberate efforts are made to locate attractive public institutions with European functions in such cities, functions which guarantee a continuous flow of visitors, they are likely to become a group of 'forgotten' cities, for instance as locations for international information exchange and communication. They need to develop a distinct profile, a combination of services and attractions if they wish to play a role in the concert of the larger European cities.

4.2 National/Regional Level

Also the urban systems in individual European countries will be affected. First, the traditional national urban networks will change in their border regions. Previously dominant large cities may lose their national importance, and more peripheral cities in declining rural regions may continue to decline. New types of urban regions and networks of cities may evolve. Semi-urbanised regions ('rurban belts') will further expand along national transport corridors. Lastly, changes of national defence policy in the wake of the East-West détente will have economic impacts on some cities.

More specifically, national and regional governments will be confronted with the following key urban issues:

Cities at the National Periphery: Tourism and Second Homes?

National transport networks will play a key role for urban development. To be linked to an international airport or to the European high-speed rail network will be a pre-requisite for economic development.

Cities at the national periphery will struggle to keep their relative position in the national urban system. In particular smaller and secondary cities outside the larger urban agglomerations will feel the widening gap between centre and periphery, unless their regional environment offers attractive alternatives to living in the crowded larger cities. Cities which are not connected to national transport networks have to rely on the exploitation of their endogenous potential (e.g. an attractive countryside or high quality agricultural products). This is particularly true for cities in the more peripheral regions of Italy, Greece, Portugal, Ireland or Scotland. They can expect to benefit from growing national and international tourism and from second-home development, but only if they succeed in preserving their environmental quality and refrain from offering sites to industries searching for cheap labour and less strict environmental standards. This, however, requires prudent policies to avoid negative financial, economic and infrastructural implications for the resident population.

Further Decline of Industrial Cities?

Unemployment will continue to be a major problem in declining industrial cities. Despite the success of some cities in restructuring their local economies and modernising their urban structure, many others will still struggle. Although increasing environmental awareness has brought about public and private support for environmental regeneration measures, much remains still to be done. The simultaneous existence of economic decline and a poor environment and a bad image makes it difficult for such cities to escape from the vicious circle of disinvestment and physical degradation. After many decades of neglect of the environment, even massive environmental improvements will change the economic climate only in the longer term. Small and medium-size industrial cities at unfavourable locations or depending on coal mining or steel production will have difficulties to meet the requirements of the international investors. Local entrepreneurial spirit and leadership will be necessary to create the synergies for revitalization. These cities will have only little chance to maintain their former importance, even if they are assisted by national or international funding programmes. They are likely to remain among the most disadvantaged among the European cities

Port Cities under Pressure?

Port cities that have been unsuccessful in modernising and specialising their infrastructure will be in danger of further decline. They will be affected by the growing competition of the large European ports and their attractive services and efficient transport links to the continental hinterland. If such cities have to carry the additional burden of being gateway cities for economic migrants (e.g. from North Africa or South-East Europe) the arising problems may easily exceed their problem-solving capacity.

High-Tech and Garrison Cities: Victims of Disarmament?

Due to new geopolitical conditions in Europe (and despite the recent Gulf war) the growth of cities which are the locations of heavily subsidised defence industries and defence-related R&D facilities may stagnate. In the past these cities profited from the military spending of national governments. The success of a conversion of their economic base will depend on the capability of local industries to diversify and survive in much more competitive markets. Similar problems may arise for cities with large military installations, which threaten to lose their economic base.

Just-in-Time Urban Regions?

Just-in-time production complexes will affect the spatial structure particularly in regions where car production is concentrated. Such regions in Germany, Italy, Spain or England are already now gradually being dominated by the infrastructural requirements of the automobile industry and their forward and backward linkages. Although these regions may flourish at times of economic prosperity, they may become heavily affected in times of recession. To a lesser extent just-in-time production is also affecting other industrial regions.

Rurban Belts: the Ubiquitous City

Rurban belts along national transport corridors and between the economically prosperous urban regions will grow further and become more densely settled. They will become a favourite location for spillover industries and population driven out from the inner cities or attracted by lower land prices and a better natural environment. Rurban belts will also be prime locations for national transport interchanges and goods handling and distribution centres. This economic development, which is highly desirable as a source of finances for local governments and as a labour market for the regional population, will bring also development pressure upon the remaining green area in these corridors. This in turn will negatively affect the environment and may exceed the capacity of public utilities and social facilities.

Unguided Growth: Large Cities in the South

Unguided urban development will continue to be characteristic for growing large cities in the South. Because of financial constraints, shortage of skilled manpower and opposition against state intervention into land development, local governments in these cities will not be able to cope with the complex urban management tasks rapid growth brings about. The simultaneous existence of the formal and a large informal economy makes it difficult for these cities to guide their expansion, so squatting and strip development are the rule. Environmental damages, insufficient public utilities and inappropriate siting of social facilities are only a few of the consequences of these difficulties.

4.3 Intraregional/Urban Level

Many urban problems originate from a city's overall economic performance and hence position in the European or national urban hierarchy, but are actually felt on the intraregional or urban level. Prosperous cities will be better able to cope with rapid change by renewing their physical stock, technical and social infrastructure and services than declining cities or cities that grow in population without economic growth. Affluent cities will have the resources to provide housing and resources for immigrants and to cushion unemployment and other adjustment problems arising from economic change. Rapid change, however, has its price. In particular in the economically most successful cities, market-driven urban development today can, without prudent and effective public control, mean land speculation, segregation or displacement of social groups, physical decay of inner-city residential neighbourhoods with or without eventual gentrification, increasing spatial division of labour, congestion, pollution, noise and waste of energy, natural resources and land by excessive mobility and urban sprawl.

Therefore, the key issues for local policy making and planning on the intraregional/urban scale will be the following:

The Future of Urban Form

The two European global cities, London and Paris, will continue their 'megaprojects' such as the Docklands and *les grands travaux*. Cities like Bruxelles and Frankfurt, and possibly Berlin, will make efforts to live up to their growing European importance by creating a skyline of high-rise buildings and glamorous convention and cultural facilities and expanding their networks of urban motorways and metros. Other 'Euro-Metro-

poles' such as Lyon, Milano or Barcelona will try to follow. In most other cities the pace of change is likely to be slower. However, as the competition between cities will become tougher with the Single European Market, the gap between the winner and the loser cities will become wider. Cities that successfully survive in the wider European market will have the financial and management resources to express their prosperity in refurbished inner-city buildings and public spaces and efficient services and transport systems. Cities not having the energy and resources for such change are likely to fall further back.

Declining Urban Infrastructure and Services

The difference between rich and poor cities will nowhere be felt so strongly as in local public finances, and this will affect the quality of local infrastructure and services. Whereas affluent cities, most notably 'company towns' (see 3.4.1) depending on prospering transnational corporations, will be able to generously improve their infrastructure and expand their services, the less affluent cities in Europe will be faced with growing problems of ageing infrastructure, both technical (roads, bridges, public transport networks, water supply and sewage systems) and social (schools, hospitals). There are two main reasons for this likely development. The first is the growing squeeze on cities to reduce their taxes for enterprises in order to survive in the intensifying interregional competition for economic activities. The second is the widespread tendency of national governments to cut public subsidies and to promote economic deregulation and privatisation of formerly public services wherever possible (see 2.5). This may in certain fields result in better and more efficient services, but in general will tend to leave the less profitable yet necessary services in the public domain with the effect that local governments will not have the funds to modernise their networks and facilities. It will require careful monitoring and assessment of the likely impacts of privatisation if an irreversible erosion of public service provision is to be avoided.

Urban Poverty

Another mounting burden of local government finances will be the costs of urban poverty. Several tendencies come together to make the proliferation of poverty in cities, despite overall growing affluence, a likely scenario. The first is the growing number of people who are permanently left behind by the transformation of the economy because they are unable to learn the new skills required by the high-tech industries and sophisticated services and are left to structural or long-term unemployment. Second, it can be expected that interregional migration from peripheral areas of Europe and international immigration from African, Asian and East European countries (see 2.2) will by far exceed the employment possibilities in target cities, among them the gateway cities described in 3.4.1. Third, there is the common tendency in almost all European countries to reduce government involvement in social security and, in the face of rising costs of public housing, social services and health care, to cut down government budgets for housing subsidies and to restrict the eligibility for welfare benefits to those in extreme need. All this will increase the number of households below the poverty line, and they will concentrate in cities. In large cities, where gentrification and rising land prices tend to reduce the supply of low-priced rental housing (see below), urban poverty often turns into homelessness. And as the 'network' of social security assistance is getting thinner, local governments find themselves responsible for the growing number of people needing help. In particular cities with declining or stagnating economies will suffer from the growing stress on their welfare budgets.

Urban Land Markets: A Time Bomb

In particular for successful cities with growing economies, increasing land values will be a dominant issue of the 1990s. While a functioning land market is a vital ingredient of a prosperous city, inflated land prices that are no longer related to the value that can be generated on land are a serious threat to a balanced urban development. They render the provision of land for public infrastructure practically impossible and lead to the displacement of less affluent segments of the population. They make large parts of the inner-city unaffordable as a place to live for local people with low incomes. First signs of this harmful process can be observed in London, Paris and Madrid, but also in München and an increasing number of other European cities. To curb excessive land prices in an urban land market without stifling economic activity requires a careful and balanced policy mix yet to be found.

Urban Transport: The Reappearing Problem

In the face of seemingly ceaselessly growing car ownership, urban transport is reappearing as another fundamental urban question, in particularly in prosperous, growing cities where the 'final gridlock' is becoming predictable. The available road space in urban areas has become the ultimate constraint to the apparently insatiable demand for more and more mobility. However, in contrast to the previous decades, today the construction of new roads is only rarely a cure for relieving road congestion. In the short run it is necessary to apply a complex mix of 'synergetic' policies encompassing traffic management and regulation, taxation and pricing, street design and pedestrianisation in order to discourage undesirable or unnecessary movements while at the same time supporting a reasonable level of mobility. In the long run, however, only a reversal, or at least a halt of the trend to ever expanding urban areas and increasing spatial separation of homes and workplaces will reduce the need for further growth of urban mobility.

Urban Environmental Problems

The quality of the urban environment will continue to rise as one of the core issues of urban development in the 1990s, not only because it is becoming more and more important as a locational factor for industry. In particular in prospering, successful cities, growing traffic volumes, uncontrolled land-use development and negligence of environmental concerns by private enterprises and households may seriously endanger the quality of the urban environment. In the fast growing cities of the South lack of public finances seems to be a prime bottleneck for a thorough improvement of the deficient infrastructure in the fields of sewerage, waste disposal and energy generation. In East Germany, years of neglect have created environmental problems of yet unknown magnitude. One universal obstacle for ecology-oriented urban development is the lack of coordination and cooperation between core city and hinterland municipalities and between neighbour cities which are competitors in the intensifying contest for economic development, infrastructure and government subsidies. However, there are also encouraging examples that through civic pride and local commitment and through intraregional cooperation and exchange of experience a balance between ecological objectives and economic interests can be achieved.

4.4 Summary and Further Work

If one tries to superimpose the trends and tendencies sketched out in this Chapter, the emerging overall picture of the future of cities in the Community is one of great hopes but also of large risks.

Opportunities and Risks

On the one hand, there are the positive impacts of continued economic growth, the removal of barriers through further advances in European integration, the emerging new European infrastructure and the opening of the borders to Eastern Europe. Always under the proviso that the next decade will not be overshadowed by major military conflicts or economic turbulences, London and Paris, the Euro-Metropolises and the major European conurbations and cities of European importance in the European core and the smaller and medium-sized cities in their hinterland can look forward to a bright prospect of prosperity fuelled by unprecedented levels of exchange of people and goods. These cities will be able to continuously upgrade their economy to the most advanced technologies and services, polish their physical appearance and transport infrastructure and attract the most creative and innovative talents in politics, business, science and the arts. Given the wealth and opportunities lying ahead of them, the next decade may become a great period for these cities.

On the other hand, there are also serious risks. The greatest danger is that the success of these favoured cities might go at the expense of the much larger number of more peripheral cities. The most likely groups of losers in this game are cities that will not be linked to the new high-speed transport infrastructure, cities at the European or national periphery or cities that do not succeed in liberating themselves from their industrial past and finding their own particular niche in the wider European market. This is the negative side of the polarisation and specialisation *megatrends* and it is in direct conflict with the stated equity goals of the Community regional policy.

There are other more specific opportunities and dangers. Border cities may acquire a new role as interfaces between national economies once the Single European Market will have become reality, but gateway cities at the outer Community borders may find it difficult to cope with the growing inflow of economic migrants. Cities depending on a single product may enjoy the benefits of specialisation but also share the risk of falling victim to a recession in their particular market segment - even if the recession is a welcome one as the declining demand for military equipment and services.

And there are the negative side effects of growth itself. Even the apparent winner cities may in some respect become losers if they do not manage to cope with the undesirable consequences of economic success such as exploding land prices, traffic congestion, environmental degradation and urban sprawl. The spread of urban poverty even in otherwise prosperous cities should be taken as a warning that the 'success' of some cities may have come about by relying too much on principles of efficiency and competition without concern for the less able that need protection and support.

It is not the remit of this study to come up with policy recommendations. That will be done in later phases of this project. However, even at this early stage some lessons can be drawn from the analysis as to what are the most important factors that make some cities prosperous and some lagging behind. Two groups of factors can be identified:

- *Tangible factors.* The 'hardware' factors listed in textbooks on location theory such as, in the first place, 'location' itself, i.e. whether a city is in the core or at the periphery or close to or remote from its markets, clearly remain important, as the analysis has shown. Transport and communications infrastructure can compensate locational disadvantage, but only to a degree, as today the 'normal' transport and telecommunication networks tend to be ubiquitous. Only if new, more efficient, levels of infrastructure are introduced, the relative advantage shifts to the early adopters at the expense of the competitors not (or not yet) linked to the new systems. This makes the new high-speed rail and road and the new advanced telecommunication systems spatially so critical for cities. Other tangible factors are tautological as they are themselves synonyms for success: the availability of modern industries and services, efficient public facilities and urban management, a diversified housing market, good educational opportunities, a rich cultural life, and an intact urban environment.
- *Intangible factors.* However there are many examples that cities with equal endowments with in these 'hard' factors have fared quite differently in the recent past. The 'success' stories of cities invariably are linked to a constellation of factors that are difficult to quantify but have to do with local attitudes, spirit, and people. Wherever there was a group of creative people (or a charismatic individual) involved in bringing together the relevant private and public actors in a city, innovative solutions were found, barriers for progress overcome and an atmosphere of optimism and confidence created that spread over the whole city and stimulated the kind of future-oriented decisions that are the secret of self-reinforcing success and the progressive image a city needs to present itself on the marketplace. If there is any single factor of urban prosperity that really counts it is this entrepreneurial, competitive spirit.

But before taking this home as the final conclusion, it is good to note that this kind of success is entirely built on the principle of *competition*. Prosperous, i.e. economically successful, cities are those that have survived better in the nation-wide, and more and more European-wide, competition between cities. To be sure, the hope is that this competition is *not* a zero-sum game where any gain is a loss elsewhere, but that at the end of the day *every* city will be better off. Yet in reality some cities gain only very little and some gain a lot, and these winner cities are called successful.

So what makes cities successful? From the point of view of a Community regional policy the question may need to be rephrased. If a reduction of disparities between the regions, and hence also cities, in the Community is the primary goal of regional policy, it may be necessary to study how the - in general indispensable and desirable - competition between regions and cities in Europe can be complemented by an element of *cooperation* and mutual help among regions and cities. The support of cooperation between border regions and city networks by the Community are steps into that direction.

A regional policy oriented towards the reduction of disparities between cities in Europe might also have a second look at other community policies clearly guided by the principle of competition. The Single European Market aiming at allowing unrestricted competition in the whole Community territory will certainly give a boost to interregional exchange and trade, but may make life for peripheral cities which now have their own undisturbed markets more difficult. The new high-speed rail and advanced telecommunications networks will bring the cities of Europe closer to each other, but by first linking the large already successful cities in the European core will put all those cities at a disadvantage which are not yet connected or never will be.

These considerations may also suggest a different and more 'cooperative' *Leitbild* for urban development in Europe than the 'Blue Banana' which is the pure expression of the competition between the regions in Europe. The 'European Grape' (Figure 15), may be more suited to represent the polycentric structure of the urban system in Europe and the fundamental *similarity in diversity* of the interests and concerns of its member cities.

Future Work

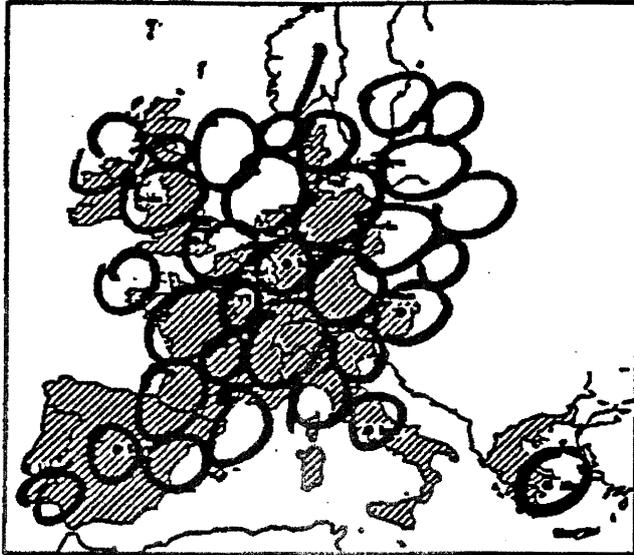
As indicated at the beginning, this report is the output of the first phase of a larger study on urbanisation and the function of cities in the European Community.

Ongoing work in the study includes case studies of 28 cities of different characteristics and a number of thematic case studies on topics such as the changing role of capital cities, East West urban links, the *Third Italy*, cultural policy and urban development, the future of smaller cities and linkages and networks between European cities. Other phases of the project deal with the changing European urban hierarchy and cities in regions, city structures, roles and internal dynamics. The project will conclude with building scenarios and policy implications.

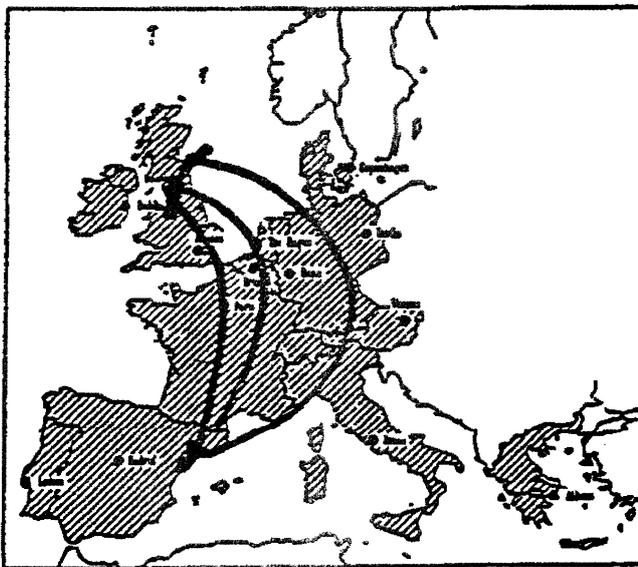
Due to its position in the overall project, much of this report is preliminary and exploratory. Its findings and hypotheses have served as a point of departure for the remaining work and, because of this, may be complemented or even in parts modified by later results and conclusions.

Figure 15
The European Grape.

The European grape



is
the appropriate
fruity image
of
the European Urban System



not
the (blue)
banana

Glossary

<i>Conurbation</i>	This term is used in this report to indicate polycentric regions of cities such as the Randstad in the Netherlands or the Ruhr area in Germany.
<i>Demographic</i>	The sequence of declining mortality and <i>transition</i> subsequent declining fertility characteristic for countries passing through the <i>economic transition</i> .
<i>Deurbanisation</i>	This is the third phase in the four-phase model of urban development proposed by van den Berg et al. (1982). In the deurbanisation phase development shifts to the urban periphery and beyond. The core city loses more people and jobs than the suburbs gain, i.e. the total urban region declines.
<i>Economic</i>	The process of economic structural change <i>transition</i> in which a country passes from an agricultural to an industrial economy (and later to a service economy).
<i>Economies of scale</i>	Savings in production costs due to mass production.
<i>Economies of scope</i>	In analogy to economies of scale, economies of scope indicate the savings made through flexibilisation of manufacturing plants which with the help of computerisation and logistic planning can produce a great variety of different versions of a product (e.g. a car) without extra costs.
<i>Functional urban (FUR)</i>	A term first used by Hall and Hay (1980) to <i>region</i> indicate a region functionally connected to a city by interactions such as commuting or trade. Neighbouring FURs do not overlap, i.e. the area of a country equals the sum of the areas of its FURs.
<i>Just-in-time</i>	Organisation of production processes in which subcontractors supply parts and semifinished products to an assembly line precisely when they are needed.
<i>Reurbanisation</i>	In the fourth phase of the cyclical model of urban development proposed by van den Berg et al. (1982) the city starts to recentralise, i.e. either the core loses less people than the suburbs or even begins to grow again.
<i>Suburbanisation</i>	In general terms suburbanisation is the expansion of a city beyond its core. In the four-phase model of urban development proposed by van den Berg et al. suburbanisation is the phase in which the suburbs grow faster than the core. Residential development in the core

declines for lack of space. The majority of workplaces is still in the centre, but gradually jobs followed people. Eventually the core starts to lose population and later jobs, but the total urban region still grows.

Urban population

The definition of what is 'urban' varies considerably from country to country. In Italy, Spain or Switzerland, for example, it is the population of all those municipalities with a population of more than 10,000. The Netherlands, to quote another example, define as urban population people living in municipalities with a population of 2,000 or more or in municipalities in which less than 20 percent of the economically active male population works in the agricultural sector and, in addition, those living in "specific residential municipalities of commuters" (United Nations, 1987).

Urban region

A city and its hinterland.

Urbanisation

The term urbanisation is used in two ways in this report. In its more general meaning (which is used in the title of the report), urbanisation is the entire process of urban development, including growth and decline. In the more narrow sense, urbanisation is the first in a four-phase model of urban development proposed by van den Berg et al. (1982) (the others being suburbanisation, deurbanisation, reurbanisation). Here urbanisation is the phase in which urban growth occurs predominantly in the urban core.

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