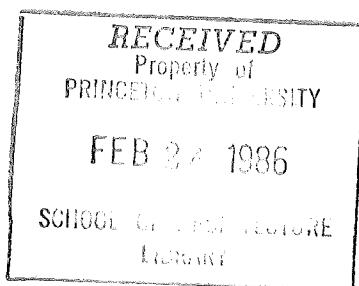


# The Making of Urban Europe 1000–1950

PAUL M. HOHENBERG  
LYNN HOLLEN LEES

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# Contents

## Introduction: Urbanization in Perspective 1

### PART I. THE PREINDUSTRIAL AGE:

#### ELEVENTH TO FOURTEENTH CENTURIES

1. The Structures and Functions of Medieval Towns 22
2. Systems of Early Cities 47
3. The Demography of Preindustrial Cities 74

### PART II. A PROTOINDUSTRIAL AGE:

#### FOURTEENTH TO EIGHTEENTH CENTURIES

4. Cities in the Early Modern European Economy 106
5. Beyond Baroque Urbanism 137

### PART III. THE INDUSTRIAL AGE:

#### EIGHTEENTH TO TWENTIETH CENTURIES

6. Industrialization and the Cities 179
7. Urban Growth and Urban Systems 215
8. The Human Consequences of Industrial Urbanization 248
9. The Evolution and Control of Urban Space 290

## Epilogue: Urban Europe in Our Time 331

Appendix A. A Cyclical Model of an Economy 343

Appendix B. Size Distributions and the Rank-Size Rule 345

Notes 350

Bibliography 355

Index 389

## CHAPTER 2

# Systems of Early Cities

CITIES WITHIN their walls have thus far occupied most of our attention, but what of their important links to the outside? Medieval towns were crossroads as well as separate communities. Indeed, they existed by and for exchange. Goods, information, and influence passed in and through them. Leicester served as the capital of Leicestershire. Located in the center of a county approximately thirty miles in diameter, it was an easy walk for those who needed its economic, political, or cultural services. Weekly and seasonal fairs attracted citizens from a ring of small market towns and villages. Travelers moving from one part of the country to another stopped at Leicester's inns and church hostels, and the presence in Leicester of royal officials and judges brought others into town on administrative errands. Neither Leicester's geography nor its location, which made it the central place in the county, was an accident. Both fitted the city into a hierarchical urban system that was well developed by the eleventh century. Let us take a brief look at the origins of this territorial system and then explore its various properties.

### *Towns as Central Places*

The urbanization of the eleventh and twelfth centuries formed part of a widespread economic revival that involved rural population growth, land clearings, and the gradual assertion of a more centralized political order. As we mentioned before, the development both of towns and of the manorial estates into which land was divided derived from the availability of a surplus and decisions

about its distribution. Fundamental to the evolving feudal system was a bargain between warriors and peasants in which support was exchanged for protection. Two aspects of the arrangement deserve special notice. First, the manor could only produce a modest range of mostly plain goods. Second, a part of the surplus could be invested to make the manor more secure and more productive in the future, for instance by strengthening the castle, by supporting and equipping more men-at-arms, by clearing land or building a waterwheel. Therefore, long-term progress depended upon forbearance by the lord in extracting resources. Because the lord enjoyed a monopoly of legitimate force, he was constantly tempted to exploit the serfs for short-term advantage.

These limitations to the progress of the system could be partially overcome by opening up the manor to outside influences, thus allowing the investment process greater scope. Various outsiders held at least a potential interest in manors and their occupants. The arbitrary power of the lord was held in check by the moral influence of the church and by the possibility of appeal to a higher rung in the feudal hierarchy: to the lord's own liege and ultimately to the king. Though they also fought, king and church contributed to gradual improvements in security and law and made possible a great expansion of trade. And it was trade, of course, that overcame the productive limits of the manorial system and so promoted growth and urbanization. We have already noted the interest of nobles in exotic wares: stronger wine, finer cloth, plate, ornaments, and most of all the implements of hunting and fighting. But local trade also had a strategic role to play. One manor might breed fine horses, another specialize in hawks. Serfs traded on their own account in a small way when a market made it possible, selling off a brace of fowl here, a jar of honey or a hide there. Significant as these scattered exchanges might become in the aggregate, some situations generated more systematic stimuli for local markets and regional urbanization. Let us look briefly at two.

The feudal nobility much preferred hunting, jousting, and fighting to business. Although it was common to entrust the management of the domain and the marketing of the estate's produce to a bailiff, an alternative was to let all or most of the land out to serfs and commute the various services and dues to money payments. This advanced form of the manorial economy made for more active local trade and a much higher degree of monetization of that trade.

If a lord controlled several manors, as abbeys often did as a result of bequests, money payments became all the more attractive.

Moreover, some regions and people specialized from earliest times. Their production came from mines, fisheries, grazing lands, or forests. The availability of specialized resources encouraged this development, but it could also result when a people were forced to find refuge in a remote forest, a rugged highland, or a windswept coastal plain. To survive, these people needed to trade their hides, charcoal, or salt for grain on a regular basis. So the zone of contact between natural regions presented a favorable site for early urbanization. Ghent in Flanders, for instance, owed its start to a strategic position between arable and pastoral areas (Nicholas 1978).

As the volume of local trade and the organization of civil society gradually increased, a large number of market and administrative settlements crystallized as *central places* for their surrounding areas. Individual markets needed to be linked to one another to broaden the range of goods traded and to equalize local imbalances in both goods and means of payment. Further, markets had to be duly authorized by charter, protected from violence, and regulated against fraud; this established ties between the administrative framework and the system of markets. Finally, central places were not random in size and placement, but tended to locate at even distances from one another and to form a hierarchy. Each center approximated the center of gravity of its service area in order to minimize transportation costs. And small centers would be arrayed around larger ones, these in turn depending on a city of still higher order.

Such a system of markets is explained by central place theory, first formulated by Walter Christaller in the early 1930s.<sup>1</sup> Fascinated by the problem of apparent regularities in the siting, size, and numbers of towns among regions, Christaller developed a model to predict ideal city distributions and functions. He began by positing a flat plain within which a population of equal wealth was equally distributed. This population produced many services and specialties, thereby generating central places for exchange. But the level of demand necessary to support a baker, jeweler, or canon lawyer, as well as the distance people are willing to travel to buy their products, varies enormously. Because each good has a given threshold of minimum demand as well as a fixed range beyond which people are unwilling to move to obtain it, only a certain proportion of all towns will offer higher-order goods and services. If the mar-

keting function of the town is made primary, a hierarchy of places can be deduced. Each node in the network has a hexagonal-shaped hinterland, which is the same size as every other town's at the same rank. In this case there are three towns of rank B dependent on city A, three towns of rank C dependent on each B center, and so forth. Urban networks, so conceived, consist of nests of central places, each level having  $k$  places of the next lower rank within the hinterland ( $k$  being equal to three in this case).

Christaller's model rests upon assumptions not met in the real world. Not only do geography, unequal incomes, and uneven population densities distort settlement patterns, but any values assigned to the thresholds and ranges of goods are arbitrary. Cultural or individual variations in demand are ignored. In any case, the range of urban functions considered is severely limited. Christaller argued that marketing needs were the basic pressure for city building, although he admitted that transportation or administrative networks were secondary reasons for the creation of an urban hierarchy. Yet many factors, including climate, terrain, and historical accident, influence the building of actual urban networks. The power of the central place model rests not with its ability to predict actual city distributions but with its recognition that cities are centers for exchange at varying levels of complexity. Moreover, the notion of urban hierarchy helps describe the wide variation in zones of urban influence.

Central place theory can be used to construct an idealized version of the process of city building and interaction that we call the Central Place System. Over time, economic pressures for urban growth are generated by the existence of a local surplus and by producers eager to exchange their specialized products for a wider range of goods. These pressures give rise to a hierarchy of service centers, centrally located towns whose territorial base is a local agricultural region. In the longer run, as we shall see, administrative functions are grafted onto the economic functions of central places. This process was most fully developed within nation-states, such as England, but could also be observed in medieval times in the *contados* of the larger Italian towns, the provinces of France, and the constituent units of the Holy Roman Empire. Throughout Europe, kingdoms were made up of provinces and other smaller nested units. In addition, there were the overlapping jurisdictions of military, legal, and ecclesiastical authorities. A hierarchical ordering

of territory by those with political power was common in medieval Europe.

Christaller argued that over time seven levels of urban places would be generated by the various needs of a population. We prefer a simpler classification borrowed from Peter Clark and Paul Slack of only four types of towns (Clark and Slack 1976). They have suggested a simple typology on the basis of scale as well as economic and political function, which they use for English towns. It also can be applied to centrally governed areas in the rest of Europe. They classify cities as market towns, county towns, provincial capitals, and national capitals—in order of increasing size, complexity, and political influence. This classification has the merit of combining attention to scale and function with awareness of a hierarchical ordering of urban places.

A look at the actual distribution of towns in the early fourteenth century will illustrate both the distribution of these various sized cities and the links between scale and function that are basic to the construction of the Central Place System.

The most common type of European town was the local marketing center. These tiny places, which had fewer than 2,000 residents, constituted the overwhelming majority of all urban settlements and housed over half the urban population. Pounds (1973) estimated that in 1330 perhaps 75 percent of the French, 90 percent of the German, and 95 percent of the Swiss towns fell into this category. Many such places were little different from farming villages, most of their population working in nearby fields. Yet weekly markets drew regular visitors and itinerant vendors, and there were usually a few craftsmen and service workers in the town. By 1500 even the smallest market towns in East Anglia could boast resident weavers, carpenters, and tailors (Patten 1978). While few such miniature communities had royal charters or complex political institutions, most had been granted the right to a market by the king or manorial lord, eager for a share of the profits that could be earned from local commerce. Hundreds of such places were founded essentially as speculations in England after the Norman Conquest, in southwestern France, and in central Germany. Many failed to attract enough settlers and trade to survive the economic contractions of the later Middle Ages, but others developed more complex economic structures and extended the size of their marketing region over time.

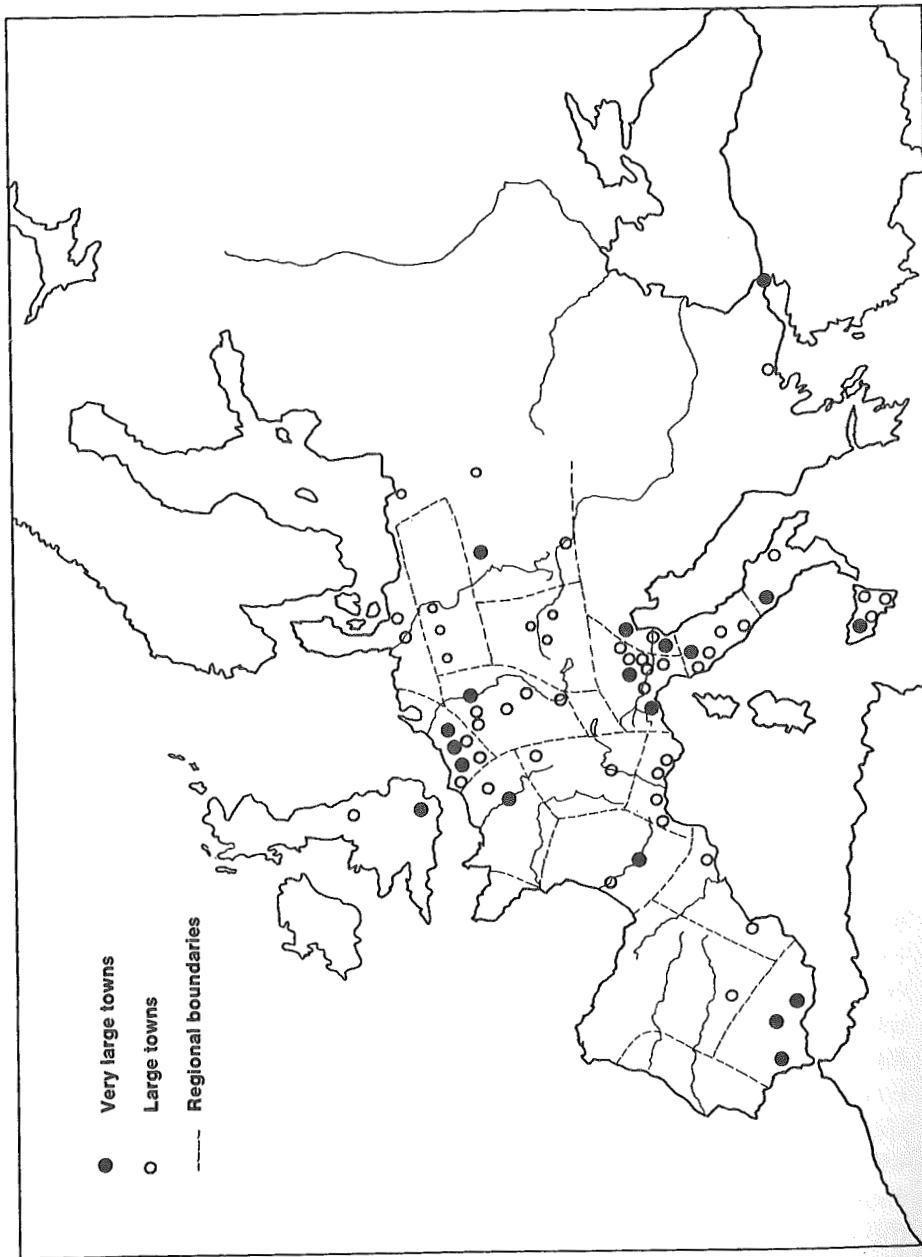


Figure 2.1. Major cities and urban regions of Europe, c. 1350. (After Russell 1972b:27, and Pounds 1973:348.)

Intermediate-sized towns added local and regional administrative functions to their role as marketing centers. As capitals of districts or counties, these substantial settlements provided a range of economic and political services to people in their hinterland. In England county towns were the sites of parliamentary elections and sessions of royal and county courts. Some had royal castles, county jails, and elaborate religious institutions. In France, the capital cities of governmental units below the level of the province (*élections, bailliages, sénéchaussées*) housed royal officials who watched over various administrative, financial, and military matters. The Italian commune of Pistoia, which had approximately 11,000 residents in 1300 and shrank to 6,000 after 1350, ruled over an area of some 300 square miles within which it levied taxes, labor, and military services. Not only did the town control many hospitals and religious foundations, but it looked after the roads and supervised travelers. Moreover, the city's merchants, bankers, and craftsmen attempted to monopolize the region's commerce, manufacturing, and financial affairs until Pistoia came under the control of Florence in the mid-fourteenth century (Herlihy 1967).

Medium-sized towns were widely distributed in Europe, but they constituted a small minority of urban places. Most numerous in Italy, France, the Rhineland, and Flanders, they were virtually nonexistent in the fourteenth century in areas of limited urbanization on the European periphery, such as Scandinavia, Poland, Russia, Ireland, and Scotland. In the later Middle Ages, their numbers grew in the east hand in hand with the political evolution of their regions. Rozman (1976) estimated that by 1500 there were

Table 2.1. The size of towns in northern Europe, c. 1330.

Size category	Number of towns	Total population
Very large (over 25,000)	9	330,000
Large (10,000–25,000)	38	570,000
Intermediate (2,000–10,000)	220	1,100,000
Small (under 2,000)	3,000	2,250,000
Total	3,267	4,250,000

Source: Pounds (1973:358). Reprinted by permission of Cambridge University Press.

about 100 *uzed* cities in Russia from which czarist officials exercised military and administrative control of their districts.

Cities with more than 10,000 residents stood out in medieval Europe except in northern Italy and Flanders where the spread of cloth production and the growth of trade permitted relatively intense urbanization. Elsewhere, large size was correlated with complex administrative, religious, educational, and economic functions. Many of the big towns—for example, Barcelona, Cologne, or Prague—supported universities as well as a wide variety of religious institutions. Their economies were diversified and included a wide range of artisans and service workers. Provincial capitals, such as Toulouse, housed royal officials of many sorts. Except in the rare case of an international manufacturing town like Bruges, the large cities of 1330 owed their size to the multiplicity of their functions, and even Bruges had once been more of a commercial and financial center than it was then. The same point can be made about the few urban giants of the Middle Ages. Paris, Milan, Venice, and Florence were commercial and manufacturing cities and also political capitals. Oriented more to international than to local trade, they supplied goods and services to distant markets. Moreover, their wealth made them major centers of consumption and attracted large numbers of sophisticated artisans and service workers.

The existence of these medieval metropolises presupposes linkages to smaller, less complex towns of a wide hinterland. In more abstract terms, the relatively spontaneous growth of market centers produces higher-order urban places and culminates in a capital city that has at least economic and usually political dominance over the region that is dependent on it. This implies that the regional capital is more closely tied to the other central places within its hinterland than to any other city or territory outside the system. In theory, therefore, a mapping of the functional interconnections among cities at any date would permit the division of a territory into its constituent regions. Unfortunately, sufficiently detailed information on migration, trade, and the local availability of services cannot be obtained for large enough numbers of towns to make such an exercise practical. The scale of towns, their location, and functions remain the best guide we have to the development of medieval urban regions.

European urban networks grew at various paces and times during the Middle Ages. Northern Italy and the Muslim regions of Spain

took the lead and were followed by the Low Countries. Much later, through the thirteenth and fourteenth centuries, towns spread into eastern Germany and Poland; Russian urbanization, which fluctuated in a cycle relatively independent of that of western Europe, constituted an intermediate case. Tikhomirov (1959) estimates that about 100 fortress cities had been founded by the late eleventh century and that almost 300 existed by the time of the Mongol invasions of the thirteenth century. Among them, Novgorod with 20,000 people and Kiev with 50,000 stood out. On the basis of these estimates, Rozman (1976) gives an urbanization rate of between 3 percent and 4 percent for Russia, on a par with northern Europe generally.

The most extensive information on early urbanization is available for England in the pages of the Domesday Book, a survey of land and population taken for the new rulers shortly after the Norman Conquest. The network of settlements on which the urban system would build was virtually complete by 1066. In 1086 England had 111 boroughs ranging from London with 10,000 people to a handful of settlements with fewer than 10 inhabitants. By 1300 the numbers had grown to 480 English boroughs and 70 Welsh ones, while London housed 50,000 residents (Dodgshon and Butlin 1978). The king granted market rights to 1,200 communities between 1227 and 1350 alone (Platt 1976). It goes without saying that most of these centers were and remained very small indeed. Most did not become important links in an urban system. Even in regions of Europe with relatively low rates of urbanization today, a full early network of central places can be documented. For the period 1200–1500 geographers have mapped a total of 1,382 fortified settlements they wish to call towns in the area of present-day Yugoslavia (F. Carter 1977).

#### *Urban Regions: A Critique of Central Place Theory*

One implication of central place theory is that the regional hierarchy should be characterized by a predictable size distribution of its cities and towns. This is a complicated subject with a large literature. For instance, one can question whether population size necessarily signifies centrality. If it does, intuition tells us that the cities of a similar rank in a central place system should have similar sizes, clustering in a few size categories. Nevertheless, many geographers accept the idea that within a region the distribution of city sizes

will be log-linear, approximating the rank-size rule. Each city's predicted population is given by the formula  $P = A/r$ , where  $P$  = population of the given city,  $A$  = population of the largest city in the hierarchy (regional capital), and  $r$  = size rank of the given city. Put simply, the rule predicts that a region whose capital has 100,000 inhabitants will have a second-largest city of 50,000, a fourth of 25,000, a tenth of 10,000, and so forth.

The use of the rank-size rule for early regional urban systems has given rise to an ambitious attempt to analyze medieval urban development by J. C. Russell (1972b).<sup>2</sup> His method is somewhere between a test of the rule and an application. He first estimates the population of the major towns, principally in the century 1250–1350, using existing data and constructing new figures. He then defines regions so as to maximize fit with the rank-size rule without doing violence to geographic common sense. In other words, regional boundaries are to be reasonably straight and the regions themselves relatively convex and compact.

Russell has divided western and central Europe into roughly eighteen regions, most considerably smaller than the nation-states of the twentieth century (see Figure 2.1). Only the urban systems in Portugal and the British Isles had a geographic reach in 1300 similar to that of their central governments today. The future France, Germany, and Italy were subdivided into several regional systems only loosely interconnected. Other regions, for example, those of Flanders, eastern Europe, and south Germany, spread over the boundaries of what is currently more than one country. The divisions that would one day produce Switzerland, the Netherlands, Belgium, Czechoslovakia, and Austria were still incipient, and economic ties overrode differences of language and cultural heritage.

Europe thus divided illustrates rather well the workings of the rank-size rule and the creation of central place systems where the sizes of a region's major cities have fixed, proportional relationships. The principal deviations come from the skewed sizes of capitals, which sometimes tended to be either too populous or too small in relation to the next rank of towns. London, Dublin, and Paris, for example, were *primate* capitals, disproportionately large when measured against the rest of their urban systems. On the other hand, Milan, Lübeck, Ghent, and Cordoba did not stand out from the pack as much as the rank-size rule would predict. These deviations occurred in two sorts of areas. Where urbanization was far ad-

vanced, an urban pattern of many medium-sized cities was common. In contrast, major cities with political as well as economic functions grew disproportionately large in more lightly urbanized areas. Russell has developed an index of urbanization calculated from the fraction of the total regional population living in larger towns. It shows rates of urbanization ranging between 20 percent and 25 percent in northern Italy and less than 5 percent in northern parts of France, England, and Ireland. In these early times the relative sizes of the higher ranks of urban systems were shaped by overall levels of urbanization.

Some writers have questioned whether medieval towns achieved sufficient integration to form meaningful urban systems (H. Carter 1976). But we reject the implied idea of isolated market centers. As we have already pointed out, the limits to trade among inhabitants of a small district are quickly reached, even if one adds the division of labor between urban craftsmen and peasants. There are also fiscal flows to consider and long-distance trade, which we have deliberately left out of account for the time being. The idea of "distributed" or isolated centers seems to be a fiction of modern geographers trying to situate in the past a starting point for their central place model. It cannot account for the presence of cities with thousands of inhabitants. We do accept the reality of urban regions, certainly in the heyday of medieval economic life (the twelfth and thirteenth centuries for the West). Robson (1973:34) has called the use of city-size distributions as an indicator of city systems "a very blunt-edged tool." And so it is. Nonetheless, differences in scale reflect differences in function and are the best indicator we have of rank in an urban hierarchy. Problems come when systems are delimited purely by criteria of size distributions.

It is instructive to compare the regional capitals of medieval Europe with the major cities of later times. Some have retained their place: London and Paris, of course, but also Prague, Milan, Barcelona, and Lisbon. Some have fallen back: Toledo, Ghent, Augsburg, and Lübeck, for example. And some names are missing from Russell's list: old centers such as Rome and Lyon, and later creations from Madrid to Manchester, Turin, and St. Petersburg (Leningrad). We shall at later points pay considerable attention to the processes by which centers of trade, political capitals, and industrial cities grew and acquired power and influence.

By looking at the regions defined by Russell, we also can get a

sense of what the central place approach leaves unexplained in the pattern of early European urbanization. Three points stand out.

(1) The less urbanized regions are larger in area than those with more intensive urban development. This is not due to lower population density in the former; Russell's urbanization index confirms the inverse correlation between region size and the percentage of total population in the principal towns. It can be argued that a small index of urbanization reflects a rudimentary state of economic development, but one must then question whether the large and loosely urbanized areas in question are sufficiently integrated to constitute regions in any meaningful sense. At best, their regional systems will be administrative or political with little economic content, as Rozman (1976) argues was the case in Russia at a comparable stage. However, it is troubling to have to define regions on the basis of political criteria in such clearly feudal areas as thirteenth-century France and central Germany.

The same point can be looked at from the other side, in terms of the potential "underbounding" of heavily urbanized regions. They are drawn small by Russell even though the very intensity of urban development argues for activities linked to a wider area. Russell's regions are in fact designed to enclose the minimum area containing enough cities to constitute a central place hierarchy. They are probably inoperative in intensely urban areas, where the system of cities is larger than the postulated region, as well as in places where the urban fabric is too loose to organize the necessary area effectively.

(2) The Central Place System implies a more or less even spatial distribution of cities around a central capital, with regional boundaries typically falling in zones of weak urban interaction. The analogy with a river basin is appropriate.<sup>3</sup> But Russell's European regions are not primarily of this type. Particularly in the heavily urbanized areas, regional boundaries run squarely through active zones such as Picardy and the Po plain. Moreover, the capitals of large regions often lie near an edge, specifically in the direction of more concentrated urbanization outside the regions: examples include Cologne, Toledo, and Prague, as well as a number of ports such as London and Barcelona. These cities in fact act as gateways or portals into their region, not as distance-minimizing central places.

(3) The Central Place System views urbanization as an outgrowth of rural development. In it, economic activity grows from local markets to the higher stage of exchange and production for local markets to the higher stage of

long-distance trade and a more complex division of labor. In one version of the model, military or religious elites play a determining role by providing conditions of security in exchange for surplus. Yet what we know of their patterns of consumption implies that long-distance trade must have played an earlier and more important role than this model suggests. Moreover, in order to import luxuries, Europe had to export staples. The model is therefore deficient or incomplete in economic as well as in geographic terms.

### *The Network System*

The foregoing observations point to an alternative approach to medieval cities. Let us step back from the attempt to delimit urban regions within Europe and look at the distribution of principal cities over the continent as a whole (see Figure 2.1). The dominant feature is without question the concentration of "large" and "very large" centers in a few areas. Two clusters stand out: northern Italy and the Low Countries. Each has important outriders, Mediterranean ports such as Naples and Marseille in one case, the London-Paris-Cologne triad in the other. Excluding Prague, whose size the map probably overstates, and Toulouse, there were no other major centers in Catholic Europe. Any theory or model of a European system must consider this larger distribution and give due weight to the dual urban core.

Let us go back for a moment to the origins of intensive urbanization near the Mediterranean in the several centuries before the more general urban revival that we have dated at approximately A.D. 1000. First, many of the Roman towns continued to be occupied, although much reduced in scale. Moreover, the kings of the invading Ostrogoths, Visigoths, Lombards, and Vandals called some of the Roman towns capitals and settled in them for a time while attempting to make use there of the administrative procedures of the late Empire (Ewig 1963). Urban continuity was greatest, of course, in the cases of episcopal centers, although the extent of urban activity outside the walls of the bishops' fortified palaces must have varied widely. Between the sixth and eighth centuries the greatest relative concentration of towns was found in Italy. Post-Roman holdovers overlapped with new centers of trade; as Rome, Bologna, and Milan went into eclipse, Amalfi, Pavia, and Venice grew.

Beyond Italy a number of nonagrarian settlements emerged during the period from the seventh through the ninth centuries. Surprisingly perhaps, they tended to be situated along seacoasts and navigable rivers and in other exposed locations. A line of fortified settlements reached north-south from Novgorod to Kiev in Russia. Another set of places bordered on the North and Baltic seas or on rivers flowing into them, from Quentowic on the Somme and Dorestad on the Rhine to Birka in Sweden and Haithabu (Hedeby) in Schleswig. This last is known to have included craftsmen as well as traders, rich and poor. Iron and glass were produced there. Luxuries from the south and slaves were brought in for distribution over a wide area (Ennen 1979). Finally, England seems to have experienced some urban revival in the context of the struggle between Danes and Saxons. The five Danish fortified towns of Nottingham, Leicester, Derby, Lincoln, and Stamford were opposed by royal *burhs* of the Saxon kings. The common characteristic of these various protourban settlements is that they were exposed to the turbulence of war, invasion, and plunder rather than tucked away in a peaceful corner. They testify to the continuing, if precarious, existence of long-distance trade and to the stimulating, if fractious, contacts between rival cultures.

If we accept the idea that neither trade nor the social order completely disappeared and that some urban functions as well as urban places persisted, it is still possible to treat them as marginal vestiges of the past or forerunners of the later urbanization we examined in the previous chapter. In this view the prevailing themes of European life in these so-called Dark Ages remain autarky and anarchy. Only as self-contained manorial estates of warrior lords and serfs could communities hope to survive. But this may be too stark a view. There are reasons to believe that trade, and therefore the economic basis for urban life, fared better than conventional interpretations suggest.

As a means of gathering surplus, plunder is effective but limited. It represents an extreme strategy in the trade-off between encouraging surplus creation and securing a maximum share. This point must be borne in mind in considering the Dark Ages, particularly since we are dealing with extraordinarily long periods of time. If wave after wave of raiders found something to sack and pillage, surely there must have been periods of recovery and reconstruction in between! Moreover, the invaders always settled down some-

where, and a kingdom, even a barbaric one, cannot be managed only by unrestrained exaction. The warriors would receive an estate with slaves or serfs to work it.

In the conventional story of a long European night, the villains were outside invaders, most notably the Saracens and Norsemen. Like others, they began as terrible raiders and later carved out substantial European domains. But these two groups left a lasting mark, becoming assimilated in the case of the Norsemen or Normans, while the Saracens or Moors of Spain were expelled only centuries later. Despite a long and distinguished record, Saracens and Norsemen still bear an image of total and primitive savagery carried over from European accounts of the years of pillage and conquest. To put it bluntly and in modern terms, this record includes a large measure of ideological propaganda. It was compiled by clerics who saw their fledgling Christian order threatened with extinction by pagans and who did not hesitate to caricature the enemy. Skilled, daring, and fierce as these attackers were, their accomplishments belie their reputation, as recent examination of indigenous sources make clear. After all, the Saracen pirates belonged to a great empire and a great civilization, whose outpost at Cordoba was a brilliant city of many hundred thousand in which science and the arts, as well as trade, flourished in a climate of tolerance (Arberry 1967). The more rustic Norsemen, for their part, ranged easily from Iceland to Russia, through which they managed to trade with Constantinople (Latouche 1967; Lombard 1972). The mistake is in thinking that trade and war were incompatible, or that cultural and religious clashes precluded mutually profitable exchanges. Scholars now believe that on balance the bold sailors and warriors who controlled the northern and southern seas contributed to the economic activity, if not to the tranquility, of Christian Europe in the High Middle Ages.

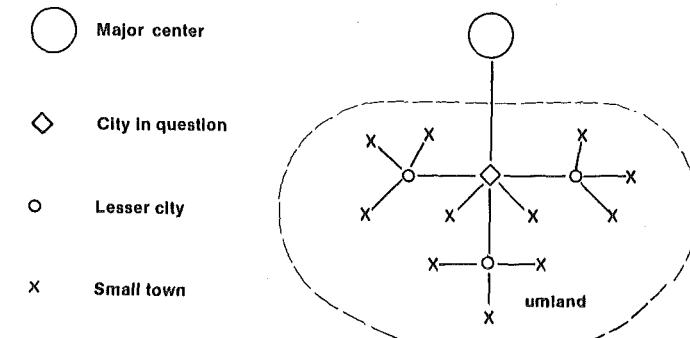
If one reflects on the conventional view of the Dark Ages, the conclusion that urban economic activity was negligible then is quite clearly based on the near absence of the structures of civilization necessary to sustain systematic or long-distance trade. Underlying this reasoning is a narrow concentration on Europe as it would become. This cultural parochialism may be unconscious or it may reflect, as in the case of Pirenne (1925), an explicit theory about the barriers raised by cultural hostility. If one broadens one's scope to fit the realities of the period, the picture changes drastically.

Western Europe is seen for what it was: a minor hinterland of two flourishing, though rival, empires in the Near East, centering on Constantinople and Baghdad respectively. Or, if one chooses to give greater weight to the trade of Frisians and Norsemen in the North and Baltic seas, the continent appears as a barrier between two unequal zones of maritime activity.

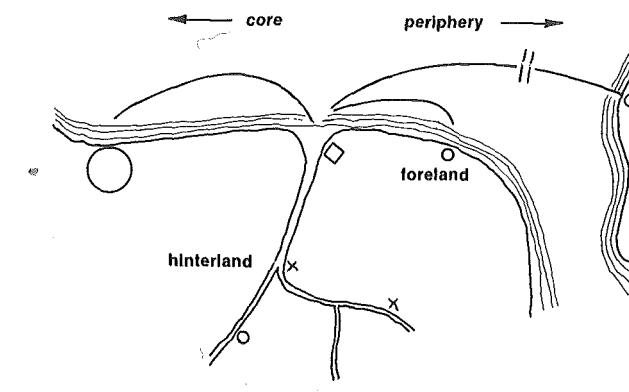
As has long been known, trade has always shown an amazing ability to permeate remote, desolate, or turbulent areas, even very large ones. All that is needed is a profit incentive and a trading center strong enough to furnish entrepreneurs, finance, and markets. One has only to think of caravan routes through the steppes and deserts of Asia and Africa, or of the sailors taking small ships through uncharted seas. By comparison, the river valleys, plains, and mountain passes of Europe do not seem like formidable obstacles. So it is quite reasonable to accept a certain amount of long-distance trade through and in Europe as part of an Eurasian network reaching out to northern Europe, sub-Saharan Africa, and China from its Near Eastern core. For the period before A.D. 1000 we can reconcile continuing long-distance trade in Europe with very sparse urban activity by noting links to a great network centered to the east.

The idea of trading links provides the basis for a second model of European urbanization, which we call the Network System. Cities form the centers, nodes, junctions, outposts, and relays of the network. We shall consider, in order, the economic, political, and spatial aspects of this system.<sup>4</sup>

Directly or indirectly, a trading network relies on agricultural and other commodity production. Raw materials for traded goods, food to sustain the cities, and potentially large untapped markets are to be found in the countryside. In this light, a primarily agricultural region may develop its urban array in a way almost opposite to the process implied by central place theory. An initial center serves as the gateway, the link to the larger network, and it typically remains the principal city. From this urban base flows the stimulus to production of larger surpluses, drawing on underused reserves of land and labor (Myint 1971). Lesser centers serve primarily to gather and ship the staple or export crop, secondarily to distribute a return flow of goods and provide other central place services. If export-led development is successful, it will in time induce the formation of a central place array based on local trade. How soon



a. Central Place System



b. Network System

*Figure 2.2. Interurban links for a city in two urban systems. Cities evolve distinctive spheres of interaction. In the Central Place System each city deals with several subordinate towns in its *umland* and with one larger, more complex center. A city in the Network System functions as a gateway for the towns in its regional *hinterland* and is linked to the larger network via its *foreland*.*

and how strongly this happens may depend as much on the nature of the export good as on the prosperity of trade. Arable farming probably spreads stronger roots than pastoral pursuits, and fishing is better than hunting, whereas forestry and mining can yield quite varied outcomes.<sup>5</sup> Local processing of export commodities also needs to be considered, but we shall defer it to the discussion of proto-industrialization in Chapters 5 and 7. Although the view of major cities as gateways and originators of regional systems has been

applied mainly to the Americas, Burghardt (1971) uses it for Bratislava on the Danube in early modern times.

Like the Central Place System, the Network System has a political as well as an economic variant. The initial urban settlements in a region can serve to establish political control in one or another form. The widespread land clearings of the twelfth and thirteenth centuries within western Europe were anchored by newly created towns and villages with revealing names: Newton, Neuilly, Neustadt. On a larger scale, planned towns or bastides served German colonization east of the Elbe during the thirteenth and fourteenth centuries. They were also common in disputed regions such as the Welsh marches. In Guyenne-Aquitaine, where two centuries of struggle between French and English followed the devastation caused by religious strife and repression, bastides served to resettle territory as well as to secure authority over it (Vance 1977). Finally, cities have furnished the bases for the full range of overseas colonial enterprises, whether for settlement or for trade only, with or without formal assumption of sovereignty by the colonial power.

The spatial properties of the two systems also differ markedly. The key is the Network System's flexibility. Since cities are links in a network, often neither the first source nor the ultimate destination of goods, they are in some measure interchangeable as are the routes themselves. Marketing shifts, political conflicts and policies, even innovations in shipping or banking can lead to the displacement of one center by another. Europe offers many examples in medieval and Renaissance times. Within the Italian core area the earliest ports were Bari and Amalfi. Venice surpassed them before A.D. 1000, while Genoa grew to strength in the succeeding two centuries. From the thirteenth to the fifteenth centuries Florence and Milan disputed the leadership of the two great Italian ports. Pisa, Lucca, Pavia, and others also had days in the sun. Throughout, however, the place of northern Italy as a key center of the European network remained secure. A similar changeable stability characterized the axis connecting Italy with the other urban center in the Netherlands. Until the eleventh century Germany and the Rhine were preferred. Then, with the development of the great fairs of Champagne, the French route prevailed until the troubles of the fourteenth century again caused Germany to come to the fore. By the sixteenth century a variety of routes coexisted. Their relative importance can be gauged by the shifting commercial for-

*Table 2.2. Characteristics of Central Place and Network Systems.*

Characteristic	Central Place System	Network System
<i>Structure</i>		
Basic unit	Agricultural region and/or local administrative unit	Trading network
Role of city	Central place in a hierarchy of central places	Node in a network of linked cities divided into core and periphery
Shape	Territorial and geometric	Maritime and irregular
Ideal type	Market city (Leicester)	Merchant city (Venice)
<i>Functions</i>		
Economic	Marketing and services	Trade, particularly long distance
Political	Administration with hierarchical, regular links to local units	Informal controls or imperial hegemony
Cultural	Orthogenetic	Heterogenetic
<i>Evolution</i>		
Economic pressures for growth	Supply-push	Demand-pull
Direction of development	Up from the base	Out from the core
Prime movers	Producers: craftsmen and farmers	Traders: merchants and bankers

tunes of the cities—principally Frankfurt, Lyon, Geneva, and Augsburg—that had taken over much of the linkage role from the fairs.

Networks are not bound to linear distance in the way central place regions are. Time and money count for more than geometry: the costs and risks of carriage balanced against the opportunities for profit (Braudel 1966). Routes to forge new interurban links or open up resource-rich plains and ore-laden hills to the world market were constantly being prospected and established. But they could as easily be abandoned. Water transport played a preponderant role throughout, though mountain passes counted also. In particular, the two inland seas, the Mediterranean-Adriatic and the Channel-North Sea-Baltic, served to unite trading centers rather than to separate them. The penumbrae of cities around the cores of European urbanization have already been mentioned. Valencia, Ragusa (Dubrovnik), and Salonika were also effectively close to the southern centers. In the north the member cities and trading posts of the Hanseatic League—Bergen, Danzig, and beyond—sustained easy ties with the core, whereas inland towns away from navigable rivers experienced poorer access and correspondingly more difficult growth even when they were less distant. With the triumph of European maritime expansion, Atlantic ports came to the fore—Cádiz, Bordeaux, Bristol—and new centers displaced or joined the old: in turn Antwerp, Amsterdam, and Hamburg. Also, the northern core eclipsed its senior rival to the south. But the basic articulation of the network showed remarkable staying power. In terms of the Network System the main process underlying early European urbanization was a gradual strengthening of trading centers, originally dependent on an extra-European network, until they became dual cores of the European “world economy” (Wallerstein 1974; Braudel 1979).

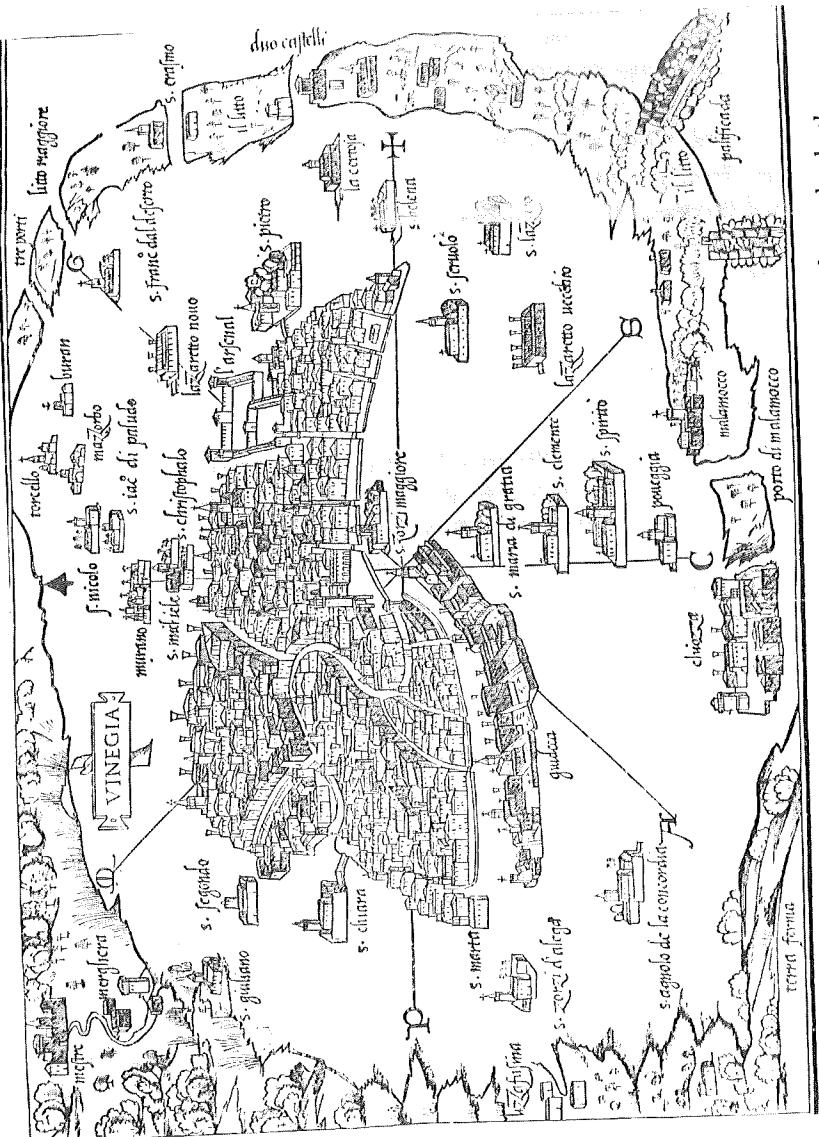
Some medieval cities had attractive powers far beyond their agricultural hinterlands. Long before the era of airplanes and railroads, citizens of trading towns overleaped common constraints and forged new links to the far corners of the world. Marco Polo traveled from Italy to Acre, Tabriz, and finally Peking in his search for adventure and profit. A look at his home city, Venice, and its development will help to illustrate the workings of the Network System in preindustrial times.

The city began as a string of small communities on the islands

of the Venetian lagoon.<sup>6</sup> Cassiodorus, a Roman official, compared their houses to aquatic birds, who moved from sea to land. Boatmen and salt workers, subjects of the Byzantine emperor, made their living as middlemen, linking the Italian mainland to the eastern empire. Before A.D. 100 they secured their own livelihoods by exchanging salt and fish for food, and then built an expanded trade upon urban demand for slaves and wood. As the Venetians became exporters and organizers of mainland resources, they added a shipbuilding industry to their economic base. In time they became important intermediaries between Constantinople and northern Italy, and by the tenth century Venetians were the leading merchants of the upper Adriatic. But the city’s power stemmed from more than commercial skill. Successes by the Venetian war fleet in the eleventh century brought trading concessions throughout the Byzantine empire, as well as overlordship of Dalmatia. And in the thirteenth century the doge persuaded the knights of the Fourth Crusade to help the city’s fleet sack Constantinople and win for Venice control of strategic areas such as Crete and Ragusa. Political control followed on the heels of the Venetian economic presence in the eastern Mediterranean. Unlike service cities whose strength came from their territorial base, Venice used its conquests to reinforce its sea power. Its colonies scattered around the upper Adriatic served as bases for the fleet, information stations, and sources of food, raw materials, and trading contacts. Venice created a maritime empire that served to support the city’s far-flung commercial interests.

The core of the empire was the city itself, a magnificent composition of canals, houses, and palaces that in Byron’s words “sat in state, throned on her hundred isles.” Its center in the area around San Marco comprised the doge’s palace, the harbor, a central piazza, and a campanile whose bells rang the hours and whose lights served as a ship’s beacon. The city’s main “street,” the Grand Canal, was kept wide enough for a 200-ton ship to sail through. Traders thronged the area around the Rialto bridge, and eventually the palaces of many noble families lined the banks. Expanded industrial development, which followed Venetian influence in foreign markets, was largely confined to specialized areas where the needed workshops and warehouses could be constructed away from the commercial traffic of the central city.

The close links among government, commerce, and shipping that can be seen in the city’s plan were much more than symbolic. The



*Figure 2.3.* Venice. This late-sixteenth-century map by Benedetto Bourdon shows clearly the maritime orientation of the city. Some of the many islands had special functions. The Piazza San Marco was the focal point of the city, while the churches and their squares served as neighborhood centers. (From Molmenti 1927, II:41.)

Venetian commune controlled much of the city's economic life. The state owned the great galleys of the merchant and war fleets and regulated their design, crews, and cargoes, as well as the timing of voyages. Residents of the city owed compulsory military service as oarsmen. Traders' activities were highly regulated, too, in Lane's (1973) judgment in order to improve citizens' chances for commercial profits and to dampen conflicts among sections of the nobility. Since the commune's survival depended upon the unified support of powerful citizens, many of the elaborate rules for economic and political life were designed to ensure evenhandedness among the major families of the oligarchy.

On the basis of their tightly controlled fleet and partnerships of merchants, Venetians built a trading system that provided several centuries of commercial prosperity and political power. The city's domination of the nearby mainland, which was increased by the land purchases of the nobility as well as by coercion and sharp dealing, helped ensure an adequate food supply and made Venice a regional entrepôt. This small territorial base, however, was no more than the pedestal of Venetian power. Navigation laws and the strength of the fleet kept Venice at the center of a vast East-West trade that exchanged the goods of northern Europe for the spices, silks, and other products of the Orient. Venetians brought wool, metals, and raw materials first overland from Champagne fairs and later by direct voyages from Bruges and Baltic towns back to Venice for transshipment throughout the eastern Mediterranean. From Persia, India, and China, caravan routes largely in the hands of Muslim merchants converged on Jiddah, Alexandria, Acre, and Constantinople, where colonies of Venetians bought goods to ship home for resale in the north and sold other products to eastern buyers. Venice, and later its rival Genoa, were the centers of an urban network that bridged the centers of the known world.

## *Conclusion: A Dual Perspective and a Regional Typology*

To summarize, the Central Place System is rooted in the stability of the land and its tillers. A neat geometric mosaic of graduated centers structures the commercial, administrative, and cultural needs of a region and eventually integrates regions into a unified nation. The peril is that the power of the central state and the luster of the court and capital will become too great, draining the land of its

material and human riches and imposing the norms of an official culture and a burdensome bureaucracy. The bloated primate capital city in an otherwise torpid array of towns is the visible embodiment of excess in this mode of urban development.

By contrast, the Network System testifies to the mercurial force of movable wealth and universal ideas. If the links among its cities could be described mathematically, it would be with topology rather than Euclidian geometry. At the heart of the system is an "internationale of cities," each determinedly autonomous and more concerned with the world at large than with its own backyard. A single city's culture, like its population and trade, is apt to be cosmopolitan and varied. Typically, a wealthy oligarchy exercises quiet but tough rule over the city-state, tolerating much that territorial societies repress so long as the local order is not threatened. Even though hopelessly outweighed in geopolitical terms, network cities are often able to achieve and retain astonishing power and to control—for themselves, for an alliance of cities, or for a nominal sovereign—vast maritime or colonial empires. On the darker side, their bold quest for profits is no more inhibited by the exploitation of human beings than it is by distance or by traditional values and superstitions. Even before taking readily to capitalism, network cities organized trades built on the unfree workers of galleys, spice plantations, silver mines, and feudal estates. If xenophobic nationalism is the historic sin of one system, that of the other is salt-water imperialism.

How can the dual perspectives be combined? Several possibilities can be suggested. Do they perhaps refer to two separate groups of cities? Van Werveke (1963) in fact suggests that some cities are outgrowths of rural activity and territorial organization, whereas others act as gateways or fit into a network. Certainly, cities differ in their mix of territorial organization, as a comparison of Leicester and Venice suggests. But remember that even Venice had tight links with the mainland and that Leicester had its long-distance traders. Another view, articulated by Berry (1961), is that urbanization passes through stages that approximate successively our Central Place and Network Systems. Other scholars support the notion of alternating historical phases of dominance for one or the other model: the first in much of the medieval period of city creation and the second in the Renaissance and early modern heyday of mercantile trade. Later discussions will show strong central place elements in the onset of industrial urbanization, whereas the generalized ur-

banization of the twentieth century can perhaps be seen as a take-over by the metropolis with network linkages becoming primary (Friedmann 1953). Finally, Braudel (1967) adopts a dialectical approach in which urbanization results from the synthesis of two sets of forces: rural production and monetary trade.

As must now be clear, our own preference is to retain the two models as complementary ways of looking at interurban relationships and at the complex process that is urbanization. Most larger cities have a place in both sorts of systems. Each model illuminates certain episodes better than others, but they often suggest converging explanations of observed facts. A few brief examples will illustrate this.

Trade can develop to an extent either without towns or beside them. Local markets were far more numerous in medieval and later times than true towns, no matter how modest a population threshold one chooses for an urban place. Also, large fairs were held near small towns, suggesting the existence of a network in which fairs made up for the absence of an adequate urban setting at strategic points. The great twelfth-century fairs were located in Champagne because of the province's situation between Flanders and Italy, not owing to any special local stimulus. By the fourteenth century cities had largely replaced major fairs in the west, although they continued in the east, for example at Frankfurt-an-der-Oder, Breslau, Poznan, and Leipzig. Specialized fairs continued, as they do to this day, and there were many smaller ones (Pounds 1973). A regional fair can make it possible for a weakly urbanized region to enjoy intermittently a high level of central place services. But it can also serve to gather a local staple for export through the larger trading network, particularly when the product is of high value but variable quality, as in the case of truffles or wine.

In addition to the urban cores and the inland sea coastlines, an east-west band in central Germany stands out for early concentration of settlements and towns. A perspective based on our Central Place System would suggest the influence of the region's favorable agricultural situation as a fertile loess belt between the mountains to the south and the cold plain to the north. But awareness of the alternative system forces acknowledgment of the location within the region of an early trade route, the *Hellweg* (Pounds 1973).

The areas of intense urbanization in Europe generally excelled in agriculture. This was certainly the case in northern Italy, in

southeastern Spain, and in Flanders. Again, the question is whether large agricultural surpluses hastened the expansion of cities or whether sophisticated commercial farming was stimulated by urban demand, financed by merchant capital, and managed for profit-minded landlords by literate bailiffs or farmers. Both forces, we feel, contributed to growth.

The two models provide a dual framework for looking at the regions formed during the medieval period. One focuses attention on the traditional rural economy and society as the base from which urbanization proceeds. The other suggests the potential of urban stimuli for rural change and points to the importance of a region's position in the European system or network. We have described the dual urbanized core, the coastal extensions and intermediate zones, and the "distant" peripheries. Our framework will make it possible to examine in later chapters regional responses to two developments that powerfully conditioned later European urbanization: centralized states and industrial capitalism.

Hechter and Brustein (1980) offer a typology of medieval regions that helps to give a regional dimension to our systems analysis of medieval urbanization. They distinguish three types of regions, arranged in roughly concentric order around the focuses of urbanization in the Middle Ages. The *Roman-Germanic core* led European urban revival largely on the basis of commercial development. This area was the most strongly urbanized, and it had the most commercial agriculture, clearly influenced by the proximity of urban markets. Here strong central states were slow to consolidate, while commercial and protoindustrial capitalists thrived, from early Italian and south German bankers to Dutch merchants or Belgian iron masters and clothiers. Adjoining the core were strongly *feudal regions* of France, England, central Spain, and some parts of Germany in which, however, commercial towns also grew during the Middle Ages. Clearly, much urban revival here followed central place logic, growth being generated by three-field agriculture with a feudal-monastic order to guide and organize the surplus. Additional growth was derived from proximity to the commercial core. How much is attributable to each is hard to disentangle. Here, however, the central state achieved full power, not least because town and country were well balanced in strength. Finally, the Celtic fringe of western Europe was touched only lightly by the productive energies of long-distance trade and commercial agriculture. It remained pas-

toral, weakly urbanized, and virtually tribal in sociopolitical terms. These peripheral regions became dominated by external states and in later centuries lagged behind in the development of commercial agriculture and industrial capitalism. Port cities were enclaves with little effect on the interior.

Neither Hechter and Brustein nor we are in a position to give a full account of the genesis of the three regional types. However, their argument has the great merit of pointing out that economics and politics are correlated, and that a regional nexus cannot be understood without reference to culture, social structure, the agrarian system, and urbanization. These relationships, however, are not fixed over time. During the preindustrial period, the economic dominance of the core areas was scarcely challenged. Later, in the age of capitalist industrialization the economic center would shift largely to the earlier intermediate, or feudal, regions. It is premature to pose the question why the shift occurred, except to suggest that the feudal regions had great scope for agricultural improvement and would benefit from the unifying force of a central state. More recently another phase has begun. Europe in the second half of the twentieth century has seen the revenge or renewed flowering of the old core, from the brilliant cities that ring the North and Baltic seas to the several Mediterranean economic miracles.