ARTICLES

Urbanization and the Economy in preindustrial societies: the findings of two decades of research

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Introduction: to a subject that has grown considerably and in ways that make difficult to consider all developments.[1]

In the course of the last two decades there has been a genuine boom in research on urban history and in particular on the history of towns in pre-industrial societies. In 1967, for example, there were no specialist journals on urban history, although the rural world had long since acquired its own specialist journals[2]. But since then at least seven new urban history journals have come into being[3]. Although Mumford's

[1] This essay is a revised and enlarged version of a paper that was originally given at the 20th *Settimana di Studio,* organized by the Francesco Datini International Economic History Institute at Prato (on "Methods, Prospectives and Findings in the Economic History of the 13th-18th Centuries", 19-23rd April 1988).

I want to thank my colleague and friend Anne-Marie Piuz for her judicious remarks on an earlier version of the paper.

[2] To mention only the most important these have included: since 1927, *Agricultural History* (Berkeley): since 1953 *Zeitschrift fur Agrargeschichte und Agrarsoziologie* (Frankfurt), and the *Agricultural History Review* (Oxford): since 1958 *A.A.G. Bijdragen* (Wageningen).

[3] The chronological list of the journals published since then is as follows: *Journal of Urban History* (Beverly Hills 1974); *Urban History Year Book*, Leicester 1974; *Urban History Review/Revue d'Histoire Urbaine*, Winnipeg 1975; *Storia della Città*, Milan 1976; *Storia Urbana*, Milan 1977; *Urbi: Art, Histoire et Ethnologie des Villes*, Paris 1979; as wellas numerous "Newsletters".

monumental study of the city[4] was first published in 1961 and Gutkind's even larger study appeared between 1964 and 1972[5], the greater part of the monographic studies on individual European towns date from those last two decades. These studies have provided the basis for various attempts at a more general overview to which we shall return in the course of this essay. Equally important are the dramatic contemporary processes of urban expansion in the Third World, the consequences of which have necessarily revived interest in the debate on the role of towns in economic development.

In this essay I shall be mainly concerned to discuss the most important results of recent research on the history of towns in pre-industrial societies. To say 'the most important' implies a process of selection which is inevitably arbitrary[6]. Our Eurocentric emphasis is in itself arbitrary, but one that is difficult to avoid given the lack of studies on non-European towns. But if a Eurocentric view of the town is difficult to avoid this need not be rigid, as Fernand Braudel showed in the first edition of his *Civilisation Matérielle et Capitalisme* (1967), which contained a chapter on towns which dealt widely with non-European as well as Western examples. Another arbitrary factor is the choice not to attempt a survey of the literature or a discussion of the major debates that are in progress, but rather to concentrate on the principal findings. And while I shall refer to numerous studies, many others — and by no means always the less important — are not mentioned. Finally, while I have myself done some work on pre-industrial towns, my principal in-

[4] L. MUMFORD, *The City in History*, London 1961.

[5] E.A. GUTKIND, *International History of City Development*, 8 Vols, New York, 1964-72.

[6] We have also omitted the questions of urban hierarchies and urban zones of attraction since these are problems that have more to do with historical geography than urban history proper. We have also completely omitted for obvious reasons any reference to urbanization in architectural terms, and indeed to architecture more generally, which does not mean of course that it was not an important element in urban history.

terest lies in developing or industrial societies which inevitably leads to a different perspective from that of a historian of the pre-industrial period.

The decision to concentrate on the five to six centuries between 1200 and 1800 is another arbitrary choice. This represents less than an eighth of the span of urban history, since the first four millenia and the last two centuries are omitted. Nevertheless, these six hundred years are amongst the best known, and have still an imprint on the towns in which we live today. However, I shall start by making a few brief remarks about the origins of the city, and my paper will be organized around the following 13 points (not all of which are by any means of the same importance):

A. Towns came earlier and in large numbers.
B. A world highly urbanized very early.
C. The stability of urbanization levels across the centuries: a misleading indicator.
D. A highly mobile urban world with thousands of individual histories.
E. The non-terminal decline of the town and the stability of urban networks.
F. Very large towns: the long eclipse of Europe.
G. The dramatic specificity of urban demography.
H. Peasants in the cities and artisans in the countryside.
I. Towns and agriculture.
J. Towns and economic life – a multi-dimensional problem.
K. Town and knowledge.
L. Did Europe have a specific urban system?
M. European expansion and colonial towns.

A. Towns came earlier and in larger numbers

Before discussing the history of the town, it is essential to spend a few moments considering, if only very briefly, the em-

ergence of cities. It is sufficient to draw attention to four cardinal points to indicate the delicate and fascinating issues to which this gives rise.

1) Recent research has tended to push back to even earlier dates the origins of the first cities, so that often we should add about two to three thousand years to the history of urbanization.
2) It seems very likely that it was agriculture that led almost ineluctably to a process of urbanization, with an intervening delay of between one and two thousand years.
3) There seem to be many cases when urbanization came into being simultaneously and independently rather than through a process of diffusion or imitation.
4) From antiquity to the present colonization has often masked the independent origin of towns and many of those that are thought to have originated from colonisation had existed for centuries.

Some recent work on the origins of urban society in pre-Columbian America can be taken as an illustration both of the backward extension of urban history and the passionate and delicate features of the earliest phases of urbanization. As in other cases one way that historians have sought to measure the importance of urbanization has been through exploring the capacity to produce agricultural surpluses. In the case of the mighty Maya civilization there is still no clear answers to why it was that a highly developed urban network that had been established around 200-300 AD should have disappeared around 900 AD in the space of a generation, but the history of Maya civilization has been extended by about 6500 years and gained an explicatory factor of urbanization. Previously the history of the Maya could be traced back to about 2,500 BC when it consisted of agricultural villages. Thanks to the excavations that R.S. MacNeish and his teams have being doing since 1980, we can now put the starting point at least 6,500 years earlier. At the same time the early development and the importance of the Maya

urban network has been confirmed by the discovery in 1980 of a vast irrigation system that was previously unknown. Radar photographs designed for mapping the planet Venus revealed the existence of a highly complex network of irrigation canals that served an area of between 1,250 and 2,500 km^2, which was confirmed by subsequent archeological research.

It must also be said that these discoveries have been challenged in a way that would completely modify the urban impact of "irrigated land" on precolombian civilizations. Hewitt and others[7] have argued in an essay published in 1987 that the canals and terraces at Hierve al Agua near Oaxaca in Mexico were not irrigation works but salt pans!

B. A world highly urbanized very early

One of the major acquisitions arising from the research undertaken over the last two decades has been a radical change in our understanding of the importance of towns in traditional societies. This also provides an interesting example of the ways in which research on post-industrial societies can influence negatively the study of pre-industrial societies. In fact, between 1956/7 and 1974/7 the only estimate of the scale of urbanization on the eve of the Industrial Revolution derived from the work of Kingsley Davis, a specialist in contemporary urbanization and urban problems in the Third World[8]. Davis's study was written in the mid-1950s and although never published it was frequently cited in subsequent studies, not least by those of the eminent Chicago geographer Hauser[9]. Davis's study was written

[7] W.P. Hewitt, M.C. Winter & D.A. Peterson, "Salt Production at Hierve el Agua Oaxaca", *American Antiquity*, Vol. 52, No. 4. Oct 1987; pp. 799-816.

[8] Amongst the major studies see K. Davis: *The Population of India and Pakistan*, Princeton 1951 and *World Urbanization 1950-70*, 2 Vols, Berkeley 1969-72.

[9] P.M. Hauser (ed.), *Urbanization in Asia and the Far East, UNESCO*, Calcutta, 1957 (pp. 55-6).

in collaboration with H. Hertz and argued that in 1800 the urban population represented less that 3% of world population (basing urban population on towns with more than 5,000 inhabitants). Davis used the same estimates in two essays that appeared in 1965, one of which was published in the *Scientific American*[10].

For historians of the contemporary period, reliable figures on urbanization date from 1850-60 and indicate with reasonable accuracy that between 1850 and 1910 the level of urbanization in Europe rose from less than 15% to 32%. Extrapolating backwards that suggested a level of urbanization of about 7-8% in 1800. Since the data came mainly from the larger cities, which were the ones that grew fastest, it was suggested that the 'point of departure' should probably be reduced further. It was 'reasonable' (although in fact quite inaccurate) to expect that the rest of the world was much less urbanized than Europe, and the proposed 3% could be seen as a reasonable estimate of the percentage of the world's population that lived in towns.

After appearing in these two journals, Davis's figures were repeated by many other researchers[11] who were looking for a point of reference and who as a result were led into drawing

[10] K. Davis, "Urbanization of Human Population", *Scientific American*, Vol. 213, n. 3, Sept 1965; pp. 41-53. "The Origins and Growth of Urbanization in the World", *American Journal of Sociology LX*, No. 5, March 1965; pp. 429-437.

[11] Given its importance I shall only refer to the excellent general study published by the United Nations in collaboration with the leading population research centres in each country (United Nations: *The Determinants and Consequences of Population Trends*, Vol. 1, New York 1973, pp. 187-189). In this study, Davis's estimate is accepted and three others are cited in confirmation. This first is J.C. Russell ("Late Ancient and Medieval Population" in *Transactions of the American Philosophical Society*, n.s., vol. 48, part. 3, no. 152, June 1958; pp. 1-152), who claims that even in the best organized empires of antiquity the urban population never exceeded 5%. The second is Woytinsky, W.S. & E.S. Woytinsky, *World Population and Production. Trends and Outlook*, New York 1953 (p. 118), who give an even lower figure for the urban population. The third is H. Hoyt ("The Growth of Cities from 1800 to 1960 and Forecast to Year 2000", *Land Economics*, Vol. XXXIX, no. 2, May 1963; pp. 167-173), who puts the urban population in 1800 at 5%, but since this is based on towns of over 2000 inhabitants it is very close to Davis's 3%.

totally incorrect conclusions about the importance of urbanization in many traditional societies. Even a scholar as well informed and subtle as the late Moses Finley could write in the framework of his explanation of the important role that cities had played in graeco-roman civilization that: 'the Graeco-Roman world was more urbanized than any other society before the modern era'[12].

Change the millenium and the Continent and much the same could be said of Rozman, of Hanley and Yamamura, and above all of Kornhauser[13], all of whom claimed that in the XVIIth and XVIIIth centuries Japan was the most urbanized civilization in the world. While it is true that Japanese society was highly urbanized, with about 11-14% of the population living in towns with over 5,000 inhabitants, this was in fact much the same level as in pre-industrial Europe.

In order to absolve (if this is needed) the historians let us cite the geographer Dwyer[14] who in the introduction to a collection of essays published in 1974 also referred to Davis's figure of 3% urbanization in 1800 to argue that before the Industrial Revolution there were 'relatively few' towns. It was not until 1974 that a more reliable figure first appeared in a book by the famous expert on urban planning, Doxiadis, which few historians read. Doxiadis suggested that the level of urbanization was 6.2%[15], but this figure was not, to the best of my knowledge, taken up by other historians. Nor did two other new estimates published in 1977 attract much attention. The first was Grauman's

[12] M.I. FINLEY, "The Ancient City: From Fustel de Coulanges to Max Weber and Beyond", *Comparative Studies in Society and History*, vol. 19, 1977; pp. 305-327 (p. 325).

[13] G. ROZMAN, *Urban Networks in Ch'ing and Tokugawa Japan*, Princeton, 1973. S.B. HANLEY & K. YAMAMURA: *Economic and Demographic Change in Preindustrial Japan 1600-1868*, Princeton 1977. D. KORNHAUSER: *Urban Japan: its Foundations and Growth*, London & New York, 1976.

[14] D.J. DWYER (ed.), *The City in the Third World*, London 1974 (p. 10).

[15] C.A. DOXIADIS & J.G. PAPAIOANNOU: *Ecumenopolis, The Inevitable City of the Future*, Athens 1974 (p. 405).

calculation[16] that on the basis of the data collected by Chandler and Fox the level of urbanization was between 5.0 and 5.5%; the second was my own estimate that averages at a rate of 7.9%[17].

This was over ten years ago now. What are figures currently proposed for the level of urbanization in 1800? The date provides a good base for measuring levels of urbanization prior to industrialization since at that time Great Britain was the only country affected by the Industrial Revolution, yet represented less than 1% of world population. The new estimates suggest that the level of urbanization in the pre-industrial world was at least three times and probably four times higher than earlier estimates had indicated. Taking towns with more than 5,000 inhabitants to define the urban population results in a rate of urbanization between 9% and 11%: for towns with over 2,000 inhabitants, a rate of between 13% and 16%.

What is the basis for these figures? First of all, virtually all recent studies on European and non-European societies arrive at similar rates of urbanization (even though these were initially considered 'exceptional' in relation to the accepted 3%). But since these 'exceptions' concerned societies that were not primitive, and since primitive societies (therefore without towns) constituted only a tiny fraction of the world population (5%-10%) in 1800, the exceptions become the norm. Secondly, the increased number of studies on urban history has made possible the elaboration of data banks on urban populations, of which that of Chandler and Fox deserve particular mention[18]. If this data-bank still leaves important gaps[19], it has made possible a

[16] J.V. Grauman: "Orders of Magnitude of the World's Urban Population in History" in *Population Bulletin of the United Nations*, No. 8, 1976, New York; pp. 16-33 (p. 29).

[17] P. Bairoch, *Taille des villes, conditions de vie et développement économique*, Paris 1977 (p. 27).

[18] T. Chandler & G. Fox: *3000 Years of Urban Growth*, New York, 1974.

[19] In this respect it is worth quoting a phrase (which I endorse entirely) from the introduction which Lewis Mumford wrote to the study by Chandler and Fox: "Any

thorough revision of the earlier figures. It is of course true that there were some earlier data, such as those included in Mols's three volumes on the demographic history of European towns between the XIVth and the XVIIIth centuries which were the first to use existing research to chart the situation for this part of the world[20]. But in 1954 there was as yet very little on whivh to draw in contrast to the numerous studies that have subsequently enriched the field of urban history.

The data assembled by Chandler and Fox, together with the studies on the earliest phases of urbanization, suggest that we can now advance the following general rule without much reservation: in any geographically normal society the maximum level of urbanization attainable in traditional societies would be reached within a thousand to fifteen hundred years after the appearance of the first cities. In the case of the larger geographical units with relatively adequate food supplies this maximum was between 10%-15% of the population (based on towns larger than 5,000). If we take towns of 2,000 inhabitants as a measure better suited to the age, then the figures rise to 15-20%. The exceptions are composed of regions with extreme climatic conditions (especially very cold regions) and those that are mainly mountainous — but since these have generally been relatively uninhabited regions, the overall level of urbanization in relation to total world population has remained close to the maximum attainable in pre-industrial societies.

scholar who would criticize the work should first earn the right by familiarizing himself with the baffling territory it explores" (p. IX).
Two other data banks have been assembled since then, but they are limited to Europe. The first is that contained in J. VRIES de: *European Urbanization 1500-1800* (London 1984). The other is assembled by the Centre d'histoire économique internationale P. BAIROCH, J. BATOU and P. CHEVRE: *La population des villes européennes de 800 à 1850. Banque de données et analyse sommaire des résultats* (Geneva 1988).

[20] R. MOLS: *Introduction à la démographie historique des villes d'Europe du XIV au XVIIIe siècle*, 3 Vols, Gembloux-Louvain 1954-56. There are also valuable population estimates for 155 different European towns in: E. HELIN, *La Démographie de Liège aux XVIIe et XVIIIe siècles*, Brussels 1963 (pp. 238-252).

C. The stability of urbanization levels across the centuries: A misleading indicator

In contrast to the upheavals brought by the Industrial Revolution, traditional societies seem more stable and in many respects even static. But it would perhaps be more accurate to describe the non-urban pre-industrial world in particular as a world with strictly limited ceilings rather than one that was immobile, the ceilings representing those levels of economic development that prior to the Industrial Revolution proved impossible to exceed.

For the pre-industrial urban world, the appearance of stability derives from the fact that the urban population remained almost unchanged as a percentage of world population for centuries and even for millenia. We have already seen that the level of urbanization (in relation to world population) was between 9-11% around 1800. However, between 200 AD — a moment when towns had developed virtually everywhere — and 1800 this level never fell below 7% and never exceeded 13%. The peaks in the levels of urbanization in the world prior to the Industrial Revolution occurred in the IIIrd, the XIVth and the XVIIth centuries — that is to say, during moments of demographic contraction: the troughs occurred in the VIIIth and the XVIIIth centuries. During the second millenium, furthermore, the movement on a world scale remained within two or three percentage points.

Yet were we to say that with levels of urbanization of between 9-11% (in towns with more than 5,000 inhabitants) the world was not appreciably more urbanized in 1800 than it had been in the year 200AD (when the levels were probably between 7-10%), this would seriously distort the reality. We must avoid the traps posed by percentages no less than those that arise from absolute figures. Between 200AD and 1800 the world population grew from about 250 millions to 970 millions, while the area inhabited by advanced societies increased by only

10-15%[21] in the same period, which means that in roughly the same area there were four times more towns.

Rural inhabitants, who represented 85-95% of the population, also lived in very different circumstances in these two periods. In 200AD for most people the town must have been distant and often unknown, whereas for the peasant of the XVIIIth century the town was something quite different. It was now three to four times closer, and this brought with it quite fundamental changes. The difficulties posed by distance were not simply linear. If, to take an example, a return journey could not be completed, a half a day and a *fortiorin* in a day, travel became very exceptional. On the other hand, as towns developed closer to one another communications became easier and increased, thereby facilitating and encouraging the transmission of knowledge and innovations of all kinds.

We should not try to read into the apparent stability of the levels of the urban population a parallel stability in the urban phenomenon, therefore. This is also true in reverse. To take the case of Europe (for which the data are less incomplete) in the XIVth century after the Black Death, the level of urbanization was much higher by 1400 than it had been in 1300 (around 9-10% for Europe as a whole, excluding Russia, in 1300 and 13-14% in 1400). But for reasons that are perfectly well known (the Black Death) there were in fact fewer people in the cities in 1400 than in 1300, but the rural population had fallen even more heavily[22]. On the other hand, in the XVth century the rural population grew faster than the urban population despite the fact that the latter also expanded. By 1500 there were probably 10% more town-dwellers in Europe than in 1400, but at the

[21] It should be noted, however, that in the hinterlands of inhabited areas the area under cultivation also grew and often at a faster rate than the inhabited area.

[22] It is worth pointing out that while our knowledge of urban population history has advanced enormously thanks to the studies carried out in the last twenty years, very little work has been done on rural population (or aggregate population) figures which may well cause errors in the base-line for the overall population figures we have used for the period after major epidemics.

same time the level of urbanization had fallen by about 20% (dropping from 13-14% to 10.6-12.0%).

Outside Europe a similar but even more pronounced pattern can be found in China between the late XVIth century and the late XIXth century. Between 1500 and 1800 the level of urbanization had probably fallen from 11-14% to 7-8%. At the same time the total population was multiplied by 2.5/2.6, so that by 1800 there were 50% more town-dwellers than in 1500. The apparent stability of levels of urbanization is therefore a highly misleading indicator and a fall in the level of urbanization did not signify the decline of the towns.

D. A highly mobile urban world with thousands of individual histories

The degree of stability and instability evident in the case of the larger aggregate figures is modest in comparison to what one finds when it comes to individual towns. The monographic studies that have been published during the last twenty years[23] show that in the case of between 20 to 30 European towns population decline could occur even in periods of prosperity free from epidemics. It was not necessary for a town to be hit by an epidemic for its population to fall, and in any case the natural growth was normally negative. But even though the 20-30 towns have been very often chosen because they were in some sense typical, what can they tell us about a Europe which in 1700 contained some 1010 towns with over 5,000 inhabitants and some 390 towns with more than 10,000 inhabitants?

It is for this reason that the study by Chandler and Fox mentioned above is to be particularly welcomed, since although essentially a compilation it has opened the way to a new percep-

[23] In order not to burden the notes to this text we have listed some of these studies in an Appendix.

tion of the process of urban development. Chandler and Fox only consider Asian towns with more than 40,000 inhabitants and European towns with over 20,000 inhabitants (which for Switzerland — for example — includes only Geneva and excludes Basle, Berne and Zurich), but nevertheless their study does provide data on 295 European towns. Employing a wider data-base derived from 379 European towns of over 10,000 inhabitants, De Vries[24] has, however, begun to pose and answer wider questions, in particular to explore the ways in which European urban systems developed and their relations with their social and economic environment.

We shall return to these questions later, but for the moment let us explore more carefully the picture of urban instability that emerges from the most recent data-bank that has been developed by the Centre of International Economic History of the University of Geneva[25] to reconstruct the population of the European towns and which includes data for over 2,200 towns with more than 5,000 inhabitants between 800AD and 1800. Between 1300 and 1700 (even if comparisons are restricted to periods of a century) at least one town in five experienced a decline in its population. The average percentage of towns in decline was 36%; varying from a minimum of 20% in the XVIth century to a maximum of 48% in the XIVth century (26% in the XVth century and 40% in the XVIIth century). The wide divergence between the two centuries with the highest and lowest figures brings into question the general economic context

[24] J. DE VRIES: *European Urbanization 1500-1800*, London 1984.

[25] P. BAIROCH, J. BATOU & P. CHEVRE: *La Population des villes européennes de 800 à 1850. Banque de données et analyse sommaire des résultats*, Centre d'histoire économique internationale, Geneva 1988. We used an earlier and incomplete set of data for P. BAIROCH: *De Jéricho à Mexico. Villes et économie dans l'histoire*, Paris 1985 (English translation: *Cities and Economic Development*. University of Chicago Press, Chicago 1988), and have also created a data-bank for about a thousand towns in other parts of the world (although the results will not be published for some years yet).

since the overall pace of population growth in these two centuries was markedly different.

These movements would be even more noticeable if a shorter period was taken, but in some cases the gap between the peaks and troughs, even across the distance of a century and more is also very pronounced. In the case of towns with more than 5,000 inhabitants between 1600 and 1700, for example, there were some 50 towns in which the population fell by 50% or more, and in fifteen the decline exceeded 70%. In the same period nearly 40 towns saw their population double, and in some ten the population tripled. Even during the XVIth century, when there were fewer towns in decline, some fifty saw their population fall by a third or more.

Misfortune hit the large as well as the small, and regions experiencing economic expansion as well as those in decline. The large towns were certainly affected, and this has long been known because the consequences were particularly visible. One such case was Bruges ('Bruges la Morte'), whose population fell in the XVth century from 125,000 to 35,000. Another is Palermo which in the XIth and XIIIth centuries was one of the three or four largest cities in Europe (with a population that some have put as high as 300,000), but by 1400 had fallen back to the 44-48th place with only 30,000 inhabitants. Of course, the causes in both cases were quite different: Bruges declined for economic reasons and Palermo for political reasons.

If the larger cities did not escape misfortune, it was nevertheles the major cities that played a crucial role in urban growth in the final two centuries of pre-industrial Europe — in particular Amsterdam, Lisbon, London, Naples and Paris. In the XVIth century these five cities alone accounted for 15% of the total increase in the urban population of Europe less Russia (which in 1500 was composed of 740 towns with over 5,000 inhabitants); in the XVIIth century their role was even more important and accounted for some 49% of the increase.

What about towns that declined in regions that were expand-

ing? This happened quite frequently. In the XVIth century, for example, Spain's urban population grew by about a third and that of France by almost 40%: at the same time 26-30% of Spanish towns and 21-15% of French towns were declining. Even in the United Kingdom where the urban population grew by over 100% in the XVIth century, about a quarter of the towns for which documentation exists were in decline. However, if we look at the United Kingdom in the period between 1750 and 1800 when the urban population grew by 85%, of the 75 towns for which we have reliable information only one was in decline and that was in Ireland (Armagh). But on the contrary, in the rest of Europe, 18% of towns were losing population in the same period. This serves to illustrate — if illustration was needed — that with the onset of the Industrial Revolution we find ourselves in a new phase of urban history and one in which urban decline quickly became a rare and exceptional phenomenon. 'Became' since it was the United Kingdom after the second World War (and largely because of the precocious timing of its industrialization) that once again experienced the problem of urban decline in ways that are echoed in Phythian-Adams' study of the crisis of the English towns at the close of the Middle Ages[26].

One of the central findings of recent quantitative studies of urban history is that each town has its own quite individual history which in turn developed within that of a particular urban network that also had its own history. This underlines the truth of Mumford's claim in 1961 that one of the principal features of urban history was the individual character of the history of each town. Since in 1700 the world was composed of about 4,000 towns with more than 5,000 inhabitants there must be literally thousands of urban histories.

As far as the situation outside Europe is concerned, it seems

[26] C. PHYTHIAN-ADAMS, *Desolation of a City. Coventry and the Urban Crisis of the Late Middle Ages*, Cambridge 1979.

probable that when we will have more information we shall discover a similar situation. By the non-European world we mean above all the vast and future Third World where the history of towns has probably been marked by even greater contrasts than in Europe. For these regions in addition to the history of the period before colonization, which is often as yet still relatively unstudied, we have the colonization by Europeans that caused major upheavals in urban life.

One of the first areas to be affected by European colonization was America where the XVIth century witnessed the drama of the pre-Columbian cities and the burgeoning of new 'mushroom' towns around the gold and silver mines. The most interesting example is Potosi — a town of fabulous wealth (Pierre Vilar called it 'the town of the silver mania'[27]) which was founded in 1547, two years after the silver was first discovered there. Despite the fact that it was sited at a height of 3,960 meters and situated on a plateau that was devoid of fertile soil and virtually without water supplies, the town grew to some 45,000 inhabitants within eight years. By 1600 Potosi already had some 150,000, placing it alongside the fourth largest city in Europe (after Paris with 300,000 inhabitants, Naples with 270,000 and London with 200,000).

Asian cities were affected by European colonization from 1810-20 onwards; those of North Africa after 1830-40; those of Black Africa after 1880-90. For Africa the impact of the terrible slave trade with the Muslim world began before the XIth century and lasted until the end of the XIXth; was followed by that with Christian America that began in the XVIth century and lasted until the beginning of the XIXth century, but was more important in its scope.

Closer at hand we have in the example of the countries of the Third World the first case of undeveloped societies that have experienced uninterrupted urban population growth since the

[27] P. VILAR, *Or et monnaie dans l'histoire, 1450-1920*, Paris 1974 (p. 13).

1920s. From the data-base that we have established from information on 650 third world towns (not including China), only about ten have experienced any loss of population. Since 1920 these towns have experienced an annual population growth of 2.8%, but although this is in itself remarkable it is lower than the 4.4% annual growth that became the norm between 1950 and 1985. To underline the exceptional character of this urban growth which fully justifies the term 'urban inflation' it should be noted that during the 35-years period when the rate of urban expansion reached its peak in Europe (between 1870 and 1905) the annual average rose to 2.0% per year. During the most flourishing periods of the pre-industrial economies in Europe the fastest rates of urban expansion (concerning 3-4 decades) were about 0.4 per year.

The exceptional character of this inflationary urban expansion in the Third World takes on a particularly dramatic form because it has occurred in the absence of real economic development, of industrialization and — most dangerous of all — of increases in agricultural productivity. Furthermore the process of urban growth has had particularly damaging consequences: the concentration of the population in very large cities, the growth of slums and 'bidonvilles', the rise in youth unemployment and so forth. Against this background, the frequency of cases of urban decline in pre-industrial societies loses its dramatic character.

E. The non-terminal decline of towns and the stability of urban networks

As well as those towns which nearly disappeared there were others that suffered an even more tragic fate and disappeared altogether. The list might start with the great archaeological sites of four continents — Pompei, the victim of Vesuvius; Carthage, the victim of Roman imperialism; and the numerous towns of

pre-Columbian America whose demise still awaits diagnosis. But in statistical terms the level of mortality has been slight and grows smaller the closer one comes to the contemporary era. Towns would therefore appear to be essentially perennial phenomena. But let us see what guidance recent research gives us on this subject.

Before the XIVth century it is not really possible to attempt to estimate the rate of urban 'mortality', and even after this century, it is possible only for Europe. We are better informed for the period between 1500 to 1800, and on the basis of the data at the Centre of Internatinal Economic History we have 611 towns with more than 5,000 inhabitants for which we can follow the evolution through the entire period suggests that only 4 totally disappeared: the true figure would probably be two or three times greater, but even so we would still be talking about an 'annual mortality rate' of 0.06 per thousand.

Outside Europe, and leaving aside for the moment those urban systems which have completely disappeared and to which we shall return in due course, the figures given by Chandler and Fox (together with those arising from our own research) suggest that in Asia the level of urban 'mortality' between the XVIth and the XVIIIth centuries was similar to that in Europe. Although our knowledge of the continent's urban history is still rudimentary, similar trends in the Muslim world inform us that for Black Africa there is as yet insufficient evidence to make any generalization about individual towns, although we do have some information on the development of urban networks.

Before turning to urban networks something should be said about urban 'resurrections'. Not only did few towns die, but of those that did quite a number subsequently experienced relatively long-lived resurrections. One of the most striking cases is Bagdad, which within a century of its foundation had by 850BC become the largest city in the world with about a million inhabitants. But its situation at the meeting point of different commercial routes also made it vulnerable to repeated invasions with the

result that the city was destroyed on many occasions. However history suggests, a town located in a situation that favours the development and expansion of an urban centre will have every chance of being reborn, and that this chance will increase if the size of the town is larger.

It is difficult, on the other hand, to assess the chances of reviving networks since the data available is limited. Since we ended our discussion of the disappearance of towns with Black Africa let us take this as a starting point for discussing urban networks. Here, as with the other continents, we shall leave aside the civilisations of the Antiquity; the principal urban network in Africa that has vanished is Zimbabwe where the remains of nearly 200 urban settlements have now been discovered (although some were little more than fortified villages). This urban network was active from the 12th to the middle of the XVth century.

In Asia there is the important example, the urban network of Angkor, which developed between the IXth and the XVth centuries. This showed many similarities to the urban networks of pre-Columbian America. The fact that the climatic and ecological conditions in the two regions were close is more than a coincidence and it is probable that the instability of the urban networks in both cases was the result of the serious consequences in these intensely humid semitropical zones of even minor changes in climate and hence also for the balance between human societies and the natural environment.

In the case of Europe there are no real examples of urban networks that have disappeared in the last two millenia. So what we do find are extremely strong ties between towns and individual civilizations — the towns survive as long as the civilizations that brought them into being and of which they are an integral part, and indeed in many cases outlive them.

Since the disappearance of urban networks would seem to be the exception, this confirms the validity of J. de Vries's claim that Europe's urban history is marked by 'stability in the midst

of change'. Changes occurred most noticeably in individual towns that formed part of a wider urban system, but the systems themselves also changed by shrinking or expanding in response to changing economic conditions especially the long economic cycles (as we shall see in Section J).

The relative stability of urban networks suggests that there were a variety of reactions to adverse conditions, be it the decline of a town's economic function, demographic change or agricultural depression. Faced by such developments there were five possible responses available which might be adopted either singly or in combination, but which could enable an urban network to come to terms except when a catastrophe on the scale of the Black Death of the 14th century settled everything.

1) Leave the structure of town-countryside relations unchanged, thereby causing the share of the urban population to decline.
2) Put certain urban activities into the countryside, thereby easing the agricultural drain by lowering transport costs and making some portion of the time of the craftsmen available for agricultural labour.
3) Reducing urban living standards.
4) Reducing rural living standards.
5) Ruralization of the town, an option that was particularly effective at moments when the urban population rate was declining.

In the case of loss of economic function there is also another factor to consider. When an urban population is declining or static there is a partial saving on building costs, which means that the town can adapt to a 4-5% fall in resources without a decrease of the per capita income. This is similar to what happens in the countryside when a fall in population increases the ratio of land to persons. Needless to say, such a hypothesis can at

best provide only a partial explanation of the effective resistance to decline shown by urban networks.

F. Very large towns: the long eclipse of Europe

The concept of a 'very large town' is obviously relative. Today we would consider a town of 200-300,000 inhabitants to be medium or small, while there are about 300 towns with over a million inhabitants. In the case of pre-industrial societies, however, towns with more than 200,000 inhabitants were considered as very large and they were few in number. The first town to reach this scale (and probably exceed it) was Babylon (c 1700BC). By 200BC there were probably three or four towns in the world with between 200 and 350,000 inhabitants and the first town to exceed 500,000 inhabitants was a European town: Rome passed this size a little earlier than 100BC. In the second century Rome was the centre of an Empire that contained over 50 million people and the city itself probably reached or even exceeded a million souls.

Four centuries later Rome was still the largest city in Europe, but its population was only some 50,000. It was not until the X-XIth century that another European town, Cordoba, reached 200,000 inhabitants: but Cordoba at that time was a Muslim city. It was not until Paris reached the same size in the beginning of the 14th century that a European Christian town once again reached that size[28], and Paris was not challenged until the beginning of the 17th century when Naples and London reached similar size.

Meanwhile Asia and the Middle East had become the

[28] But we must not forget the magnificent history of Constantinople just on the border of Europe, which remained a Christian city until 1453. Constantinople was the largest city in the world between 400-650 AD (with 300-500,000 inhabitants). Despite sharp fluctuations thereafter it remained one of the two to four largest cities in the world until the 13th century.

world's center of gravity for the larger cities. Around 800AD there were probably 5-7 towns in the world with over 200,000 inhabitants. These included Sian and Baghdad (with maybe over 700,000 inhabitants); Constantinople, Lo-yang, Kyoto, Alexandria and Hangzhou. By 1300AD there were 9-10 towns larger than 200,000 of which only one was European. By 1700 the number had risen to nearly 20, four of which were European and of these Paris and London now ranked amongst the five or six largest in the world.

Thus it was only around 1700 and after an eclipse of 12 centuries that Europe began to develop cities of a size proportionate to its share of world population. But the growth of these very large cities was one of the dominant features of European urban history from the beginning of the XVIth century. Between 1500 and 1600 some 18-22% of the total increase in the urban population occurred in the ten cities that by 1600 counted over 100,000 inhabitants.

Between 1600 and 1700 another 'very' large city' (Amsterdam) joined the other three, while Paris and London went beyond 500,000. Between 1600 and 1700 the four European towns with over 200,000 inhabitants accounted for 41-44% of the total increase in the urban population. But the larger cities were not necessarily protected from the forces of economic decline. Seville had a population of 135,000 in 1600, but only 70,000 in 1700. Prague fell from 100,000 to 50,000 in the same period. As we have already noted, it was not until the Industrial Revolution that these examples of decline became (temporarily) much more rare and that European towns began to exceed what had hitherto been the 'absolute' population ceiling in pre-industrial society— that is between 1 and 1.5 million inhabitants. By 1850 London exceeded 2.2 millions and before the end of the century reached 5 millions. On the eve of the First World War the developed world contained seven other cities that exceeded 2 million inhabitants: Berlin, Chicago, New York, Paris, St Petersburg (Leningrad), Tokyo and Vienna.

Subsequently a number of cities of the developed world have grown beyond 10 million inhabitants. At present the largest city in the world is Mexico City with nearly 20 million inhabitants; in a quarter of century there will be about 30 cities with over 10 million inhabitants, 24-26 of which will be located in the Third World.

G. The dramatic specificity of urban demography

After discussing the varied and often tragic fate of towns we should pause for a moment to consider the often no less tragic fate of their inhabitants. It is increasingly evident that one of the most specific features of the urban demography of pre-industrial societies was the constant excess of mortality rates. The most vulnerable victims were babies and the young, but adults were not spared either. A permanent excess of mortality seems to be one of the most constant features of urban history and of urban geography since it is already found in Ancient Rome and also in non-European civilizations.

In pre-industrial European societies, infant mortality (that is to say the number of children who died before reaching the age of one year per 1000 births) was probably of the order of 200-270 for the population as a whole. In towns, however, the rate was somewhere between 230 and 450, and it is likely that the average urban infant mortality rate was 60% higher than in the countryside, while even in the case of adults the urban death rate was some 20% higher.

On the other hand — and this is true not only for infant mortality (which is generally the easiest to measure) but also mortality in other age groups — there were as many different demographic patterns as there were cities. Size was an important factor again, and the very large cities were also generally those with the highest mortality rates.

The available data make it difficult to attempt to generalize

about urban fertility rates, but it seems probable that the differences between town and countryside were in this case less pronounced. The doubts expressed in 1974 by Bardet[29] on the basis of the data then available for France (the country for which the largest number of studies existed) still holds good today: the suggestion of earlier studies that fertility rates were higher in the towns has not been proved: 'regional patterns seem to be more important, than urban specificity'.

High rates of mortality and average fertility rates reinforce the fact that immigration was the principal means by which urban populations grew. Even at moments when towns were not expanding more rapidly than the rest of the country they still relied on immigration from the countryside. At times when urban expansion was rapid the flow of migrants was considerable. According to the detailed studies by Wrigley and Schofield,[30] London must have experienced an excess of migration of nearly 900,000 persons between 1600 and 1700 in order to grow from 190,000 to 550,000 inhabitants — meaning that in those years London absorbed 80% of the natural increase in the entire population of England!

Thus towns relied on the countryside not only for their food but also for their demographic survival. This was something that even the Industrial Revolution would not change for a long time. Although urban excess mortality began to decline in the first half of the XIXth century it was not until the years 1850-80 that urban populations began to experience a natural excess of births over deaths. It is only in the first decades of the XXth century that urban excess mortality disappeared. In the case of the Third World urban excess mortality lasted until after the Second World War.

[29] J.P. Bardet, "La démographie des villes de la modernité (XVIe-XVIIIe siècles); mythes et réalités", *Annales de démographie historique 1974*, Paris 1974; pp. 101-126.

[30] E.A. Wrigley & R.S. Schofield, *The Population History of England 1541-1871*, Cambridge 1981.

H. Peasants in the cities and artisans in the countryside

Recent research has considerably altered our over-simplified image of towns as places where people worked only in secondary (manufacturing) and tertiary (service) occupations and of the countryside as a place inhabited solely by peasants.

Many peasants lived in towns, and often on a scale that calls the very notion of a town into question. Let us take the case of the Yoruba civilization which developed between what is now south-western Nigeria and part of Benin. From the XIth century the Yoruba evolved an urban system that was still very active in the XIXth century. According to Mabogunje in the middle of XIXth century it contained between 27 to 30 "towns" with over 5,000 inhabitants.[31] The majority of these were very populated: Ibadan had over 100,000 inhabitants, while there were some 15 other towns with between 20,000 and 70,000 inhabitants. These were genuine towns in terms of size; of economic criteria (developed industrial activities, long distance trade and the use of money); of sociological criteria (eg. contempt towards the rural populations); and of density. Yet at the same time probably over half of the inhabitants (although the percentage is far from precise) of these cities were peasants.

Although the proportions are lower, one finds a variety of situations in European pre-industrial towns which range from towns in which agricultural workers formed less than 4% of the active population[32] to large XXth century cities where agricultural workers formed 10% and more of the population.[33] If we go

[31] A.L. Mabogunje, *Yoruba Towns*, Ibadan 1962; Id., *Urbanization in Nigeria*, London 1968.

[32] At Geneva, for example, the figure was less than 4%. Cf. A. Perrenoud, *La Population de Genève, XVIe-XIXe siècles*, Geneva 1979 (pp. 147-178).

[33] According to the census of 1960, for example, 12.9% of the active population in Italian cities of 100-200,000 inhabitants were employed in agriculture (in contrast to 0.5% in England and 1.5% in Germany). The figures for contemporary Third World cities (that is, in 1960) are comparable: 29% in Mexican towns with 5-10,000 inhabitants, 25% in Indian towns with 10-20,000 inhabitants, 18% in Algerian towns with

back to the XVIth and XVIIth centuries and move towards Eastern Europe, in Russia we find that the huge numbers of peasants living in Russian towns led many 'bourgeois' historians of the end of the XIXth century to define them as 'agrarian towns' — an epithet which 'Soviet' historians have rightly rejected. Going back further in time and space, and without any claim to be comprehensive, we could cite the example of the pre-Columbian American cities which contained very high levels of peasants (probably more than 50%).

Nonetheless, there are no systematic studies of urban occupations and employment. This is something that should be noted as a gap in recent research, since we have, for example, no adequate data for estimating the average number of agricultural workers living in European cities in the XVIIth and XVIIIth centuries (even leaving aside the preceding centuries). Statistically the bracket probably ranged from 5% to 20% — although this percentage refers to working time rather than to the numbers involved (we shall see the same thing in relation to the artisans working in the countryside) since many agricultural activities that were carried on inside the towns were part-time.

Just as the rural artisan is not really the same as his city counter part, the urban peasant had a number of specific features. First of all, we would do better to call him an agricultural worker rather than a peasant. In those societies subject to serfdom, urban peasants were normally freemen. But other distinctions were more economic in character. The urban peasant had the advantage of greatly reduced transport costs and an abundant supply of manure. Furthermore his range of products was different, he could especially produce perishable products like milk. On this point it is worth noting that dairy herds continued to be raised inside major European (as well as non-European) cities until at least a century after the Agricultural Revolution. I

150-320,000 inhabitants, etc. (cf. P. BAIROCH, *Taille des villes...* Paris 1977; pp. 283-287).

was born in Antwerp in 1930 in a house whose owner was engaged in this occupation.

Artisans in the countryside? Paradoxically there were probably almost as many rural artisans as there were urban craftsmen. Since 85-90% of the population of pre-industrial Europe lived in the countryside, it only needed 7-8% of the active population outside the cities to take up artisan trades for them to equal the number of urban artisans. Even supposing that 50% of the active urban population was engaged in craft trades (but the figure is probably too high[34] and makes no adequate allowance for the importance of the tertiary sector) it is simple to calculate that the number of rural artisans was only about 20% less.

The whole question of the importance and also the impact of the rural artisan raises a range of unanswered issues. It cannot be separated, for example, from the question of the part-time industrial activities of peasants. But despite the new research inspired by the late Franklin Mendels' thesis on proto-industrialization,[35] we still have insufficient data on the situation in pre-industrial Europe and even less on non-European societies.

Nevertheless the studies on the non-European world have progressed sufficiently to enable us to throw out the conclusions derived from the concept of an 'Asiatic mode of production', on the basis of which it is claimed that the countryside was self-sufficient in manufactured products. The belief that Asiatic towns were not industrial towns that exported their products is the mirror image of the same argument. But this is to overlook the fact that Japan, India and China all developed very different

[34] Although the data is very thin, one can estimate that manufacturing activities probably accounted about 35-45% of the active population in pre-industrial European towns. By 1913 the figure had risen to between 50-55% (and the data also become more reliable).

[35] F.F. MENDELS: *Industrialization and Population Pressure in XVIIIth Century Flanders*, Wisconsin 1969.

types of urban systems, and that the urban history of each of these countries was quite different. The lack of historical studies has often led to the belief until recently that there was no urban history in these societies. But the information now available makes it absolutely clear not only for Asia but also for pre-Columbian America and for Africa that in most periods the idea that the countryside was self-sufficient in manufacturing is inaccurate. Had this been the truth, then it would have been impossible to achieve the high levels of urbanization that occurred in these societies.

This is not to say that pre-industrial Asian towns were identical to pre-industrial European towns. Too often those urban system were compared without taking due account of the impact of European economic growth and colonization in the XIXth century. We shall return to these questions in the final section of the essay.

If we limit our view to Europe for the moment, what is the global balance sheet? Were there more peasants in the towns than artisans in the countryside? Or vice-versa? It is a question of balancing two imprecise columns but, even if we accept a wide margin of error, the estimate still has important implications. If we estimate that in pre-industrial towns on average 10-15% of the active population (perhaps better, 10-15% of total working hours) were engaged in agriculture, and that in the countryside 5-10% of the active population were artisans, even taking the extreme variants of the statistical brackets (i.e. 15% = urban agricultural workers and 5% = rural artisans) we see that there were twice as many rural artisans as urban peasants: taking the average percentages we finish up with three and a half times as many rural artisans as urban peasants. Thus the percentage of non-agricultural activities exceeded the proportional weighting of the urban population by 4 to 5 percentage points.[36]

[36] De Vries (*op cit.* pp. 238-240) argues that the share of non-agricultural workers in the rural population was higher than this and increased markedly between 1500 and 1800, rising from 17-18% in 1500 to 24-26% by about 1800. As he points out, this

I. Towns and agriculture

In turning to the relations between towns and agriculture we shall omit the question of the role of agriculture in the birth of the town which we have already referred to briefly. As far as pre-industrial societies are concerned, the town remained totally dependent on agriculture. The size of the urban population was directly determined by the food surplus which the peasants were able voluntarily or by force to make available. This elementary truth needs to be borne in mind, since until the Industrial Revolution the agricultural surplus was not very important. What was its maximum? How large a proportion of peasant produce could be appropriated to feed the towns? Despite the improvements that were achieved first by the civilizations of Antiquity and then by those of Europe and Asia, the most advanced agricultural techniques in pre-industrial societies still required the participation of 70-75% of the active population to produce foodstuffs and raw materials. The non-agricultural sector of the population could not therefore exceed 25-30% of the population, and since there were more non-agricultural workers in the countryside than agricultural workers in the towns this meant that the urban population had to remain at an even lower level.

This does not mean, however, that a given level of agricultural productivity would determine a comparable level of urbanization. There was a variety of other factors that could also influence the development of the town. Account must be taken, for example, of the degree of economic specialization. If there

would imply a decline in the relative size of the population that was active in agriculture, which he suggests fell from 74% to 51% between 1500 and 1800. These figures do not seem convincing, however, for the following two reasons. If we assume that food consumption per inhabitant did not increase at all, this would mean that there had been a net gain in productivity of the order of 45% between 1500 and 1800 and indicates — given the European averages around 1800 — that the figure suggested for 1500 must be too low. On the other hand, the available data indicate that the percentage engaged in agriculture in western Europe around 1800 was 69-72% of the population — even in 1860 (when the figures are detailed and reliable) the average figure for Europe (excluding Russia) was still 57%.

were large numbers of agricultural workers in the towns but few artisans or merchants in the countryside, then the level of urbanization could be higher. The relations were also affected by the different population densities that the cultivated land could support, which in turn depended not only on the fertility of the soil, on climate and technologies, but also on the types of crop produced: rice, maize and potatoes supported more people per acre than corn. Nor can we omit the 'tyranny of distance' since agricultural surpluses had to be transported physically to the town. Beyond certain distances (which varied according to geographical conditions and existing transport technologies) an agricultural surplus ceased to have any value. Finally there are the rules for cutting the cake: the peasant should be left with more or less, besides the town-dweller was often better fed than the peasant.

As we have already seen, often in global terms and for large regions these factors only resulted in variations of 2-3 percentage points around the average level of urbanization. If we shift our attention to smaller societies and to those that developed particular specialization in international commerce — such as the Phoenicians and the Ancient Greeks, Italy in the Middle Ages, the Low Countries in the XVIIth century — it is evident that much higher levels of urbanization were possible. But these higher levels were achieved thanks to the agricultural surpluses drawn from other societies in return for which they provided economic services. To take one of the best known and most revealing cases, grain imports to the Low Countries during the 'Golden Age' virtually satisfied the needs of the urban population which constituted more than 40% of the total population.

Let us now consider the other side of the problem, the impact of the towns on agriculture. It is worth dwelling for a moment on the thesis advanced by Jane Jacobs[37] who tried to turn the conventional understanding of the relationship between agri-

[37] J. Jacobs, *The Economy of Cities*, New York 1969, pp. 13-56.

culture and the birth of the towns on its head. Jacobs argued that the town 'invented' agriculture but her premise is almost certainly mistaken since it is derived from the geographical differences of agricultural productivity of the contemporary world. She states that 'agriculture is not even tolerably productive unless it incorporates many goods and services produced in the cities or transplanted from the cities'. As proof of this, she compares contemporary regions with low levels of industrialization whose agricultural hinterland is seen to be generally backward, and regions with high levels of urbanization which are generally accompanied by advanced forms of agriculture. But although the starting premise is not very convincing and certainly does not prove that agriculture was invented by the towns, the vast cloud of uncertainty that shrouds this whole period means that we should not totally reject the hypothesis. Groups of hunters living together in towns or encampments of a few hundred or more inhabitants are certainly not impossible. Nor is it impossible that the demographic pressures that developed in and around these 'cities' created incentives for finding other ways of producing food as well as trying to develop artisan activities. But even if we accept this much of the hypothesis, it remains nonetheless true that agriculture — whether or not it was invented in the 'town' or in the 'rural world' — played a crucial role in the development of the real towns.

Esther Boserup's thesis,[38] on the other hand, merits much closer attention. She, too, has attempted to develop a series of hypotheses that arise directly from the experience of the Third World and project them back on to pre-industrial societies (including those of Antiquity). Boserup's thesis can be quickly summarized as follows: population pressure in the Third World has encouraged farmers to adopt more productive farming methods since more people have to be fed than in the past and any expansion of the area under cultivation becomes difficult

[38] E. Boserup, *The Conditions of Agricultural Growth*, London 1965.

(not least because of previous demographic growth). But in a detailed study of the relations between demographic expansion and agricultural change in pre-industrial Europe, Grigg[39] has shown that population growth between 1000-1300 had resulted in very little change in agricultural techniques. "Most of the increase in food output must have come from expanding the area under cultivation, but by 1250 there was little good land left, and in some regions intensification took the form of reducing the fallow by shifting from the two-field system to the three-field; this was not always accompanied by adequate means of maintaining soil fertility".

If the impact of demographic pressures was limited, we must also remember that there is no real comparison between the contemporary demographic inflation experienced in the Third World and the situation that existed in Europe from the Xth to the XVIIth centuries. Even in the periods (of a half century) of most rapid demographic growth in Europe (and leaving out the recovery from the Black Death) the population grew at the rate of 0.3% per year (and would have needed 230 years to double), whereas the current rate of demographic growth in the Third World is 2.5% (requiring 28 years to double itself). In 1000-AD Europe (without Russia) had 8 inhabitants per square kilometre: in 1960 India had already 131 and Bangladesh 390 (for the year 2000 the projected figures are respectively 280/300 and 1050/1150).

Some of those who have attempted to apply Boserup's thesis have in some cases failed to distinguish clearly between agricultural yields and agricultural productivity. The terminological ambiguities that go back to Ricardo's law of diminishing returns are partly responsible for this. It is essential to be clear that not only is there no direct correlation between yields and productivity, but that the relationship may often be inverse. Cereal yields fell in the United States during the XIXth century, for example,

[39] D.B. Grigg, *Population Growth and Agrarian Change. An Historical Perspective*, Cambridge 1980.

although productivity rose rapidly. On the other hand, in 1934-8 agricultural yields in Egypt (and in some other Third World countries) were much higher than in the United States, whereas agricultural productivity was 14 times greater in the US than in Egypt.[40] As far as economic development (and urbanization) is concerned, the important thing is productivity, even though improved yields did also play a part in XIXth century urbanization as I have shown elsewhere.[41] In that essay I attempted to assess (other things being equal) the impact on levels of urbanization in Europe between 1880 and 1910 of the following three factors: rises in agricultural productivity, the fall in transport costs, increase in yields. Of the three factors, increased yields showed the weakest impact — two-times weaker than the fall in transport costs and sixty-times weaker than increases in productivity. More specifically in relation to urbanization in pre-industrial societies, however, it is worth noting that the thesis first advanced by Fisher in 1935[42] that London played a major role in promoting the English agricultural revolution has recently been confirmed by E.A. Wrigley's essay of 1967.[43]

Before leaving agriculture we must briefly mention some other aspects of the town-countryside relationship. As Anne-Marie Piuz has shown,[44] there was an interdependence linking

[40] Cf. P. Bairoch, "Les trois révolutions agricoles du monde développé. Rendements et productivité de 1800 à 1985", *Annales, E.S.C.*, Vol. 44 No. 22, 1989, pp. 317-353.

[41] Cf. P. Bairoch, "Impact des rendements agricoles, de la productivité agricole et des coûts de transports sur la croissance urbaine de 1800 à 1919", *Séminaire de l'Union internationale pour l'étude scientifique de la population sur l'urbanisation et la dynamique de la population dans l'histoire*, Tokyo 22-25 January 1986.

[42] F.J. Fisher, "The Development of the London Food Market 1540-1640", *Economic History Review*, Vol. V, No. 2, 1935; pp. 46-64.

[43] E.A. Wrigley, "A Simple Model of London's Importance in Changing English Society and Economy 1650-1750" *Past and Present XXXVII*, July 1967, pp. 44-70.

[44] A.M. Piuz, "Les relations économiques entre les villes et les campagnes dans les sociétés pré-industrielles" *Revue européenne des sciences sociales et Cahiers Vilfredo Pareto*, Vol. XV, No. 41, 1977, pp. 195-231 (esp. p. 196). The end of this section relies heavily on this essay which summarizes the state of knowledge in the late '70s very well. Although fresh data has been published since, there have been no other recent attempts at synthesis — as far as I know.

town and countryside both in personal terms and also in cycles of activity. Not only did the 'urban notable' play a role in the village where he owned land and where he took a place of honour in the village festivities and in the Parish church but equally, within the town itself, everday life was marked by rural events. Cereal harvest and the gathering of the grapes interrupted the activities of the town-dweller'.

Since we have mentioned urban notables, let us also remember that, as far as Europe is concerned, power has resided in towns from the end of the feudal regime. An abiding feature of the town-countryside relationship has been the control exercised by the town-dwellers over the land in the countryside. Although this has long been recognised, the ways and mechanisms in which this power was expressed, together with the regional variations that developed, have been more accurately traced in a number of recent studies.[45] For the non-European societies, however, we have as yet very little information on these subjects.

J. Towns and economic life: a multi-dimensional problem

The final chapter of Fernand Braudel's *Civilisation Materielle et Capitalisme* is dedicated to 'Towns' and begins: "Towns are like electric transformers: they increase tension, they precipitate change and keep men's lives in a state of permanent fermentation. They are themselves the fruit of one of the oldest di-

[45] See especially: G. CABOURDIN, *Terres et hommes en Lorraine du milieu du XVIe siècle à la guerre de Trente Ans. Toulois et Comté de Vaudémont* (thesis), University of Lille III, 1975; J. DUPAQUIER, "L'Etat présent des recherches sur la répartition de la propriété foncière à la fin de l'Ancien Régime" in *Troisième Conférence Internationale d'Histoire économique* (Munich 1965) Paris-The Hague 1968; pp. 385-389; G. FRECHE, *Toulouse et la région Midi-Pyrénées au siècle des Lumières (vers 1670-1789)*, Paris 1974; R. GRASSBY, "English merchant capitalism in the Seventeenth Century. The Composition of Business Fortunes", *Past and Present*, no. 46, Feb. 1970; pp. 87-107.

visions of labour, which set on one side the land and on the other all those activities which came to be described as urban".[46] Braudel went on to cite what the young Karl Marx had written on the same subject: "The opposition between town and countryside had its beginnings in the transition from barbarism to civilization, from tribalism to the State, from local communities to the nation, providing a constant theme in the history of the world down to the present day." He even invoked Herodotus in evidence of the ancient origins of the negative effects of many urban systems: "Towns are also parasitic and abusive constructs."

It is around these issues that the debate on the economic role of the town still revolves. The contrast between the city as the matrix of growth and the city as parasite is well reflected in the title of an essay on Third World cities written in 1955 by Hoselitz: "Generative and Parasitic Cities".[47]

There is no simple or unequivocal answer to the question, however, since it involves exploring the whole gamut of relations linking the town to the economy and in the wider sense to what Braudel rightly described as material life. Even if we leave aside the question of the origins of the town, which raises a similar question, there is first the problem of the different types of economic factors that have influenced the individual development of the town. The ways in which the life of the urban networks of the major historical civilizations (Western Europe, China, the Muslim world, etc.) have been affected by the great cyclical movements in the economy are also important in this respect. More specific but not less important, as we have seen, are the changes in agriculture that impinged directly on urban life. We must also take account of the important impact of technological change, although in the case of pre-industrial societies these were not numerous and did not have consequences com-

[46] F. Braudel, *Civilisation Matérielle et Capitalisme*, Paris 1967 (p. 369).

[47] B.F. Hoselitz, "Generative and Parasitic Cities" in *Economic Development and Cultural Change*, Vol. 3, No. 3, April 1955; pp. 278-294.

parable to those of a later age. But even minor technological innovations could influence urban life, and even more important the town played an important role in the geographical dissemination of new technologies. One of the lesser aspects to which we will only make a passing reference is the role of the town in the development of monetary systems.

In other words, the relationship between towns and economic development has many different facets. We shall examine the more important of these briefly before returning to the central question: were towns the engines of economic progress or parasites?

J. 1 Economic factors and the fate of individual towns

Although we now have a large number of monographic studies, they are still insufficient to provide a statistical base for any broader generalizations about the processes of urban development. Any such attempt also runs up against the complexity and range of the different factors that might influence the life of the town. The Canadian scholar Trigger[48] has listed eleven separate factors that could influence the growth of pre-industrial cities. These include 1) an increase in the food supply; 2) increasing population and/or rural unemployment; 3) a division of labour; 4) marketing and trade; 5) landlords who live in the city; 6) administration; 7) defence; 8) religion; 9) secular tourism; 10) education; 11) domestic services.

I would add at least three further factors to this list: the discovery (or, conversely, the exhaustion) of mineral deposits; changes in political boundaries; ecological changes (for example, the silting of ports, earthquakes, changes in micro-climatic con-

[48] B.G. Trigger, "Determinants of Urban Growth in Pre-Industrial Societies" in P.J. Ucko, R. Tringham & G.W. Dimbleby, (eds) *Man, Settlement and Urbanism*, London 1972; pp. 575-599.

ditions). Nor can more casual factors such as the capacity or incapacity of those governing the town, which could certainly affect its future for good or for ill. For all those reasons the confrontation of the demographic evolution of cities with their characteristics can yield very important information.

In his thesis, recently published, Bernard Lepetit[49] has carried out an analysis of this sort on France's urban network between 1740-1840. I have attempted a similar analysis myself for Europe as a whole (excluding Russia and the Balkans) in the period 1500-1700 for towns with more than 10,000 inhabitants[50], and taking also in consideration the city size. Comparisons of this sort confirm what earlier studies had already suggested, in particular the importance on the one hand of the strengthening of the power and intervention of the state and on the other the expansion of international trade. Capital cities represented only 7% of the towns examined but they formed 19% of the towns whose population grew by over 100% in this period while no capital city experienced less than 50% increase in its population. As a general rule, the fastest growth occurred in those capital cities that were also ports.

This brings us to a second aspect of urban growth ports. After state capitals, it was towns with ports that experienced the strongest expansion. In the period referred to some 55% of port cities saw their population double or triple. Even more important: port cities represented 27% of the total number of towns other than state capitals, but 57% of the towns that experienced a population increase of more than 100%. Even in regions where towns were generally in decline in this period (especially, Italy), ports fared better than other cities. However, a port was obviously not a guarantee against misfortune and of the 52 port cities (excluding those that were also state capitals) 5 stagnated and 4 declined during this period.

[49] B. Lepetit, *Les villes dans la France moderne (1740-1840)*, Paris 1988.
[50] P. Bairoch, *Cities and Economic Development*, Chicago 1988 (pp. 185-188).

Amongst the other categories of towns, commercial towns (without ports) and industrial towns did better in these two centuries than towns whose primary functions were administrative, religious, educational (i.e. university towns) or military.

There are too many gaps in our knowledge to go far beyond this fairly rudimentary appraisal, although even this serves to show that there are still important gaps in our understanding of urban history. Until we have more information of the demographic development of individual cities we cannot, therefore, attempt the more detailed analysis of urban typologies that is an essential prerequisite for understanding the differing destinies of different towns.

J. 2 Towns and long economic cycles

In his analysis of the contours of European urbanization, Jan de Vries[51] speaks of the vigour of urban growth during the "long Sixteenth Century," although he stresses that the cycles of economic and urban growth coincided only in certain geographical areas. In the introduction to their chapter on the cities between 1300-1800, Hohenberg and Lees[52] also insist on the importance of the impact of "long term cycles," but only in conjunction with other factors, for urban development. The points raised in sections C, D and E above lend further weight to the reservations made in these two excellent studies.

However the impact of these broad economic cycles finds further confirmation from the wider historical and geographical record. The Islamic world, India and China all show a close synchronism between major economic cycles and urban expansion. Nor is this surprising in view of the close and complex links between the economy and urban life. But we should not forget either that economic cycles are often measured primarily

[51] J. Vries, de: *European Urbanization 1500-1800*, London 1984 (pp. 28-29).

[52] P.M. Hohenberg & L.H. Lees, *The Making of Urban Europe 1000-1950* Cambridge, Mass., 1985 (p. 106).

through urban activities: to a certain extent, the symbiosis between economic cycles and urban growth is built into the ways in which we analyse the phenomenon.

J. 3 Towns and technology

In general terms there cannot be any doubt that towns both favour innovation and the dissemination of new technologies across wider areas. But the ways in which this has occurred are highly complex. We might summarize by saying that the concentration of people in one place facilitates communication and speeds up the flow of information. The varied character of urban activities in turn encourages the application (or adoption) of solutions devised in one sector to other sectors. Towns are also the natural locus for educational institutions which have traditionally combined both teaching and research in the modern sense of the word. The city also provides a natural refuge for creative minds that feel constrained by the conformism of the rural world. Last but not least the town is above all the point of contact with other towns as a result of trade, of the migrations of artisans, workers and intellectuals from one town to another (inter-regional rural migration was a much smaller affair).

The fundamental role in this sense played by the towns of the Western world from the XIXth century onwards is evident from a number of recent empirical studies.[53] Although there are fewer specific studies on the effects of city size,[54] there is con-

[53] The starting point for the study of the role of the town in innovation is A.R. PRED, *The Spatial Dynamics of US Urban Industrial Growth 1800-1914*, Cambridge, Mass., 1966. Other important studies include R. HIGGS, "American Inventiveness 1870-1920", *Journal of Political Economy*, Vol. LXXIX, May-July, 1971; pp. 661-667; and especially I. FELLER, "Determinant of the Composition of Urban Invention", *Economic Geography*, vol. 49, No. 1, January 1973; pp. 48-58. The starting point for studying the ways in which towns contributed to the diffusion of innovation is T. HAGERSTRAND, *Innovation Diffusion as a Spatial Process*, Chicago 1967.

[54] The first attempts to correlate the size of towns with their role in innovation and dissemination were by R.V. BOWERS, "The Direction of Intra-Societal Diffusion", *American Sociological Review*, Vol. 2, No. 6, Dec. 1937, pp. 826-836; E. ROSE,

siderable evidence that this was important and most of the studies referred to here suggest that the larger the town and the greater the number of its inhabitants the faster and wider the process of innovation.

As far as pre-industrial Europe is concerned, there are as yet only a very small number of studies, and they are very recent, on urbanization and technology,[55] although these suggest that before long others may also be published. These conclusions are similar to those on the industrial towns. As yet, however, we have virtually no information on other traditional societies, but there seems little reason to suppose that the town there also provided a more favourable environment for technological development than the countryside even though the intensity of innovatory force of the town or city still needs to be established.

J. 4 Towns and money

The town-countryside opposition (at least as far as Europe is concerned) is also the opposition between commercial exchange and auto-consumption. Commercial exchange means a monetarized economy, and we should remember that money was probably 'invented' by that quintessentially urban civilization, Ancient Greece, around 700 BC. So far, however, these questions have hardly been studied, although it is also true that the

"Innovation and American Culture", *Social Forces*, Vol. XVI, No. 3, March 1948, pp. 255-272; W.F. Ogburn & O.D. Duncan, "City Size as a Sociological Variable" in E.W. Burgess & D.J. Bogue (ed.), *Contributions to Urban Sociology*, Chicago 1964, pp. 127-147.

There have been very few recent studies of these problems, but see B.T. Robson, *Urban Growth: An Approach*, London 1973; I. Martin, *Inventions techniques et urbanisation en Europe au XIXe siècle. Allemagne, France et Royaume-Uni* (diploma, Dept of Economic History, University of Geneva) Geneva 1977; J. Rees, R. Briggs & R. Oakey, "The Adoption of New Technology in the American Machinery Industry", *Regional studies*, Vol. 18, No. 6; pp. 489-504.

[55] Virtually all the research on this subject is covered in the volume edited by B. Lepetit & J. Hoock, *La ville et l'innovation en Europe XIVe-XIXe siècles*, Paris 1987.

urban character of money systems does not pose major problems since it clearly had essentially positive consequences for the towns in particular and for economic life in general.

J. 5 *Conclusion:* were towns the breeding grounds of economic growth or parasites?

The answer is simple, and that is the problem: towns have always played a double role. Even a rapid glance through the preceding pages will indicate that the positive or negative impact of an individual town or urban network will depend on a combination of different factors which might very schematically be summarized as follows. In traditional pre-industrial societies the town generally encouraged economic growth unless the demands that it made on the rest of the economy became too heavy, at which point a series of negative mechanisms came into play which outweighed any remaining stimulants. For this reason, the larger the town the greater the risk that it would become parasitic on its surrounding economy. Finally, and without being exhaustive let us note that the loss of commercial functions was likely to be a key factor in determining the transition to a parasitic situation.

K. The town and knowledge

I use the singular in the sub-title not simply as a stylistic whim but also to emphasize that the only information available on the subject relates to western European society and hence to the European town.

As Jacques Le Goff[56] has already shown, it was in the XIIth century that the city began to take over from the monasteries the role of disseminating knowledge and providing education. This was due mainly to the development of learned institutions

[56] J. Le Goff, "The Town as an Agent of Civilisation 1200-1500" in C.M. Cipolla (ed.) *The Fontana Economic History of Europe*, Vol. 1, London 1972; pp. 71-106.

both on the elementary and university level. Children started to learn to read and write in large numbers. It is estimated that in Florence around 1340 some 8-10,000 boys and girls were being taught to read. The city's population at that time was about 60,000, and if we assume that children between the ages of five and ten years would have represented some 8-12% of the population, this means that virtually all children attended schools.

In the development of non-university teaching the Xth and XIth centuries were important turning points. In his study of "Schools and Teaching in the High Middle Ages" P. Riche[57] begins his chapter on urban schools as follows: "The monastery represented the past, the city the future." His study also provides a valuable indication of the ways in which teaching subsequently developed in ways that were closely related to changing 'demand'.

Was the university an urban phenomenon? The answer is yes and in much more fundamental ways than might at first be apparent. It goes without saying that universities were generally founded in cities (and thus added a basic activity), but we should also remember that the university was already an important presence in all major cities by the late XVth century. As Barel[58] remarks "the medieval university was at the cross-roads between the Church, the authorities, and the urban system, and it exploited this position to obtain some degree of autonomy and so became almost a sub-system in its own right." In fact this became quite a large sub-system. The first European universities were founded in the XIth century, but already by the late XIVth century there were — by my calculations — one or more universities in 35-37 different towns. By the end of the XVth century the number had grown to 70-73 towns, and by that time

[57] P. Riche, *Les écoles et l'enseignement dans l'Occident chrétien de la fin du Ve siècle au milieu du XIe siècle*, Paris 1979 (p. 162).

[58] Y. Barel, *La ville médiévale. Système social, système urbain*, Grenoble 1977 (p. 261).

half of all European towns (excluding Russia) with over 20,000 inhabitants had one or more universities.

Printing played a more ambiguous role in establishing the city's function as the primary source of knowledge. Although printing strengthened the position of the city against the monastery as the principal producer of cultural goods, the lower cost of books which resulted from printing encouraged the dissemination of knowledge and information in rural as well as in urban settings.

L. Did Europe have a specific urban system?

In talking about the specificity of urban Europe we are obviously talking about Christian Europe in the period that starts around the Xth-XIth centuries and lasts until the onset of the changes that came with the Industrial Revolutions which by about 1810/30 had begun to transform the whole fabric of European society, making of this society something without precedent not only in the history of Europe but also of the world. This means, however, that we cannot make meaningful comparisons with urban systems of Antiquity or with those of pre-Columbian America. But we can compare these European urban systems with their contemporaries in the Muslim and Asiatic worlds.

It is frequently stated that Muslim cities were generally made up of separate quarters or districts with very homogeneous ethnic and religious contours. This is a feature which does seem to have occurred more often in the case of Islamic than Christian cities. But the distinction becomes perhaps less relevant when one remembers that most Muslim towns were conquered towns — that is to say towns that had their own histories from long before the arrival of Islam. As a result, assimilation into the Islamic world was accompanied by the creation of new urban districts, some of which were inhabited by the new ruling classes. Similar structures would reappear a thousand years later in

the wake of European colonization. The specificity in this sense of the Islamic town is historical not religious or cultural in origin.

If, on the one hand, the search for elements of specificity can lead us into error unless we take proper account of the complexity of historical processes or of the constraints imposed by climate, on the other, the search for similarities is also fraught with problems. This is particularly evident when it comes to guilds and corporations. Similar institutions that performed similar functions can be found in Japan, for example. But in so far as the Muslim world is concerned, Bonine[59] has shown that what were believed to have been genuine guilds, created and functioning to promote the interests of the relevant crafts and trades, were in fact regulatory and supervisory institutions created by the political authorities. This would also explain why Muslim towns enjoyed much less independence since in both Europe and Japan the guild (among other things) contributed to widening the sphere of urban autonomy.

The question of the guilds takes us again to the concept of the Asiatic mode of production. It is worth noting that while not accepting the Marxist formula, Max Weber[60] has also stressed the differences between European and non-European urban systems, and in particular the relative lack of autonomy in the non-European systems. Other writers have drawn distinctions that are similar to those in the Asiatic mode of production — notably Sjoberg,[61] whose study of the pre-industrial city was widely influential in the 1960s and 1970s.

We can summarize the three principal features attributed to the Asiatic mode of production as follows:

1) Land is never, or at best rarely, privately owned.

[59] M.E. Bonine, "From Uruk to Casablanca. Perspectives on the Urban Experience of the Middle East" *Journal of Urban History*, Vol. 3, No. 2, Feb. 1977; pp. 141-180.

[60] M. Weber, *The City*, Glencoe (Ill) 1958 — esp., pp. 81-96. The same theme is developed in other works by Max Weber.

[61] G. Sjoberg, *The Preindustrial City. Past and Present*, Glencoe (Ill) 1960.

2) The presence of a central power that controls or at least intervenes extensively in economy life.

3) In each community agriculture and handicraft are interdependent; in other words, rural villages were economically self-sufficient.

It is the last of these points that concerns us most directly here. We have already seen (in Section H above) that the idea that the countryside in non-European societies had achieved 'industrial' autonomy is untenable, if only because of the levels of urbanization that had been achieved in most of these societies.

The absence of towns specializing in the production of manufactured goods for wide markets is another feature of the Asiatic mode of production, but this does not fit any of the three major non-European civilizations either, without mentioning less advanced societies about which, however, our knowledge is more limited. Even in the case of India, which was the original "model" for the Asiatic mode of production, there were numerous commercial and industrial centres in the Moghul period whose economic influence reached far beyond their immediate localities. This is something that Naqvi[62] stressed in his study of the towns of northern India, and it is confirmed by the research of Gokhale[63] who states that: "the economy of seventeenth-century India can no longer be held to be static and fragmented into self-contained small regional units but was rapidly becoming quasi-continental," with cities "highly localized and specialized manufacturing centers."

We must also bear in mind two other points. The first is that for the period prior to colonization, we know even less about

[62] H.K. Naqvi, *Urban Centres and Industries in Upper India 1556-1803*, London 1968.

[63] B.G. Gokhale, "Burhanpur. Notes on the History of an Indian City in the XVIIth Century' *Journal of the Economic and Social History of the Orient*, Vol. XV, Part. 3, Dec. 1972, pp. 467-486. See also the eight studies on these towns in the volume edited by J.S. Grewal & I. Banga, *Studies in Urban History*, Amritsar (no date, probably 1982). The most recent study on XIXth century China is W.T. Rowe & W. Hanko, *Commerce and Society in a Chinese City 1796-1889*, Stanford 1984.

Asia's urban history than we did about pre-industrial European urban history in the 1950s. There are still very few detailed studies of individual Asian towns. There is also a certain tendency (conscious or not) to exaggerate the dynamism of traditional extra-European towns in order to maximize the impact of colonization. Therefore it is not impossible that in the future there will be a tendency to return to the previous line of interpretation. However this cannot go too far since the distortion arising from the extrapolation of post-colonial situations to the past led to strong biases.

Since there is nothing more frustrating for the reader than to be left without a conclusion, let me say that if recent studies have tended to play down the peculiarities of the urban history of the major world civilizations (and hence that of Europe as well) they have not caused them to disappear altogether. The peculiarities of the European urban systems were probably more pronounced than those of other continents, and are best defined in terms of the highly developed character of a wide range of different features rather than in the number of particular characteristics. The towns of Christian Europe seem generally (and the adverb is critical) to have been more extrovert in their economic activities, more individual in their architectural styles (and so more diversified), to have been peopled by more educated citizens who, finally, formed a more freer world. Was it not Mark Elvin,[64] one of the most perceptive experts in Chinese history, who claimed that "Chinese air made nobody free"?

Defining peculiarities is one thing, explaining them another, especially when there is little detailed research to rely on. But let me suggest two possible explanations: the role of religion and political fragmentation. Political fragmentation certainly contributed to the absence of vast metropoli in Europe, and this in turn possibly had a beneficial effect on the relations between towns, and between town and countryside. But one should also

[64] M. Elvin, *The Pattern of the Chinese Past*, London 1973 (p. 166).

include in the specificities of European cities the spirit of opennes that was peculiar to European civilization especially in the age of the Renaissance. But we are still dealing with explanations rather than causes.

M. European expansion and colonial towns

The spirit of openness also played a part in Europe's vast commercial and colonial expansion after the early XVIth century. With this new phase in its history Europe joined the ranks of the great colonial civilizations of the world: the Romans, the Persians, the Chinese, the Ottomans, etc.

Why then limit our discussion solely to Europe? There are three reasons. In terms of the historical period we are discussing, Europe and the Ottoman Empire were two of the most important examples of colonization. Secondly, the history of European colonization is somewhat better documented than other cases. Thirdly, since European colonization was the work of a civilization that was about to experience the Industrial Revolution, its impact was greatly magnified and today's world has largely been shaped by it.

European colonization and commercial expansion from the beginning of the XVIth century till the end of the XVIIIth century had consequences that varied greatly from place to place. In the Americas these consequences were immense and disastrous, whereas in Asia and in Africa they were much more marginal. In Central and Southern America European colonization caused the collapse of advanced civilizations and the urban systems that these civilizations had evolved. While these systems certainly differed from those of Europe in the same period, they included a large number of towns many of which were very populated. Indeed, pre-Columbian America may well have been more urbanized than Europe at the same date. They city of Tenochtitlan (modern Mexico City) is estimated to have had 400,000 inhabitants at a time when the largest city in Europe, Paris, had

some 225,000 inhabitants and the three next biggest European cities (Naples, Milan and Venice) had about 100,000.

The collapse of the old urban system was followed by the creation of a new urban system that had clear colonial functions. It is symptomatic that the first attempt at building a colonial city was made by Christopher Colombus himself. But, as Soclow and Johnson[65] have noted, "Columbus was a better navigator than town planner: his two attempts to create towns — Navidad (1492) and Isabela (1493) — were failures." It has been calculated, however, that between the founding of Navidad and the early XIXth century the Spaniards created if not thousands then certainly nearly a thousand towns.

Many of these "towns" were in fact little more than small military posts and like Columbus's own foundations quickly disappeared. Nonetheless, both the Spanish and — albeit to a lesser degree — the Portugese and other European colonizing powers brought about the creation of completely new urban networks in the Americas. "The Iberian Conquest and Colonization: An Urban Venture" is the title of the chapter which Butterworth and Chance[66] devote to this period. Mining precious metals and the cultivation of tropical fruits created an outward-looking economy with numerous and often prosperous cities which by 1700 had made what was already Latin America one of the most highly urbanized regions in the world.

In Asia, on the other hand, the balance of power, especially on the land, was not in favour of Europe until the second half of the XVIIIth century. Here European commercial expansion, like earlier Muslim commercial expansion, created or dominated a ring of essentially coastal towns. The most important of these was Batavia (modern Jakarta), Calcutta, Goa, Malacca and Manila. But these colonial towns were of minor importance in rela-

[65] S.M. Socolov & L.L. Johnson, "Urbanization in Colonial Latin America", *Journal of Urban History*, Vol. 8, No. 1, Nov. 1981; pp. 27-59.

[66] D. Butterworth & J.K. Chance, *Latin American Urbanization*, Cambridge 1981.

tion to the existing indigenous urban networks. The "European" cities (even if we include their non-European populations) contained less than 1% of the urban population of Asia before the second half of the 18th century (and probably as little as 0.5%).

The "European" towns in Africa were much more numerous but also much smaller. Africa was the indirect victim of European expansion, in the first place because the routes to Asia necessitated circumnavigating the continent and created the need for provisioning stations on the way (there was also triangular trade with Asia). But Africa was, above all, victim of the demand for man-power on the American plantations which gave birth to the infamous slave trade that continued until the beginning of the XIXth century.

One consequence was the creation of a number of European cities in Africa, although these were often islands near the continent rather than part of it, hence the concept of the "island-city". There were also European enclaves in Africa towns, especially those that specialized in the purchase and sale of slaves. Such towns were either added to or combined with others that specialized in genuine trade. But if there were numerous settlements, they were not densely populated. Many were simply forts that guaranteed the safety of shipping and provided a base for a small number of soldiers and administrators. Some of the earliest settlements were Portugese, and it was they who founded the fort of St. Georges de la Mine to the west of Accra in 1486 which later became the town of Elmina. In fact the site had been explored as early as 1481 and Christopher Columbus had been a member of the expedition. About fifty more forts and "towns" of this sort were created before the end of the XIXth century.

The total population of these fifty settlements remained very small, however, and collectively they probably did not reach 100,000. These fifty little towns of which many were the starting point for the tragic journeys of thousands of black slaves, were

often also the end of the road for many whites. Climate and disease ensured that the life expectancy of the Europeans who came to live in these towns was very short: the available data suggest that the life expectancy was no more than three-four years! This too was another important reason why genuine European towns were relatively "late" to arrive in Black Africa.

With the end of these European towns in Africa we come to the XIXth century and hence to the period which marked a major turning point in the history of both the European city and of what has become the Third World city. But, as we have already seen, this is also an historical period with characteristics different from the one that we have been examining in this paper, and one which has begun to assume dramatic features especially in the Third World where urban inflation in the last four decades has been particularly strong. This inflation will persist in the next decades so that the population of these regions which grew from 0.2 to 1.1 milliard between 1945 and 1985 will probably reach 3.8 milliards by the year 2025.

Appendix

Some major studies on European urban history between the XIIIth and XVIIIth centuries published between 1967 and 1987.

A. History of individual cities.

Asenjo Gonzalez, M.: *Segovia. La ciudad y su tierra a fines del medievo*, Segovia 1986.

Bardet, J.P.: *Rouen aux XVIIe et XVIIIe siècles*, 2 volumes, Paris 1983.

Bennassar, B.: *Valladolid au siècle d'or: Une ville de Castille et sa campagne au XVIe siècle*, Paris 1967.

Cieslak, E. (ed.): *Historia Gdanska*, tomes I and II, Gdansk 1974 and 1980.

Chacon Jimenez, F.: *Murcia en la centuria del Quinientos*, Murcia 1979.

Collantes de Teran, A.: *Sevilla en la Baja Edad Media. La ciudad y sus hombres*, Sevilla 1977.

Deyon, P.: *Amiens, capitale provinciale*, Paris and The Hague 1967.

Ebelin, D.: *Bürgertum und Pöbel. Wirtschaft und Gesellschaft Kölns im 18. Jahrhundert*, Cologne 1987.

El Kordi, M.: *Bayeux aux XVIIe et XVIIIe siècles. Contribution à l'histoire urbaine de la France*, Paris-The Hague 1970.

Francois, E.: *Koblenz im 18. Jahrhundert. Zur Sozial-und Bevölkerungsstruktur einer deutschen Residenzstadt*, Göttingen 1982.

Friedrichs, C.R.: *Urban Society in an Age of War: Nördlingen, 1580-1720*, Princeton 1979.

Garden, M.: *Lyon et les Lyonnais au XVIIIe siècle*, Paris 1975.

Gascon, R.: *Grand commerce et vie urbaine au XVIe siècle: Lyon et ses marchands*, 2 volumes, Paris 1971.

Guillaume, P.: *La population de Bordeaux au XIXe siècle. Essai d'histoire sociale*, Paris 1972.

Higounet-Nadal, A.: "Périgueux aux 14e et 15e siècles. Etude de démographie historique", Compte rendu in: *Annales de démographie historique, 1978*, pp. 443-448.

Kellenbenz, H. (ed.): *Zwei Jahrtausende Kölner Wirtschaft*, 2 volumes, Cologne 1975.

Laufer, W.: *Die Sozialstruktur der Stadt Trier in der frühen Neuzeit*, Bonn 1973.

Perrenoud, A.: *La population de Genève, XVIe-XIXe siècles*, Geneva 1979.

Perrot, J.C.: *Genèse d'une ville moderne; Caen au XVIIIe siècle*, 2 volumes, Paris 1975.

Poussou, J.P.: *Bordeaux et le Sud-Ouest au XVIIIe siècle*, Paris 1983.

Phythian-Adams, C.: *Desolation of a City. Coventry and the Urban Crisis of the Late Middle Ages*, Cambridge 1979.

Ringrose, D.R.: *Madrid and the Spanish economy, 1560-1850*, Berkeley 1983.

Seta, C. de: *Storia della città di Napoli*, Roma and Bari 1973.

Soly, H.: *Urbanisme en kapitalisme te Antwerpen in de 16de eeuw: De stedebouwkundige en industriele ondernemingen van Gilbert van Schoonbeke*, Brussels 1977.

Schich, W. Von: *Würzburg im Mittelalter. Studien zum Verhältnis von Topographie und Bevölkerungsstruktur*, Cologne 1977.

Sosson, J.P.: *Les travaux publique de la ville de Bruges, XIV-XVe siècles. Les matériaux. Les hommes*, Brussels 1977.

B. General studies

ABRAMS, P. and WRIGLEY, E.A. (ed.): *Towns in Societies*, Cambridge 1978.

BAREL, Y.: *La ville médiévale. Système social, système urbain*, Grenoble 1977.

BOGUCKA, M. and SAMSONOWICZ, H.: *Dzieje miast i mieszczanstwa w Polsce przedrozbiorowy*, Wroclaw 1986 (*Histoire des villes en Pologne durant les partages*).

CENTRE AIXOIS D'ETUDES ET DE RECHERCHES SUR LE XVIIIE SIECLE: *La ville au XVIIIe siècle* (Colloque d'Aix-en-Provence, 29 Avril-1er Mai 1973), Aix-en-Provence 1975.

CHEVALIER, B.: *Les bonnes villes de France du XIVe au XVIe siècle*, Paris 1982.

CLARK, P. and SLACK, P.: *English Towns in Transition 1500-1700*, Oxford 1976.

CLARK, P. (ed.): *The Transformation of English Provincial Towns 1600-1800*, London 1984.

CORFIELD, P.J.: *The Impact of English Towns, 1700-1800*, Oxford 1982.

Démographie urbaine XVe-XXe siècles, IIIe Rencontre franco-suisses, Centre d'histoire économique et sociale de la région lyonnaise, no 8, Lyons 1977.

DUBY, G. (sous la direction): *Histoire de la France urbaine*, 5 volumes, Paris 1980-1983.

DYOS, H.J. and WOLFF, M. (ed.): *The Victorian City: Image and Realities*, 2 volumes, London 1973 (reprint 4 volumes, London 1976-1978).

HOHENBERG, P.M. and LEES, L.H.: *The Making of Urban Europe 1000-1905*, Cambridge (Mass) 1985.

LEPETIT, B.: *Les villes dans la France moderne (1740-1840)*, Paris 1988.

MEYER, J.: *Les villes en Europe occidentale*, tome 1: Généralités - La France, Paris 1983.

MISKIMIN, H.A., HERLIHY, D. and UDOVITCH, A.L. (ed): *The Medieval City*, New Haven 1977.

PATTEN, J.: *English Towns, 1500-1700*, London 1978.

PLATT, C.: *The English Medieval Town*, London 1976.

POUSSOU, J.P., LOTTIN, A., VAN DER WOUDE, A., SOLI, H. and VOGLER, B.: *Etudes sur les villes en Europe Occidentale*, tome 2: Angleterre, Pays-Bas, Provinces Unies, Allemagne Rhénane, Paris 1983.

RENOUARD, Y.: *Les villes d'Italie de la fin du Xe siècle au début du XIVe siècle*, Paris 1969.

SCHMAL, H. (ed.): *Patterns of European Urbanization since 1500*, London 1981.

Villes et campagnes. XVe-XXe siècle, IIIe Rencontre franco-suisses, Centre d'histoire économique et sociale de la région lyonnaise, no. 9, Lyon 1977.

VRIES, J. de: *European Urbanization 1500-1800*, London 1984.