

THE HISTORICAL GEOGRAPHY OF EUROPEAN CITIES: AN INTERPRETIVE ESSAY

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Introduction

The co-evolution of Europe's cities and towns and their economies in space and time – the subject of this exercise in geographic economic history – is a complex story, not only in its myriad details and multiplicity of cases, but even in its outline and main traits. Given the long period and great changes involved, models that attempt to capture it must account for both the stability of the system during a certain period and the cumulative disequilibrium that leads to a new order. Also, much of the recent literature in economic geography focuses on explaining the location of economic activities, whereas the object of concern here is the economy of the urban units and systems. In the first case, the location of production gives rise to agglomerations; in the second, producers who can benefit from agglomeration choose among existing ones, though of course their choices in turn modify the distribution of population and the economic characteristics of the places chosen.

A number of themes will run through the story, and it will prove challenging to keep them all going and in proper balance. Although the economic models of agglomeration that figure heavily in this volume and in the “new” economic geography – or geographical economics – will prove hard to apply directly to the long-run story of European urban habitats and economies, their insights can help to bring out general trends. In turn, the historical record may suggest some new questions for the economic model builders to tackle and new regularities to model. Here then, by way of introduction, are some themes that seem to constitute ineluctable elements of a coherent economic history of urban Europe.

- Urban Growth

Though it scarcely needs saying, the first stylized fact about Europe is that it has, over a thousand years, become largely urban. From a share of scarcely 10 percent from medieval times until well into the 18th century, the urban population has risen to a clear majority in every country and an overall proportion near 80 percent, of course of a much larger total. Today, indeed, the apparent share of city dwellers is shrinking, but this is doubly misleading. Not only is the urban way of life almost universal even among those who dwell in the country, but the reach of particular urban areas, the extent of the “local urban system” [Dematteis 1999], tends to expand faster than statistical categories can encompass it. Thus, commuters and others can live farther than before from the city or town to which they nevertheless continue to relate closely.¹ Growth also characterizes the population size of urban units: cities, urban regions, conurbations, etc. Whereas in 1800 any place with 50 000 inhabitants was considered large, and only a score or so cities surpassed 100 000, today half a million inhabitants barely justify the designation of major city. In addition, urban regions or conurbations numbering in the tens of millions of inhabitants give the urban phenomenon a totally different scale than in the past.

- Permanence

Despite the enormous increase in the urban population – absolute and relative – since medieval and early modern times, Europe's urban map has in many ways remained remarkably stable, to say nothing of the many places that date back earlier, notably to Roman times. The big cities of the past have more or less kept their place in the hierarchy or at least remained significant. Other present-day large centers are less ancient, owing their existence or importance to early modern absolutism or to 18th-19th century industrialization, whereas only a few date from the 20th century. Finally, while towns, indeed large cities, can today be found in all parts of Europe, the urban grid reflects the past, in that the areas longest urbanized, constituting the urban core of Western Europe, retain the highest density of urban places.

- Evolution

Though the larger historical context in which Europe's cities have developed is rich in revolutions, economic as well as social and political, the urban system has – with important exceptions – changed mostly by increments. While the general direction is clear and the overall growth has been enormous, change has at times been slow and its rhythm and incidence, spatial as well as functional, uneven and complex. Indeed, an important theme of this paper is that ongoing urbanization does not preclude a re-emergence of earlier patterns, *mutatis mutandis*. Just as radical social movements have been pretty well abandoned as bases for organizing European societies, so some aspects of nineteenth-century urbanization, which gave enormous weight to factory industry, interurban rail transport, and the centralized nation state as agglomerative forces, are being partially rolled back. The rollback, largely spontaneous and unforeseen, has allowed older urban traditions to re-emerge. To express the matter more broadly, Europe's cities and its urban system exhibit considerable path dependence, but also decidedly non-linear behavior involving punctuated equilibrium, with spurts of change and with reversals as well as declines and stagnation [Arthur 1988].

- Context

Finally, it is important to set the story within the large-scale social processes and transformations that mark Europe's history: the rise of capitalism – a multi-dimensional concept if it is to retain meaning – and of territorial sovereign states, empire or nation; the more recent reaction to the hegemonic nation-state represented by European integration and regional autonomy (or separation); the demographic transition; global ties, ancient and modern; and successive technological regimes, to name a few. Clearly, the present chapter will not try to summarize these, let alone offer original interpretations, but they must be kept in mind. Two points deserve a brief initial mention, both having to do with the relative role of states and markets. One concerns the relation of the city to the growth of a market economy. Cities have been the cradle of commerce and of the market economy, the first places created for exchange and totally dependent on it for their subsistence. Yet they have also housed both strong forces of resistance vis-a-vis unfettered markets and institutions to regulate them, and they embody the sources of market failure that economic theory and a mixed market economy must wrestle with. The second point relates specifically to the pre-industrial period and the long run-up to sustained economic growth, understood in the sense of increasing per capita income. The prevailing wisdom has been that Malthusian limits on resources constrained the system, with population growth braking the pace of economic growth, notably in the 14th and 17th centuries. Improvements in technology, as well as the opening up of overseas sources of "land," then allowed Europe to overcome the ceiling on output per head. This view has been challenged by new work that stresses early institutional barriers to efficient use and full development of available resources. Some focus the beneficial effects of limits to political power that safeguard private property (North 1990), whereas others focus on the ability of the strong central state to pacify, and integrate large territories with positive effects on market activity (Epstein 2000).

A Systems Perspective

Europe's array of cities and towns can be approached along a number of dimensions: spatial, numerical/functional (to distinguish and classify the units), and, in the present chapter, temporal. Yet accounting for how large each city is, where it is situated, its principal activities, and how it came to be what it is, even if it were possible, would yield little understanding. Cities are both pointless and unviable in isolation. Thus it is the relations of the city with what is outside itself that matter most. Urban places are elements in an interacting set, in other words, in a system. A great deal has been written about urban systems, much of it using the term to mean little more than an array, an ensemble. Somewhat more analytic is the idea of an urban system as a hierarchy, with population size, political function, and spatial centrality as possible metrics. Unfortunately, much of a city's activity, notably commercial, financial, and more broadly

“informational,” is at best crudely grasped by these criteria.² But the real difficulty is that even an ordered set of cities offers only a synchronic view, whereas the concept of system also needs to explicate the processes by which an array or hierarchy comes into being and evolves over time. Thus the approach followed here, and developed in earlier work, proceeds from the logic of urban systems rather than from certain manifestations of that logic in particular times and places [Hohenberg and Lees 1995]. The argument is that the systemic logic antedates the full development of Europe’s urban array, and transcends particular numerical properties, such as a rank-size distribution, that may develop and that some have viewed as defining the urban system. As envisaged here, that logic is dual, in that two types of system effectively model urban Europe. From the origin of cities onward, two sets of forces have driven the process of urban development, expressed respectively in central places and networks. The arrays of central places that service and administer (agricultural) territory build toward a pyramidal structure, with many small centers and (numerically diminishing) tiers of, larger, higher-order centers culminating in a single capital. These arrays show great spatial and rank stability over time. The system may develop from the top, with small centers as outposts of an initial center or gateway, or emerge by selection of high-order centers from among an array of small ones, or undergo a mixture of the two processes. Cities that participate strongly in network relations, on the other hand, form a spatially fluid system where distance as such counts for little, thanks to long-standing reliance on water (more rarely caravan) transport. Being in competition with other cities, they can seldom preserve a high order of “nodality” or dominance for very long. For certain periods the dichotomy of prince’s cities and merchant cities [DeLong and Shleifer 1993] captures the dual systems perspective pretty well.

Functionally, central places tend to house diverse service activities, whose range and “level” matches the size of the center, so that high-order places serve as centers of (smaller) centers. Their services are typically administrative and cultural as well as market-oriented. Networks, on the other hand, link specialized cities and zones of production (mines, plantations) in an inter-urban, often international, division of labor, and thus typically feature a limited range of activities in a single place. The political role even of a major network city may be informal and subordinate to commerce. (Population) size is an imperfect indicator of role, or importance, in networks, and its growth can be quite irregular, by contrast with central places whose size generally follows their degree of centrality. Dominance or subordination in network cities thus depends on function more than on size, with finance and headquarters functions considered privileged.. Given cities can find a place in either or both types of system. While one system or the other may clearly dominate, we shall argue that a balanced role – regional or national capital plus cosmopolitan node – can prove a particularly vital basis. While this is clearly true, to take one example, for London from the 17th century on, it also applies to cities of less than metropolitan size. In our time, such places as Munich, Bordeaux, Barcelona, and Florence offer examples.

The growth of cities in each system follows a distinctive pattern. Central places tend to show a bias toward more rapid growth of larger cities, with a frequent tendency to primacy or gigantism in the principal city, usually a political capital. Small centers may fail to grow and in time shrink as they lose all central-place functions. Large ones, on the other hand, resist decline, except relative to those above them, counting on the state to supply facilities and subsistence when needed.. In the network system, by contrast, growth can be very rapid, as for example in a mining district or when a new trade or industry opens up. Yet booms may well be followed by busts, while the most brilliant mercantile cities have resisted letting their numbers exceed their employment opportunities. As a result, the relation of growth rate to initial size is somewhat negative among network cities whereas it is positive for the array of central places.

It will be noted that the overall relationship between growth and initial size is nearly neutral, with only a slight tendency to favor the large cities, but the underlying dynamics reveal the more complex set of system based relationships.

In terms of the long-term changes in European urban systems, network system logic is behind most structural transformations, whereas the central place system has shown much greater stability over time. Political changes have given rise to new capitals, and more rarely demoted others, most notably in the period of absolute monarchy (early modern times), also in later eras of nationalism and break-up of empires, including most recently the Soviet. This aside, the highorder central places have tended to hold their position for a very long time. Network logic, on the other hand, is behind the rise and fall of great city-states such as Venice, and later the sometimes explosive rise of industrial settlements that sometimes coalesced into great conurbations. Other specialized cities, some achieving considerable size, also derive their dynamics from network system logic. What is most telling, perhaps, is that industry has on its own spawned so few cities that have achieved a high order of either centrality or nodality, the UK offering partial exceptions (Manchester, Leeds, Glasgow...). Mere size does not confer important leadership functions. Finally, network relations are behind the macro transformations of the European urban system, such as the shift from the Mediterranean to the northwest in early modern times and the more recent rustbelt-to-sunbelt move from regions of heavy industry to ones with a better climate and a more nearly unspoiled landscape.

Much of the work on economic models of cities and urban systems focuses on forces of agglomeration in production, and within that on material production or manufacturing. Yet in the historical context, these represent only a part of the basis for urban agglomeration. Indeed, where large-scale manufacturing coupled with strong specialization has been the driving force, the resulting agglomerations have often proved especially limited in their capacity to renew their economic base or to engender a strong urban identity. Thus, history indicates that long-lived agglomerative forces come largely from services – not least trade, finance, and informational pursuits – and small-scale material production on the one hand, and from consumption and administration on the other. At the same time, the absolute level of material production and associated employment in particular cities, especially large ones typed as non-industrial, has often been underestimated. Early modern and nineteenth-century capitals and ports (Naples and Bordeaux before 1800, London and Vienna after) are historical examples .

The systems approach is also relevant to the debate, mentioned earlier, regarding institutional forces that freed Europe for economic growth in the early modern period. Those who stress the weakening of political constraints on markets, with competition between states curbing the arbitrary power of the sovereign over persons and property, would consider network cities key incubators for modern growth. Europe's overtaking of China can, in this view, be ascribed to the relative fragmentation of political units in the former (Jones 1981, Diamond 1997). On the other hand, those who view the integration of states as the key process that allowed markets to put resources to best and full use will put the accent on the role of central places in the administration, unification, and structuring of the territory (Epstein 2000).

A systems view, finally, casts a skeptical light on two quantitative constructs that economists have applied to arrays of cities: the rank-size rule and optimum city size. As regards the size distribution, central place systems should ideally feature certain favored size ranges corresponding to the order of centers. There would thus be one largest city, n cities ($n = 3-7$) of the next lower order and size, n^2 of the next, and so on. The size-rank distribution would feature steps rather than a smooth log-linear decay. Network cities or those with significant network ties complicate the picture, their population being at any rate imperfectly related to their network role. While the end result, factoring in noise (historical contingency), may well approximate a rank-size array, it is difficult to derive strong conclusions from the fact, beyond the simple idea that a number of forces have contributed to the distribution of population among cities.

As regards optimum city size, the systems model not only recognizes different types of cities, from diverse service centers to places specialized in one or a few activities, but also hierarchic relationships. Without small centers as relays, for example, large ones cannot carry out their highorder

functions. Thus no one size will work for all types. Small places will feature lower (congestion) costs in exchange for limited amenities in consumption and weak urbanization economies in production. Large ones will require massive infrastructural investments, justified, one hopes, by the unique functions their size makes viable. Cities can only be efficient or inefficient in size for the role they play. Of course, the question persists as to whether market forces, and particularly migration, the dominant source of change in city size, will yield a reasonably efficient size array of places. The confidence of economists that individual choices tend to provide positive guidance to the system as a whole seem fraught with problems in this case. Rural-to-urban migrations can often take on siphon-like characteristics, further emptying regions that have lost any excess population and adding to urban congestion at their destination. Ireland in the late 19th century is a case in point, with the migrants ending up in the most crowded cities of Great Britain and North America. Of course, many migratory streams originate in stark necessity or coercion rather than in free choice by maximizing agents, while potential movements are often hampered by administrative and political barriers at either end of the journey. This is not the place to re-open the discussion of the origins, really the rebirth, of cities in medieval Europe. Specialists ponder and debate the scrappy evidence, archeological and numismatic more often than documentary. Suffice it to say that economic motives are hard to find in the origins, though they come into their own in explaining later relative growth and functional characteristics. Prototypically, the seed of an urban formation was a fortified center of power, royal, noble, or religious, perhaps within the remains of a Roman city that had acquired and retained ecclesiastical functions (episcopal see). An abbey (monastery) sited nearby often served as the kernel of a civil settlement, as in the case of the Cité and St. Germain-des-Prés, separated by a few hundred meters in the heart of today's Paris. The earliest trade may well have involved servants of the local lord, entrusted with transforming rents/taxes/tithes collected (in kind) from the manors into more exotic and finer goods from elsewhere. Did these men begin a merchant settlement between castle and abbey while still dependent, or had they become autonomous merchants before starting the settlement process that would transform their successors into burghers or bourgeois, inhabitants of the burg or town? [Verhulst 1999] Towns also presumably gained an advantage over rural manors in the production of craft goods on the basis of specialization.

The systemic dualism we introduced earlier was at work even in the earliest stages. While the proto-towns depended on local rents and those who appropriated them, and housed local periodic markets, services, and specialized craft workers, the more active places were sited on routes that served for long-distance trade, offering the wandering traders shelter, provisions, and an occasion to trade. In this case, the periodic market might eventually rise to the status of a fair, purchasing protection from the local lord for the duration of the event. We are speaking here of the period, the 9th and 10th centuries C.E., which scholars no longer dismiss as the Dark Ages, despite the depredations of foreign raiders (who also proved to be active traders). While the Vikings came from the North, others originated in areas south and east that had a higher level of economic development and urban life. Europe itself was at that time a periphery of the Byzantine and Muslim empires in the Near East. Byzantium and Cordoba were, in fact, much the largest cities in what we today call Europe.

Pre-industrial Spatial Patterns

After the millennium, the pace of urban formation and growth accelerated in Western Europe. But while many towns were founded and grew, their distribution was far from uniform. By the 13th century, a clear pattern had emerged, with two cores near the coasts of the inland seas: the Mediterranean/Adriatic and North/Baltic. Linking the northern Italian and Low Country concentrations were a number of towns and urban-studded routes, from Paris in the west to central Germany in the east. Trade could flow in one or another of these network channels depending on the vagaries of war, the greed of robber-barons who controlled rivers and passes, the daring of

bandits, and other market and non-market circumstances. At the external margin, a number of ports on the coasts of the inland seas funneled the products of the interior for shipping to the core areas. Elsewhere, urban density tailed off as one moved east or west away from the core, and arable agriculture gave way to pasture, in a sort of macro-von Thünen pattern. In general, the south was more urban, more intensively settled, than the north, and the Italian core more developed than the Netherlandic one.

However active, most of the towns in medieval Europe were small. Florence topped out at 90,000 before the famines and plagues of the 14th century.³ But the bulk of places could count their numbers with four and even three digits, falling well short of what today can be called a town. In addition to offering commercial and administrative services, towns carried on craft production for markets, local or distant. Cloth was the dominant commodity – wool, silk, linen, and some mixtures – but metal, leather, wood, and glass/ceramic wares abounded. The town exchanged these with its environs for the food, materials, and also the wood it needed for fuel and so many other uses. Strong urbanization co-located with intensive and advanced agriculture, though the direction of causation, is hard to establish. Financial institutions – the early bankers, credit instruments, high-value coins, bourses, and systems of accounts – were also to be found in the urban cores.

The fourteenth century witnessed a crisis, leading to a general cessation of urban growth, except in the east where the process was just under way (Poland). Diminishing returns to agriculture on densely populated land farmed with poorly sustainable techniques (fallow) were largely responsible, most scholars agree. Dearth (worst around 1315) were followed by the bubonic plague at mid-century, with recurrences. Recovery was slow, although the 15th century flowering of the arts in the urban cores disguises the fact.

Medieval Europeans were far from immobile as the flowering of towns attests. They were founded and sustained by migrants, without whom few could maintain their numbers, let alone grow. High urban mortality was part of the problem, but celibacy among servants and clergy, and late marriage for commoners, also contributed. While the drift of rustics to town often represented a search for opportunity, other movements were generally motivated by fear and necessity rather than hope and opportunity. Towns offered possible refuge from violence and, paradoxically, from dearth, but, despite having all the doctors, not from infectious disease. In more quiet times, travelers as well as migrants dotted the roads and waterways. Pilgrims, pedlars, carters, and craft workers – aptly named journeymen – joined agents of the Church and of secular lords moving from one town to another.

Physically, towns grew by accretion rather than plan. The exceptions that have come down to us usually reveal the failure of growth to overrun an initial scheme. The planned towns tended to be outposts (bastides) for clearing or holding territory, or inhabited fortresses. Within the town, inhabitants congregated by, profession, area of origin, or “clan.” Prestige attached to a more central location, a forerunner of choices that still distinguish European cities, at least Continental ones, from the American norm. Most urban plots were narrow and deep, as frontage counted for more than total area. Public spaces, though important for markets, festivities, and other gatherings, were typically limited in size and hard to expand. Masters of each craft clustered, eg., on the butchers’ street or in the weavers’ quarter, testifying to the regulatory power of the guilds as well as to economies of agglomeration. Areal expansion was discontinuous, since a new wall generally had to be built, so crowding was frequent. Settlements outside the walls, along the roads or at bridgeheads, enjoyed no prestige. Finally, whether it was a sweeping shoreline or a sluggish and small stream, scarcely a town did not boast some body of water running through or lying by it. The advantages of water transport, even on small or difficult rivers, were compelling. The political and institutional context of urban growth and commerce must be evoked, though it deserves a treatise rather than a paragraph. A legend of free, enterprising, and even democratic towns amidst a society that remained rural, feudal, and church-ridden has come down to us, one which, as usual, mixes gross oversimplification and idealization with kernels of truth. Cities often

achieved political autonomy, with remaining obligations to a nominal lord exercised collectively, and they did allow citizens to participate in governance, but with property and other restrictions on full citizenship and office-holding. While ways were found around the more commerce-inhibiting rules of the Church, towns imposed plenty of regulations of their own, typified by guild rules restricting entry into craft and other trades and prescribing product as well as process. On the larger political scene, urban oligarchies, which might in fact entrust effective power to an outsider, contended with and against rulers, powerful nobles, and the secular power of the Church and its bishops, in an unending series of struggles and alliances. Urban leagues such as the Germanic Hansa were only one manifestation of a struggle that inexorably saw power pass over time to unified kingdoms over much of Europe. Only the northern Netherlands, the Swiss Alpine cantons, and some Italian and German cities – all parts of the old core – managed to remain outside the monarchic framework much past the 16th century.

The Early-Modern Period (1500-1800)

The era of absolutism and European expansion was marked by relatively modest changes in overall urbanization, and indeed in population. The beginning and end of the period saw growth, in the first case representing recovery from the late-medieval crisis, in the second the forerunners of mass urbanization and accelerated population growth in the centuries to come. In between, the 17th century shows up as another crisis period in most places. Two large-scale processes dominated urban change during this period: the formation of centralized and powerful states, notably in the areas where the feudal system had been strongest (the edges or semi-periphery of the urban core), and the expansion of European trade, settlement, and control to territories overseas and to the east. We must summarize the changes these forces and processes wrought on the urban map of Europe.

- The North gained on the South, with the northwest of Europe overtaking the Mediterranean. Antwerp, Amsterdam, and London were successive financial and commercial centers, while Genoa, Venice, and Florence gradually slipped into relative somnolence. Yet the South remained more urbanized overall, in fact until the 19th century.
- The fringes of the urban core gained on its heartland, especially in terms of where the fastest-growing cities were located.
- The fast growers were mainly territorial capitals, from Madrid and Lisbon to Berlin and St. Petersburg. Already large, London, Paris, and Naples attained a size (one half million or more) not seen in the Christian West since the great days of Rome. On a smaller scale, court cities in Germany outpaced the free Imperial cities [François 1978]. Dynastic power also gave rise to new cities that were not capitals but served that power as ports, fortresses, or garrison towns.
- Growth was generally concentrated in large cities, particularly in the 17th century, when many smaller ones declined [de Vries 1984]. This is why, despite the spectacular cases of growth, the best data suggest little or no overall increase in the urban percentage. While some declines reflected the loss of pretension to urban status in very small towns, the difficulties of the core areas in Flanders and northern Italy also led to a decline in their precociously high urban percentages. It needs to be mentioned that most scholars have, for data reasons, had to use a threshold city size of 5,000. This leaves out a significant – and secularly declining – fraction of the population that would at the time have been reckoned as urban, and thus overstates the gradual increase in urban share.
- Absolutism worked against a high urban share, despite the fast growth of capital and court cities. [DeLong and Shleifer 1993]. To be sure, the fact that strong rulers prevailed in areas of previously modest urban share, outside the old urban cores, biases the results. Path dependence again plays a role. The particular failure of cities located near capitals to grow suggests that the latter cast a strong shadow [Hohenberg and Lees 1996].
- Ports stand out among cities that grew for economic reasons, particularly those on the Atlantic

coast, from Cadiz to Glasgow. By contrast, interior market centers fared less well. Of course, the ports, conforming to network system logic, tended not to grow excessively in population, unlike certain much less economically active capital cities (Madrid versus Cadiz, Brussels overtaking Antwerp, Naples' ever greater primacy in southern Italy).

The early modern period saw little clear-cut or rapid growth in income per capita (or even total product and income, since population generally rose more slowly than it did earlier or later). But the changes that did take place take on added importance in view of the massive transformation that first took hold in England after 1750. What is noteworthy is that developments which anticipated the future were not typically urban, though cities had a part in mediating them. Again, a brief summary must suffice.

- Agriculture underwent a gradual and slowly-diffusing process of intensification and commercialization that resulted in a more sustainable system as well as a more productive. Modern scholars emphasize the role of markets, transport, and communication – and thus of cities – in the diffusion process [Hoffman 1996], and we previously noted that intensively urbanized (core) areas also developed the most sophisticated agriculture.
- Mobility, of persons, capital, and information increased. Cities clearly played the major role here, not only drawing immigrants – and large cities were particularly hungry for human fodder, owing to the large natural deficit they typically ran – but housing the institutions that mobilized and transmitted both tangible and intangible capital, from early banks to printers.
- Individual property rights were better safeguarded despite fiscal and judicial systems that added absolutist and mercantilist demands to stubborn feudal exactions. Institutionalists have stressed the importance of secure property and freedom of contract, practices that were developed in and defended by cities long before they were generally accepted by rulers [North 1990].
- Long-distance trade, though significant in Europe for much longer than is often realized, expanded during the period, notably overseas. Moreover, trade policy became an integral part of power politics, leading to overseas settlement and conquest and to aggressive policies concerning shipping, trade, and monetary matters (mercantilism). Some cities and nations thrived, while others stagnated or lost their commerce as a result. Not until 1815, with the end of Napoleon's attempt to control the shores of Europe (and thus break commerce-dependent England) did central governments begin to loosen their grip on trade, retaining mostly tariffs as instruments of control. In the major maritime countries, the great trading companies acted as surrogate governments with respect to the colonial areas and trades they controlled.
- Manufacturing expanded, though technical change was limited. However, large-scale production was mostly confined to what were called "manufactures," royally sponsored producers of luxuries or military goods, which appear to have played little part in the industrial revolution to come. Some coal was used as fuel, but wood remained dominant, along with other "organic" and natural sources of energy – animal, wind, and water. Cottage or domestic, and other small-scale industry, on the other hand, with large numbers of small producers typically coordinated by putting-out merchants, had more impact. The connection of this activity to cities, its geography, and its relation to the mechanized manufacturing to come raise complex and problematic issues and require separate treatment.