THE ORIGIN AND GROWTH OF URBANIZATION IN THE WORLD

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ABSTRACT

Although there were a few cities as early as 4000 B.C., the cities of the ancient world were generally small and had to be supported by much larger rural populations. "Urbanized societies," in which a high proportion of the population lives in cities, developed only in the nineteenth and twentieth centuries. The process of urbanization has moved rapidly in the entire world since 1800, and the peak is not yet in sight. A diminution of the rate of urbanization in the older industrial countries is being compensated for by an increase in the rate in the underdeveloped areas.

Urban phenomena attract sociological attention primarily for four reasons. First, such phenomena are relatively recent in human history. Compared to most other aspects of society—e.g., language, religion, stratification, or the family—cities appeared only yesterday, and urbanization, meaning that a sizable proportion of the population lives in cities, has developed only in the last few moments of man's existence. Second, urbanism represents a revolutionary change in the whole pattern of social life. Itself a product of basic economic and technological developments, it tends in turn, once it comes into being, to affect every aspect of existence. It exercises its pervasive influence not only within the urban milieu strictly defined but also in the rural hinterland. The third source of sociological interest in cities is the fact that, once established, they tend to be centers of power and influence throughout the whole society, no matter how agricultural and rural it may be. Finally, the process of urbanization is still occurring; many of the problems associated with it are unsolved; and, consequently, its future direction and potentialities are still a matter of uncertainty. This paper examines the first and last points: the origin, growth, and present rate of progress of urbanization in the world. Since good statistics on urban concentration do not exist even today for substantial parts of the world, and hardly exist for any part during most of the time since cities have been in existence, we are forced to rely on whatever credible evidence can be found and so can reach only broad conclusions concerning early periods and only approximations for recent times. Nevertheless, it can be said that our information, both statistical and nonstatistical, is much better today than when Adna Weber wrote his classic treatise on comparative urbanization at the turn of the present century.[1]

THE RISE OF EARLY URBAN CENTERS

Because the archeological evidence is fragmentary, the role of cities in antiquity has often been exaggerated. Archeologists in particular are inclined to call any settlement a "city" which had a few streets and a public building or two. Yet there is surely some point in not mistaking a town for a city. Moreover, what is important is not only the appearance of a few towns or cities but also their place in the total society of which they were a part. Thus, even though in particular regions around the Mediterranean and in southern and western Asia many towns and a few cities arose prior to the Christian Era, there were severe limitations both on the size that such cities could reach and on the proportion of the total population that could live in them.

Speaking generally, one can agree with the dominant view that the diverse technological innovations constituting Neolithic culture were necessary for the existence of settled communities.[2] Yet one should not

[1] Adna F. Weber, *The Growth of Cities in the Nineteenth Century* (New York: Columbia University Press, 1899).

[2] V. Gordon Childe, *Man Makes Himself* (rev. ed.; London: Watts, 1941), chaps. v–vi; *What Happened in History* (London and New York: Penguin Books, 1946 [first printed in 1942]), chaps. iii–iv.

infer that these innovations, which began some 8,000–10,000 years ago, were sufficient to give rise to towns as distinct from villages. Even though the Neolithic population was more densely settled than the purely hunting or food-gathering peoples, it was nevertheless chiefly engaged in an occupation—agriculture—which requires a large amount of land per person. The Neolithic population density was therefore not a matter of town concentration but rather a matter of tiny villages scattered over the land.

What had to be added to the Neolithic complex to make possible the first towns? Between 6000 and 4000 B.C. certain inventions—such as the ox-drawn plow and wheeled cart, the sailboat, metallurgy, irrigation, and the domestication of new plants —facilitated, when taken together, a more intensive and more productive use of the Neolithic elements themselves. When this enriched technology was utilized in certain unusual regions where climate, soil, water, and topography were most favorable (broad river valleys with alluvial soil not exhausted by successive cropping, with a dry climate that minimized soil leaching, with plenty of sunshine, and with sediment-containing water for irrigation from the river itself), the result was a sufficiently productive economy to make possible the *sine qua non* of urban existence, the concentration in one place of people who do not grow their own food.

But a productive economy, though necessary, was not sufficient: high productivity per acre does not necessarily mean high per capita productivity. Instead of producing a surplus for town dwellers, the cultivators can, theoretically at least, multiply on the land until they end up producing just enough to sustain themselves. The rise of towns and cities therefore required, in addition to highly favorable agricultural conditions, a form of social organization in which certain strata could appropriate for themselves part of the produce grown by the cultivators. Such strata—religious and governing officials, traders, and artisans—could live in towns, because their power over goods did not depend on their presence on the land as such. They could thus realize the advantages of town living, which gave them additional power over the cultivators.

The first cities, doubtless small and hard to distinguish from towns, seem to have appeared in the most favorable places sometime between 6000 and 5000 B.C. From that time on, it can be assumed that some of the inventions which made larger settlements possible were due to towns and cities themselves—viz., writing and accountancy, bronze, the beginnings of science, a solar calendar, bureaucracy. By 3000 B.C., when these innovations were all exercising an influence in Egypt, Mesopotamia, and India, there were in existence what may be called "true" cities. After that there appears to have been, for some 2,000 years, a lull during which the most important innovations, toward the end of the period, were alphabetic writing and the smelting of iron. Curiously, the cities in the regions where city life had originated eventually went into eclipse, and it was not until Greco-Roman times that new principles made possible, in new regions, a marked gain in city existence. The fact that the greatest subsequent cultural developments did not occur primarily in the regions where the first cities arose suggests that cities are not always and everywhere a stimulant of economic and social advance. Childe admits that, if anything, the first cities had a stultifying effect on cultural progress,[3] due perhaps to the unproductive insulation and excessive power of the urban elite. There is no doubt that the religio-magical traditionalism of the early cities was profound.

Why was there so little urbanization in ancient times, and why did it proceed so slowly from that point? The sites of the earliest "cities" themselves show that they were small affairs. The walls of ancient Babylon, for example, embraced an area of very roughly 3.2 square miles,[4] and "Ur,

[3] *Man Makes Himself*, p. 227.

[4] Deduced from data given in Marguerite Rutten, *Babylone* (Paris: Presses Universitaires de France, 1948), p. 34.

with its canals, harbors, and temples, occupied some 220 acres; the walls of Erech encompass an area of just on two square miles."[5] This suggests that the famous Ur could hardly have boasted more than 5,000 inhabitants and Erech hardly more than 25,000. The mounds of Mohenjo-daro in Sind cover a square mile,[6] and Harappa in the Punjab had a walled area visible in 1853 with a perimeter of $2\frac{1}{2}$ miles.[7] These were evidently "cities" of 5,000–15,000 inhabitants, yet they were the chief centers for the entire Indus region, an area nearly two-thirds the size of Texas. Less is known about the earliest Egyptian cities, for they were built with mud bricks and have long since disappeared beneath the alluvial soil. Tell el 'Amarna, the temporary capital built much later, about 1400 B.C., perhaps held something like 40,000 people. The wall of Hotep-Sanusert, an earlier capital built about 1900 B.C. on the Fayum, measured 350 by 400 meters[8] and inclosed an area of approximately one-twentieth of a square mile. Thebes, at the height of its splendor as the capital of Egypt about 1600, was described by Greek writers as having a circumference of 14 miles. By a liberal estimate it may have contained 225,000 inhabitants.

To the questions why even the largest cities prior to 1000 B.C. were small by modern standards, why even the small ones were relatively few, and why the degree of urbanization even in the most advanced regions was very slight, the answer seems as follows: Agriculture was so cumbersome, static, and labor-intensive that it took many cultivators to support one man in the city. The ox-drawn plow, the wooden plowshare, inundation irrigation, stone hoes, sickles, and axes were instruments of production, to be sure, but clumsy ones. Not until iron came into use in Asia Minor about 1300 B.C. could general improvement in agriculture be achieved. The static character of agriculture and of the economy generally was fostered perhaps by the insulation of the religio-political officials from the practical arts and the reduction of the peasant to virtually the status of a beast of burden. The technology of transport was as labor-intensive as that of agriculture. The only means of conveying bulky goods for mass consumption was by boat, and, though sails had been invented, the sailboat was so inefficient that rowing was still necessary. The oxcart, with its solid wheels and rigidly attached axle, the pack animal, and the human burden-bearer were all short-distance means of transport, the only exception being the camel caravan. Long-distance transport was reserved largely for goods which had high value and small bulk—i.e., goods for the elite—which could not maintain a large urban population. The size of the early cities was therefore limited by the amount of food, fibers, and other bulky materials that could be obtained from the immediate hinterland by labor-intensive methods, a severe limitation which the Greek cities of a later period, small as they remained, nevertheless had to escape before they could attain their full size.

There were political limitations as well. The difficulty of communication and transport and the existence of multifarious local tribal cultures made the formation of large national units virtually impossible. The first urban-centered units were city-states, and when so-called "empires" were formed, as in Egypt, in the Sumerian region, and later in Assyria, much local autonomy was left to the subordinated areas, and the constant danger of revolt prevented the extension of the hinterlands of the cities very far or very effectively. It is symptomatic of the weakness of the early cities that they were constantly threatened and frequently conquered not only by neighboring towns but also by nonurban barbarians. Each wave of barbarians tended to rebuild the urban centers and to become agricultural and sedentary, only to be eventually overwhelmed in turn by new invaders. Other limiting factors

[5] Childe, *What Happened in History*, p. 87.

[6] Stuart Piggott, *Prehistoric India* (Harmondsworth: Penguin Books, 1950), p. 165.

[7] Childe, *What Happened in History*, p. 118.

[8] Pierre Montet, *La Vie quotidienne en Égypte* (Paris: Hachette, 1946), p. 16.

were the lack of scientific medicine (which made urban living deadly), the fixity of the peasant on the land (which minimized rural-urban migration), the absence of large-scale manufacturing (which would have derived more advantage from urban concentration than did handicraft), the bureaucratic control of the peasantry (which stifled free trade in the hinterland), and the traditionalism and religiosity of all classes (which hampered technological and economic advance).

The limitations explain why we find, when the sites furnish adequate evidence, that the earliest cities were small affairs, usually no more than towns. Whether in the new or in the old world, even the biggest places could scarcely have exceeded 200,000 inhabitants, and the proportion of the total population living in them must have been not more than 1 or 2 per cent. From 50 to 90 farmers must have been required to support one man in a city.

SUBSEQUENT CITY DEVELOPMENT

If urbanization was to escape its early limitations, it had to do so in a new region, a region more open to innovation and new conceptions. As it turned out, the region that saw a later and greater urban development was farther north, the Greco-Roman world of Europe, flourishing approximately during the period from 600 B.C. to 400 A.D. Iron tools and weapons, alphabetic writing, improved sailboats, cheap coinage, more democratic institutions, systematic colonization—all tended to increase production, stimulate trade, and expand the effective political unit. Towns and cities became more numerous, the degree of urbanization greater. A few cities reached a substantial size. Athens, at its peak in the fifth century B.C., achieved a population of between 120,000 and 180,000. Syracuse and Carthage were perhaps larger.

The full potentialities of the ancient world to support a large city were realized only with the Romans. Through their ability to conquer, organize, and govern an empire, to put the immediate Italian hinterland to frutiful cultivation, to use both force and trade to bring slaves, goods, food, and culture to the imperial capital, they were able to create in Rome (with the possible exception of Constantinople some centuries later) the largest city that was to be known in the world until the rise of London in the nineteenth century. Yet, despite the fact that Rome and Constantinople came to hold populations of several hundred thousand, they were not able to resist conquest by far less urbanized outsiders. The eclipse of cities in Europe was striking. Commerce declined to the barest minimum; each locale became isolated and virtually self-sufficient; the social system congealed into a hereditary system.[9] When finally towns and cities began to revive, they were small, as the following estimates suggest: Florence (1338), 90,000; Venice (1422), 190,000; Antwerp (sixteenth century), 200,000; London (1377), 30,000;[10] Nuremberg (1450), 20,165; Frankfort (1440), 8,719.[11]

Yet it was precisely in western Europe, where cities and urbanization had reached a nadir during the Dark Ages, that the limitations that had characterized the ancient world were finally to be overcome. The cities of Mesopotamia, India, and Egypt, of Persia, Greece, and Rome, had all been tied to an economy that was primarily agricultural, where handicraft played at best a secondary role and where the city was still attempting to supplement its economic weakness with military strength, to command its sustenance rather than to buy it honestly. In western Europe, starting at the zero point, the development of cities not only reached the stage that the ancient world had achieved but kept going after that. It kept going on the basis of improvements in agriculture and transport, the opening of new lands and new trade routes,

[9] Henri Pirenne, *Medieval Cities* (Princeton: Princeton University Press, 1939), pp. 84–85.

[10] Pierre Clerget, "Urbanism: A Historic, Geographic, and Economic Study," *Annual Report of the Smithsonian Institution for 1912* (Washington, D.C.: Government Printing Office, 1913), p. 656.

[11] Henri Pirenne, *Economic and Social History of Medieval Europe* (London: Routledge & Kegan Paul, 1936), p. 172.

and, above all, the rise in productive activity, first in highly organized handicraft and eventually in a revolutionary new form of production—the factory run by machinery and fossil fuel. The transformation thus achieved in the nineteenth century was the true urban revolution, for it meant not only the rise of a few scattered towns and cities but the appearance of genuine urbanization, in the sense that a substantial portion of the population lived in towns and cities.

THE WORLD TREND FROM 1800 TO 1950[12]

Urbanization has, in fact, gone ahead much faster and reached proportions far greater during the last century and a half than at any previous time in world history. The tremendous growth in world trade during this period has enabled the urban population to draw its sustenance from an ever wider area. Indeed, it can truly be said that the hinterland of today's cities is the entire world. Contemporary Britain, Holland, and Japan, for example, could not maintain their urban population solely from their own territory. The number of rural inhabitants required to maintain one urban inhabitant is still great—greater than one would imagine from the rural-urban ratio *within* each of the highly urbanized countries. The reason is that much of agriculture around the world is still technologically and economically backward. Yet there can be no doubt that, whether for particular countries or for the entire globe, the ratio of urban dwellers to those who grow their food has risen remarkably. This is shown by the fact that the proportion of people living in cities in 1950 is higher than that found in any particular country prior to modern times and many times higher than that formerly characterizing the earth as a whole.

The rapidity of urbanization in recent times can be seen by looking at the most urbanized country, England. In 1801, although London had already reached nearly the million mark (865,000), England and Wales had less than 10 per cent of their population in cities of 100,000 or more. By 1901 no less than 35 per cent of the population of England and Wales was living in cities of 100,000 or more, and 58 per cent was living in cities of 20,000 or more. By 1951 these two proportions had risen to 38.4 and 69.3 per cent, respectively.

Britain was in the van of urban development. A degree of urbanization equal to that she had attained in 1801 was not achieved by any other country until after 1850. Thereafter the British rate of urbanization began slowly to decline, whereas that of most other countries continued at a high level. By assembling available data and preparing estimates where data were lacking, we have arrived at figures on urbanization in the world as a whole, beginning with 1800, the earliest date for which anything like a reasonable estimate can be obtained. The percentage of the world's population found living in cities is as shown in Table 1. It can be seen that the proportion has tended to do a bit better than double itself each half-century and that by 1950 the world as a whole was considerably more urbanized than Britain was in 1800. As everyone knows, the earth's total population has grown at an extremely rapid rate since 1800, reaching 2.4 billion by 1950. But the urban population has grown much faster. In 1800 there were about 15.6 million people living in cities of 100,000 or more. By 1950 it was

TABLE 1

PERCENTAGE OF WORLD'S POPULATION LIVING IN CITIES

	Cities of 20,000 or More	Cities of 100,000 or More
1800.....	2.4	1.7
1850.....	4.3	2.3
1900.....	9.2	5.5
1950.....	20.9	13.1

[12] The writer acknowledges with pleasure the collaboration of Mrs. Hilda Hertz Golden in the statistical work on which this and succeeding sections are based. Such work has been done as part of a continuing program of comparative urban research in the population division of the Bureau of Applied Social Research, Columbia University.

313.7 million, more than twenty times the earlier figure. Much of this increase has obviously come from rural-urban migration, clearly the most massive migration in modern times.

In 1800 there were apparently less than 50 cities with 100,000 or more inhabitants. This was less than the number in the million class today and less than the number of 100,000-plus cities currently found in many single countries. By 1950 there were close to 900 cities of 100,000 or more people, which is more than the number of towns and cities of 5,000 or more in 1800.

TABLE 2

PERCENTAGE OF WORLD'S POPULATION LIVING IN CITIES, BY REGIONS

	In Cities of 20,000 Plus	In Cities of 100,000 Plus
World	21	13
Oceania	47	41
North America (Canada and U.S.A.)	42	29
Europe (except U.S.S.R.)	35	21
U.S.S.R.	31	18
South America	26	18
Middle America and Caribbean	21	12
Asia (except U.S.S.R.)	13	8
Africa	9	5

As yet there is no indication of a slackening of the rate of urbanization in the world as a whole. If the present rate should continue, more than a fourth of the earth's people will be living in cities of 100,000 or more in the year 2000, and more than half in the year 2050. For places of 20,000 or more, the proportions at the two dates would be something like 45 per cent and 90 per cent. Whether such figures prove too low or too high, they nevertheless suggest that the human species is moving rapidly in the direction of an almost exclusively urban existence. We have used the proportion of the population in cities of 20,000 and 100,000 or more as a convenient index of differences and changes in degree of urbanization. Places of less than 20,000 also fit a demographic definition of "urban." When, therefore, more than a third of the population of a country lives in cities of the 100,000 class (38.4 per cent in England and Wales in 1951), the country can be described as almost completely urbanized (81 per cent being designated as "urban" in the English case in 1951). We thus have today what can be called "urbanized societies," nations in which the great majority of inhabitants live in cities. The prospect is that, as time goes on, a greater and greater proportion of humanity will be members of such societies.

The question may be raised as to how such an extreme degree of world urbanization will prove possible. Who will grow the food and fibers necessary for the enormous urban population? The answer is that agriculture may prove to be an archaic mode of production. Already, one of the great factors giving rise to urbanization is the rather late and as yet very incomplete industrialization of agriculture. As farming becomes increasingly mechanized and rationalized, fewer people are needed on the land. On the average, the more urbanized a country, the lower is its rural density.[13] If, in addition to industrialized agriculture, food and fiber come to be increasingly produced by manufacturing processes using materials that utilize the sun's energy more efficiently than plants do, there is no technological reason why nearly all of mankind could not live in conurbations of large size.

THE REGIONAL PATTERN OF URBANIZATION

The highest levels of urbanization are found today in northwestern Europe and in those new regions where northwest Europeans have settled and extended their industrial civilization. The figures are as shown in Table 2.[14] Oceania is the most urbanized of

[13] See Kingsley Davis and Hilda Hertz, "Urbanization and the Development of Pre-industrial Areas," *Economic Development and Cultural Change*, III (October, 1954), 6–26. See also the writer's paper, "Population and the Further Spread of Industrial Society," *Proceedings of the American Philosophical Society*, XCV (February, 1951), 10–13.

[14] From Kingsley Davis and Hilda Hertz, "The World Distribution of Urbanization," *Bulletin of the International Statistical Institute*, XXXIII, Part IV, 230.

the world's major regions, because Australia and New Zealand are its principal components. North America is next, if it is defined as including only Canada and the United States. The regions least urbanized are those least affected by northwest European culture, namely, Asia and Africa.

The figures for world regions are less valuable for purposes of analysis than are those for individual countries. The latter show clearly that urbanization has tended to reach its highest point wherever economic productivity has been greatest—that is, where the economy is industrialized and rationalized. This explains why urbanization is so closely associated with northwest Europeans and their culture, since they were mainly responsible for the industrial revolution. Of the fifteen most urbanized countries in the world, all but one, Japan, are European in culture, and all but four derive that culture from the northwest or central part of Europe.

The rate of urbanization in the older industrial countries, however, is slowing down. During the twenty years from 1870 to 1890 Germany's proportion in large cities more than doubled; it nearly doubled again from 1890 to 1910; but from 1910 to 1940 the increase was only 36 per cent. In Sweden the gain slowed down noticeably after 1920. In England and Wales the most rapid urbanization occurred between 1811 and 1851. Contrary to popular belief, the fastest rate in the United States occurred between 1861 and 1891. Since, as we noted earlier, there has been no slowing-down of urbanization in the world as a whole, it must be that, as the more established industrial countries have slackened, the less-developed countries have exhibited a faster rate. In fact, such historical evidence as we have for underdeveloped areas seems to show that their rates of urbanization have been rising in recent decades. This has been the case in Egypt, where the rate is higher after 1920 than before; in India, where the fastest urbanization has occurred since 1941; in Mexico, where the speed-up began in 1921; and in Greece, where the fastest period ran from 1900 to 1930. Asia, for example, had only 22 per cent of the world's city population in 1900 but 34 per cent of it in 1950, and Africa had 1.5 per cent in 1900 but 3.2 per cent at the later date.

With respect to urbanization, then, the gap between the industrial and the preindustrial nations is beginning to diminish. The less-developed parts of the world will eventually, it seems, begin in their turn to move gradually toward a saturation point. As the degree of urbanization rises, it of course becomes impossible for the rate of gain to continue. The growth in the urban proportion is made possible by the movement of people from rural areas to the cities. As the rural population becomes a progressively smaller percentage of the total, the cities no longer can draw on a noncity population of any size. Yet in no country can it be said that the process of urbanization is yet finished. Although there have been short periods in recent times in England, the United States, and Japan when the city population increased at a slightly slower rate than the rural, these were mere interludes in the ongoing but ever slower progress of urban concentration.

THE TENDENCY TOWARD METROPOLITAN EXPANSION

The continuance of urbanization in the world does not mean the persistence of something that remains the same in detail. A city of a million inhabitants today is not the sort of place that a city of the same number was in 1900 or in 1850. Moreover, with the emergence of giant cities of five to fifteen million, something new has been added. Such cities are creatures of the twentieth century. Their sheer quantitative difference means a qualitative change as well.

One of the most noticeable developments is the ever stronger tendency of cities to expand outward—a development already observed in the nineteenth century. Since 1861, the first date when the comparison can be made, the Outer Ring of Greater London has been growing more rapidly than London

itself. French writers prior to 1900 pointed out the dispersive tendency,[15] as did Adna Weber in 1899.[16] There is no doubt, however, that the process of metropolitan dispersion has increased with time. This fact is shown for the United States by comparing the percentage gains in population made by the central cities with those made by their satellite areas in forty-four metropolitan districts for which Thompson could get comparable data going back to 1900. The

TABLE 3

PERCENTAGE INCREASE IN POPULATION IN 44 METROPOLITAN DISTRICTS IN THE UNITED STATES, 1900–1940

	Central Cities	Rest of Districts
1900–1910...	33.6	38.2
1910–20.....	23.4	31.3
1920–30.....	20.5	48.7
1930–40.....	4.2	13.0

gains are as shown in Table 3.[17] The difference increases, until in 1930–40 the population outside the central city is growing more than three times as fast as that inside the central city. Furthermore, Thompson has shown that *within the metropolitan area outside the central cities* it was the "rural" parts which gained faster than the urban parts, as the percentage increases per decade shown in Table 4, indicate. Clearly, the metropolitan districts were increasingly dependent on the areas outside the central cities, and especially upon the sparsely settled parts at the periphery of these areas, for their continued growth. Thompson showed that, the greater the distance from the center of the city, the faster the rate of growth.[18]

The same forces which have made extreme urbanization possible have also made metropolitan dispersion possible, and the dispersion itself has contributed to further urbanization by making large conurbations more efficient and more endurable. The outward movement of urban residences, of urban services and commercial establishments, and of light industry—all facilitated by improvements in motor transport and communications—has made it possible for huge agglomerations to keep on growing without the inconveniences of proportionate increases in density. In many ways the metropolis of three million today is an easier place to live and work in than the city of five hundred thousand yesterday. Granted that the economic advantages of urban concentration still continue and still push populations in the direction of urbanization, the effect of metropolitan dispersion is thus to minimize the disadvantages of this continued urban growth.

TABLE 4

PERCENTAGE POPULATION INCREASE OUTSIDE CENTRAL CITIES IN 44 METROPOLITAN DISTRICTS

	Urban Parts	Rural Parts
1900–1910.	35.9	43.2
1910–20....	30.2	34.5
1920–30.....	40.6	68.1
1930–40.....	7.3	28.1

The new type of metropolitan expansion occurring in the highly industrial countries is not without its repercussions in less-developed lands as well. Most of the rapid urbanization now occurring in Africa and Asia, for example, is affected by direct contact with industrial nations and by a concomitant rise in consumption standards. Although private automobiles may not be available to the urban masses, bicycles and busses generally are. Hence Brazzaville and

[15] Paul Meuriot, *Des agglomérations urbaines dans l'Europe contemporaine* (Paris: Bélin Frères, 1898), pp. 249–78. Literature on the movement of industry and people to the periphery of cities is cited, and a theoretical discussion of the subject given, in René Maunier, *L'Origine et la fonction économique des villes* (Paris: Giard & Brière, 1910), pp. 231–314.

[16] *Op. cit.*, pp. 458–75.

[17] Warren S. Thompson, *The Growth of Metropolitan Districts in the United States, 1900–1940* (Washington, D.C.: Government Printing Office, 1948), p. 5. The picture is much the same for the rest of the metropolitan districts for decades in which comparability could be established.

[18] *Ibid.*, p. 9.

Abidjan, Takoradi and Nairobi, Jamshedpur and New Delhi, Ankara and Colombo, are not evolving in the same manner as did the cities of the eighteenth and nineteenth centuries. Their ecological pattern, their technological base, their economic activity, all reflect the twentieth century, no matter how primitive or backward their hinterlands may be. Thus the fact that their main growth is occurring in the present century is not without significance for the kind of cities they are turning out to be.

FUTURE TRENDS IN WORLD URBANIZATION

Speculation concerning the future of urbanization is as hazardous as that concerning any other aspect of human society. Following the direction of modern trends, however, one may conclude that, with the industrial revolution, for the first time in history urbanization began to reach a stage from which there was no return. The cities of antiquity were vulnerable, and the degree of urbanization reached was so thin in many societies as to be transitory. Today virtually every part of the world is more urbanized than any region was in antiquity. Urbanization is so widespread, so much a part of industrial civilization, and gaining so rapidly, that any return to rurality, even with major catastrophes, appears unlikely. On the contrary, since every city is obsolescent to some degree—more obsolescent the older it is—the massive destruction of many would probably add eventually to the impetus of urban growth.

The fact that the rate of world urbanization has shown no slackening since 1800 suggests that we are far from the end of this process, perhaps not yet at the peak. Although the industrial countries have shown a decline in their rates, these countries, because they embrace only about a fourth of the world's population, have not dampened the world trend. The three-fourths of humanity who live in underdeveloped countries are still in the early stages of an urbanization that promises to be more rapid than that which occurred earlier in the areas of northwest European culture.

How urbanized the world will eventually become is an unanswerable question. As stated earlier, there is no apparent reason why it should not become as urbanized as the most urban countries today—with perhaps 85–90 per cent of the population living in cities and towns of 5,000 or more and practicing urban occupations. Our present degree of urbanization in advanced countries is still so new that we have no clear idea of how such complete world urbanization would affect human society; but the chances are that the effects would be profound.

In visualizing the nature and effects of complete urbanization in the future, however, one must guard against assuming that cities will retain their present form. The tendency to form huge metropolitan aggregates which are increasingly decentralized will undoubtedly continue but probably will not go so far as to eliminate the central business district altogether, though it may greatly weaken it. At the periphery, it may well be that the metropolis and the countryside, as the one expands and the other shrinks, will merge together, until the boundaries of one sprawling conurbation will touch those of another, with no intervening pure countryside at all. The world's population doubles itself twice in a century, becoming at the same time highly urbanized, and as new sources of energy are tapped, the possibility of centrifugal metropolitan growth is enormously enhanced. If commuting to work could be done with the speed of sound and cheaply, one would not mind living two hundred miles from work. Almost any technological advance from now on is likely to contribute more to the centrifugal than to the centripetal tendency. It may turn out that urbanization in the sense of emptying the countryside and concentrating huge numbers in little space will reverse itself—not, however, in the direction of returning people to the farm but rather in that of spreading them more evenly over the land for purposes of residence and industrial work. "Rurality" would have disappeared, leaving only a new kind of urban existence.

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