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SOCIOLOGY, HISTORY AND THE ORIGINS  
OF THE EUROPEAN PROLETARIAT

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Sociology and history? When someone utters those magic words, a strong feeling wells up in me. The feeling is unquenchable apathy, unutterable ennui. (The ennui, I fear, extends to the dozen or so essays on the subject I have myself committed over the years. The apathy might even stem from those essays.) The topic calls forth the worst in both sociologists and historians. It calls forth dreary disquisitions on the epistemology of Geisteswissenschaften, flatulent tracts on the evils of Philistinism, exhortations to interdisciplinary efforts, earnest essays asking whether history is, or ought to be, quantifiable. Have we no choices but to chatter, grumble, mumble, or shout?

Yes, we have other choices. We can look backward or forward, and speak softly but clearly about what we see. Looking backward, we can examine previous efforts to answer questions which lie in the zone of overlap between sociology and history. Looking forward, we can identify fruitful areas for collaboration. Let us talk about a problem which requires us to look in both directions. Let us talk about the origins of the European proletariat.

The topic is old. It certainly antedates the invention of sociology as a separate discipline. Listen to what Adam Smith wrote in the century before sociology declared independence, and published in the year that the American colonies declared independence: "The demand for those who live by wages naturally increases with the increase of national wealth, and cannot possibly increase without it" (Wealth of Nations, Book I, chapter 8).

"Those who live by wages" is the short definition of the proletariat.

"The liberal reward of labor, therefore," said Smith later on, "as it is the effect of increasing wealth, so it is the cause of increasing population. To complain of it is to lament over the necessary effect and cause of the greatest public prosperity." In Smith's analysis, the increasing division of labor resulted from the rational disposition of the factors of production -- land, labor and capital -- by those who controlled each of them. Since the increasing division of labor enhanced productivity, it increased the return to all factors of production, including labor. Indirectly, the rational disposition of resources led to the growth of that part of the population which lived from wages alone. It led to the growth of the proletariat.

How did that growth occur? So far as I know, Adam Smith never analyzed the historical process in detail. Perhaps it seemed too obvious: wage-laborers multiplied because the demand for their labor increased. Malthus' gloss on Smith, after all, does little more than elaborate that basic relationship.

Writing a century later, however, Karl Marx considered the historical process of proletarianization to be both fundamental and problematic. Chapters twenty-five to thirty-two of Das Kapital discuss at length the formation of the English proletariat. Marx denied emphatically that the smooth operation of demand accounted for the proletarianization of the English labor force. "The proletariat created by the breaking up of the bands of feudal retainers and by the forcible expropriation of the people from the soil," he wrote, "this 'free' proletariat could not possibly be absorbed by the nascent manufactures as fast as it was thrown upon the world" (chapter 28). Thus, according to Marx, the industrial reserve army

which was essential to the operation of capitalist labor markets began to form. It is worth noting that Marx concentrated on rural, and especially agricultural, workers; only since his time has the term "proletarian" taken on its current connotation of large-shop manufacturing.

In general, Marx portrayed proletarianization as the forcible wresting of control over the means of production away from artisans and, especially, peasants. "In the history of primitive accumulation," he declared at the end of chapter twenty-six,

all revolutions are epoch-making that act as levers for the capitalist class in course of formation; but, above all, those moments when great masses of men are suddenly and forcibly torn from their means of subsistence, and hurled as free and "unattached" proletarians on the labour-market. The expropriation of the agricultural producer, of the peasant, from the soil, is the basis of the whole process.

Thus the central fact was the creation of a rural proletariat, working mainly for wages in agriculture, but available at bargain rates for industrial production.

Marx had little to say about the numbers involved, or about how those numbers changed from one period to the next. His implicit argument in that regard had two elements. First, the important increases in the number of proletarians occurred in bursts of expropriation such as the enclosures. Second, once people were proletarians, they more or less reproduced themselves: proletarians beget proletarians, apparently in constant numbers. If that is the case, the growth of the proletariat directly measures both the progress of expropriation and the current extent of exploitation.

Here sociology and history come together. Marx' analysis, and his apparent insouciance about the numbers involved, provide a prime opportunity for complementary work by people from the two disciplines. There is the opportunity to verify the main lines of Marx' analysis -- for example, the idea of spurts of proletarianization as a consequence of massive expropriation. There is the opportunity to specify the different paths by which people moved from artisanal or peasant production into various forms of wage labor. There is the opportunity to assign relative weights to those paths: which ones bore the most traffic? There is the opportunity to integrate them into a general account of the flows of people by which the largely peasant and artisanal European population of 1500 or 1600 became the overwhelmingly proletarian European population of 1900 and later.

How and why did that great shift occur? Why in Europe rather than elsewhere? In the century since Marx, one version or another of that double question has dominated the agenda of modern European economic and social history. Some of the debate has pivoted on the facts: how many yeomen, for example, did enclosures actually displace? Some of the debate has concerned the proper way to state the questions: Weber and Tawney differed over the appropriate Problemstellung as much as over the historical facts. And much of the debate has dealt with explanations: why did capitalism flourish earlier in Britain than in Prussia?

These problems are essentially historical: they concern real people at specific times and places in the past. Why, then, might proud and self-sufficient historians want to share them with mere sociologists? Well, both a backward look and a forward look identify these problems as a fruitful zone of collaboration between historians and sociologists. The backward look shows that one group of specialists within sociology has already

given historians valuable assistance in identifying and assembling the crucial evidence. Those specialists are the demographers. Once historians saw the value of demographic approaches to their problems to be sure, they acquired many of the essential skills themselves. Nonetheless, the continuing contributions of such demographers as Louis Henry remained crucial to the historical study of European populations. Furthermore, the forward look reveals a whole series of further problems to which sociological expertise is relevant, perhaps even indispensable.

One dull, routine sociological procedure which promises to help the search for the origins of the European proletariat is to break the search into three parts. The first part is the analysis of components of growth. The second, the explanation of the individual components and their interactions. The third, the integration of those partial explanations into a general account of the process. Let me stress at once that these are logical subdivisions of the task, not distinct temporal stages. If we *don't* begin with a piece of the third part, with a tentative account of the entire process of proletarianization, indeed, we are quite likely to wander through the analysis of components of growth, and to stumble through the explanation of individual components and their interactions. The secret is to begin with a tentative account which is clearly verifiable, falsifiable and correctible. Or, better still, two or three competing accounts which are clearly verifiable, falsifiable, and correctible. Accounts built on the arguments of Adam Smith and Karl Marx, let us say.

Components of growth? At its simplest, the analysis consists of defining precisely the change being analyzed, preparing a logically exhaustive list of the components of that change, and estimating the contribution of each component to the change as a whole. In the case of

European proletarianization, we must begin with working definitions of "Europe" and "proletarian". That means deciding what to do with Iceland, Constantinople, Malta, the Azores, and so on. It also means deciding whether it is possible to be a little bit proletarian -- for example, whether the independent weaver who hires himself out for the harvest qualifies as a proletarian, as one quarter of a proletarian, or as no proletarian at all. What about his young children? Uninteresting decisions, these, except that they significantly affect the results of the analysis.

These dull but crucial decisions made, we can begin to ask how the absolute number and the proportion of the European population in the category "proletarian" changed from, say, 1500 to 1900. We'll come back to guesses at the real numbers later. For now, the thing to notice is that we can break down those numbers into geographic, temporal and, most important, logical components. We may ask where the transformation of non-proletarian populations into proletarian populations occurred. Did it happen mainly in areas of advanced capitalism? We may ask when the transformation occurred? Did the process accelerate greatly with the expansion of large-scale manufacturing after 1800? We may also ask how it happened. But the how, in this case, concerns the logical components of the change.

If we turn to standard demographic accounting procedures, we find three logical possibilities. Each is in turn the resultant of two possible changes. The three logical possibilities are reclassification, natural increase and net migration. Marx stressed reclassification: the movement of a particular social unit from one category to another as a consequence of an alteration in its own characteristics or relationships. If individuals



are our social units, every person who in his own lifetime loses control over his or her means of production adds to the toll of proletarianization. Thus every landowning peasant who loses his land and becomes an agricultural wage-worker counts. However, every wage-worker who sets up business for himself subtracts himself from the toll of proletarianization. In fact, the same individual often oscillates between the two categories throughout his or her lifetime. The net effect of all such moves across the boundary is the component of reclassification.

Natural increase is the resultant of births and deaths. If I read him aright, Marx' implicit assumption was that natural increase was an unimportant component of the growth of the European proletariat: the deaths more or less balanced out the births, while net enlargements of the proletariat depended on new entries by people who began life as non-proletarians. This is where the components-of-growth analysis gets interesting. For several alternative possibilities exist. Given their vulnerability to infectious disease, starvation and war, proletarians sometimes underwent a natural decrease: deaths exceeded births. The question is: how often and how much? If natural decrease were the normal situation of proletarians, the proletarian population would be in something like the situation of most pre-industrial cities: they would have to recruit substantial numbers of newcomers merely to maintain their current size. To grow, they would have to recruit very large numbers indeed.

It is also possible that the normal situation of proletarians was for their birth rates to run above their death rates. In that case, the proletarian population could grow without any new recruitment of non-proletarians. If the proletarian rate of natural increase were higher than that of the population as a whole, the proletarian share of the total popu-

lation would tend to rise, even in the absence of lifetime mobility from non-proletarian to proletarian. With additional permutations of fertility and mortality, still further alternatives are quite possible; for example, the proletarian rate of natural increase could have risen over time.

The third component -- net migration -- likewise offers multiple possibilities. If we are considering the European population as a whole, the migration that matters consists of moves of proletarians into and out of the continent. Because that component, too, sums up numerous losses and gains, its overall effect may have been nil, a substantial addition to the proletariat, a substantial subtraction from the proletariat, a change over time, or something else. If we start considering migration into and out of the proletarian populations of different European regions, the problem becomes more complex and interesting.

To recapitulate: as in any population change, we can break down the increase of the European proletarian population from 1500 to 1900 (or for any other interval) in terms of a standard accounting equation:

$$P_2 = P_1 + (IC - OC) + (B - D) + (IM - OM) + e$$

where  $P_1$  and  $P_2$  are the populations at the two points in time, IC and OC are the numbers of persons who make lifetime moves into the category and out of it, B and D are births and deaths of members of the category, IM and OM are in-migration and out-migration, and e is the measurement error summed over all these observations.

Now, why should anyone care about these hypothetical numbers? For more reasons than one. First, if we are to attempt any general account of Europe's proletarianization, we have no choice but to formulate hypotheses

about the components of growth. The hypotheses may be implicit, and they may be very crude; they may consist, for example, of assigning an indefinitely large positive value to the net effect of lifetime moves and zero values to all the other components. That is the tone of Marx' analysis. Adam Smith, on the other hand, wrote as if natural increase were the only component differing significantly from zero. Thus in the absence of any exact numbers, the simple knowledge of which components were positive or negative, large or small, would give us the means of judging whether Marx' formulation, Smith's formulation, or some modification of one or the other, was more adequate.

Second, the relative weight and direction of the three components make a genuine difference to our understanding of the historical experience of proletarianization. To the extent that lifetime moves into the proletariat comprised the dominant process, we might expect a good deal of proletarian action to consist of efforts to retain or regain individual control over the means of production. On the other hand, that same extensive recruitment through lifetime moves would make it more difficult to account for the existence of an autonomous proletarian culture, persisting from one generation to the next. To the extent that natural increase was the main source of growth in the proletariat, we would find it easy to understand autonomous, persistent proletarian culture, but hard to account for artisanal and peasant themes in that culture. To the extent that net migration was the primary source, we might expect the proletariat to be the locus not only of alienation but of aliens, and to be correspondingly resistant to unification. The contrasting portraits of proletarian experience which come to us from, say, E. P. Thompson and Louis Chevalier may result in part from their having studied populations which differed signifi-

cantly in these regards, or from their having implicitly assumed differing configurations of reclassification, natural increase and net migration.

Third, the composition of the three major components matters as well. Zero net migration over a long period may result from no moves in either direction, from large but exactly equal flows of definitive in-migrants and definitive out-migrants, from numerous circular migrants who spend some time at the destination and then return to their points of origin, and from a number of other equalizing migration patterns. These are very different social situations. They have very different implications for social control, proletarian culture, class conflict and the recruitment of an industrial labor force.

Positive or negative net migration may likewise result from a wide variety of migratory patterns, each affecting life at the destination in different ways. The same observation holds for the sub-components of reclassification: temporary or definitive moves into the proletariat, temporary or definitive moves out of the proletariat. Clearly it holds for births and deaths as well. Consider the difference between a) slight natural increase due to high fertility which is almost balanced by high mortality and b) slight natural increase due to low fertility which is matched with even lower mortality. That is the difference between the death-ridden experience of the sixteenth century and the long life of the twentieth. To make such distinctions, we do not need the precise numbers. But we do need to consider the full set of components of growth.

It is a good thing we don't need the precise numbers. If we did, the task would be impossible in our lifetimes. Although the methods of archeology, paleobotany and historical demography may one day converge on fine estimating procedures for the European population, at present we have

only a crude sense of the grand totals. What is more, we have no large-scale estimates of the proletarian population. Indeed, we face one of those recurrent historiographical ironies: the ideas of "labor force" and "employment" are at once essential to the keeping of the sorts of statistics we need and contingent on the very process we hope to trace: proletarianization. In general, we cannot look to the statistical reports of national states before the full bloom of nineteenth-century proletarianization. For earlier periods, we must combine analysis of trends in small areas which historians have studied intensively with indirect inferences from other, more general trends.

We might, for example, reflect on trends in total and urban population since 1500. Table 1 and Figure 1 assemble data from many disparate sources -- especially from Chandler and Fox's mammoth compilation of urban populations. The numbers run higher than the usual estimates (for example, those in DeVries 1976) because they include European Russia, European Turkey and the rest of eastern and Mediterranean Europe. If the numbers have any relation to reality, they are beguiling. They indicate a relatively constant rate of European population growth before 1750: a bit faster in the early sixteenth century, a bit slower in the early seventeenth, but generally fluctuating around a quarter of one percent per year. After 1750, and especially from 1850 to 1900, we witness an acceleration of total growth despite the fact that net emigration from Europe was likewise accelerating. In these figures, the "expansion" of the sixteenth century and the "crisis" of the seventeenth appear as minor deviations from a well-established trend rather than as major turnabouts. However, since the estimates before 1800 result from interpolations and approximations, we should treat their ups and downs as fragile hypotheses.

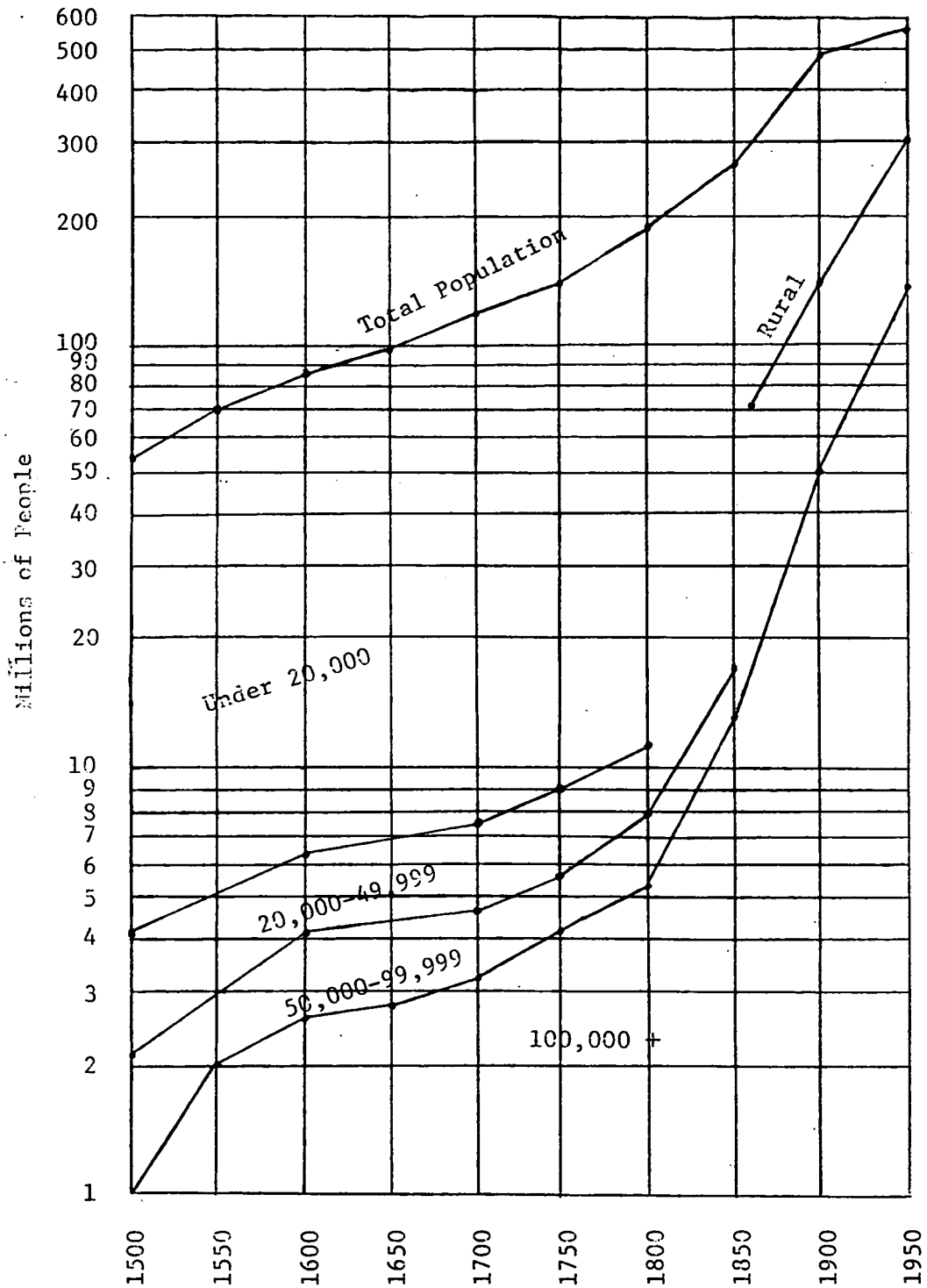
The figures for urban population are a bit more solid. They result from the collation of reported figures for individual places throughout the 450-year interval, interpolated and summed at the fifty-year marks. They indicate more or less continuous urban growth throughout the period, as we might expect. They show the expected speeding up of urban growth after 1800. Yet they also have an unexpected implication. If the figures are correct, the share of the European population in big cities rose dramatically in the early sixteenth century. From 1500 to 1550, the proportion of the population in cities of 100,000 or more went from 1.6 to 2.9 percent. A major part of that sixteenth-century growth occurred in Mediterranean cities, including Constantinople. Nevertheless, future North European leaders such as London, Copenhagen, Danzig and Amsterdam were growing as well. The figures indicate that after the first surge of sixteenth-century urban growth, the proportion of the population in large cities did not rise again until the nineteenth century. In fact, if we sum the figures for cities of 20,000 and larger, they show a de-urbanization of Europe after 1600.

Now, that surprising conclusion may well fade away in the light of fuller evidence. Nonetheless, it is not so implausible on the second look as it is on the first. If the figures are correct, Europe de-urbanized from 1600 to 1800 because urban growth slowed while total growth continued. To put it another way, the rural and small-town population grew faster than the population in large cities. It is possible that the normal natural decrease of cities grew larger as sanitation, nutrition and health care declined, that the normal natural increase of rural areas increased as fertility rose or mortality declined, and that the normal rural-to-urban flow of migrants diminished. All three may well have happened.

Table 1. Total and Urban Population of Europe, 1500-1950.

<u>Year</u>	<u>Total Population In Thousands</u>	Percent of Total in Cities of:		
		<u>100,000+</u>	<u>50,000 to 99,999</u>	<u>20,000 to 49,999</u>
1500	56,000	1.6	2.3	3.4
1550	71,000	2.9		
1600	85,000	3.1	1.7	2.7
1650	100,000	2.7		
1700	120,000	2.7	1.3	2.3
1750	140,000	3.0	1.1	2.4
1800	190,000	2.9	1.4	2.0
1850	266,228	5.2	1.4	
1900	497,100	10.1		
1950	576,000	24.2		

Figure 1. Europe 1500-1950: Numbers of People by Size of Settlement.





These hypothetical changes are thinkable for several reasons. First, Europe's larger cities were unhealthy places, and may well have gotten unhealthier as they grew. Second, the food supply of large cities was growing increasingly problematic in the seventeenth and eighteenth centuries despite modest increases in agricultural productivity. Urban growth may well have overrun the general capacity of European agriculture to support non-producers, surpassed the abilities of merchants and officials to extract whatever surplus did exist, strained the limits to shipping of food set by reliance on navigable waterways, and exceeded the possibility that particular cities and their immediate hinterlands could produce enough to sustain their own non-agricultural populations. In such circumstances we would expect the cost of food to rise prohibitively in urban areas. The eighteenth-century rise of the food riot and the elaboration of municipal and national controls over food supply certainly suggest a sharpening struggle over the disposition of food during the period of apparent de-urbanization. Third, as we shall see, there are reasons for thinking that natural increase rose in important parts of rural and small-town Europe during the seventeenth and eighteenth centuries. Whether such increases resulted from declining mortality, rising fertility, or both, remains debatable. We shall return to that problem, too.

The final possible source of de-urbanization connects the most directly with our inquiry into the origins of the proletariat. Two kinds of employment were growing rapidly in the Europe of 1600 to 1800; they were surely growing more rapidly in small towns and rural areas than in big cities. One was wage-labor in agriculture. The other was cottage industry. The expansion of agricultural wage-labor proletarianized, almost by definition; it was the principal case Marx had in mind. The growth of cottage

industry did not necessarily proletarianize; that depended on who held control of the means of production. But in fact the major European forms of cottage industry created a workforce which depended for survival on the sale of its labor power. Thus it is plausible (although far from established) that a temporary de-urbanization of Europe did occur in the seventeenth and eighteenth centuries, and that the growth of a rural proletariat contributed significantly to that de-urbanization.

If we start our inquiry at 1500 and end it at 1900, we are dealing with an increase in the total European population from fifty or sixty million to around 500 million. That makes a net rise of about 450 million. A large portion of that increase consisted of net additions to the proletariat. But how much, <sup>where</sup> when/and how? Of the estimated 56 million Europeans in 1500, a good half were probably peasants -- people living mainly from agriculture who supplied the bulk of their own labor requirements and exercised substantial control over the land they farmed. It is unlikely that many more than a million were landlords, officials, merchants or artisans who disposed of the products of their labor. That leaves a possible twenty million wage-workers in agriculture, manufacturing and services.

By 1900, the great majority of the 500 million Europeans were wage-workers and their households. Now, setting limits on all these speculative numbers is itself an important task for theory and research. Since at this point we are only seeking orders of magnitude, however, let us simply guess the number of proletarians in 1900 at a conservative 300 million. That figure would leave us a net increase of 280 million proletarians to account for. (It would also, incidentally, give us a net increase of something like 160 million non-proletarians to explain.) If those are the numbers, we must ask when <sup>where</sup> and how the increase occurred.

The timing of total population growth sets important limits on the possible timetable of proletarianization. Since the population of Europe rose from under 200 million to around 500 million during the nineteenth century, a large part of the net increase in the proletariat must also have occurred in the nineteenth century. Nevertheless, given the significant eighteenth-century expansion of wage labor in such widely scattered areas as England, Poland and Spain, it is quite possible that by 1800 something like 100 million Europeans were already proletarians and their households. Now, according to my estimates no more than twelve million people then lived in cities of 20,000 or larger. Nine-tenths of Europe's proletarians therefore probably lived in smaller cities, towns and rural areas. In tracing the proletarianization of Europe before 1800, we have to give priority to farms and villages. From the nineteenth century onward, larger cities start occupying our attention.

We are thinking about components of growth within a population which broke down something like this:

	(millions of persons)		
	<u>1500</u>	<u>1800</u>	<u>1900</u>
total population	55	190	500
non-proletarians: peasants, artisans, landlords, officials, etc.	30	100	200
proletarians in cities of 20,000+	3	10	100
proletarians in smaller places	22	80	200

To avoid any misunderstanding, let me repeat: these numbers are no more than thoughtful guesses, orders of magnitude, hypotheses to verify. Their revision stands high on the agenda of historical demography. I have de-

liberately understated my own sense of the size of the proletariat in 1900, in order to avoid fruitless controversies about so-called peasants who owned an acre of land, or so-called artisans who had nothing but a toolbox to call their own. Even understated, the numbers suggest a thirty-fold increase in the proletarian population in larger cities, a ten-fold increase of proletarians in smaller places, a more rapid increase of proletarians in smaller places before 1800, a great acceleration of urban proletarianization in the nineteenth century. With these orders of magnitude in mind, let us return to the components of growth: reclassification, natural increase and net migration.

#### Reclassification

Speaking of the sixteenth- and seventeenth-century Netherlands, Jan De Vries distinguishes between two models of rural social organization: a peasant model and a specialization model. Peasants produce enough to survive at a conventional level of well-being and to meet their basic outside obligations. They work to insulate themselves from the market's vagaries. They produce a variety of non-agricultural goods and services, while avoiding purchases of goods and services as much as possible. They seek in general to maintain all their offspring on the land. With natural increase that strategy produces subdivision of holdings and intensified cultivation of the available land. The result is then that per capita income almost never rises, but remains constant or declines.

Specialists, on the other hand, exploit the market by concentrating on profitable crops. They specialize in agricultural production, and purchase goods and services they cannot produce profitably. They accumulate capital and reinvest it in land and equipment. Such children as they cannot profitably employ on the land they place in other forms of enterprise.

Over the long run, their per capita income tends to rise. The specialists are capitalists, the peasants non-capitalists, often anti-capitalists.

The two models identify two quite different exits from the peasantry. The peasant path leads eventually to wage-labor in agriculture or in industry. The specialization path leads to cash-crop farming. The peasant strategy proletarianizes, while the specialization strategy, if successful, capitalizes. The peasant strategy leads to wage labor for two reasons: first, because its internal logic results sooner or later in the over-running of the household's capacity to support itself from the land it controls; second, because in the meantime capitalists are expanding their control over the land and over other means of production. English enclosures and Polish "refeudalization" are variants on that second pattern. Whether the new proletarians remained in agricultural wage labor, moved into manufacturing or took up some combination of the two varied significantly as a function of the local labor requirements of agriculture and the market for local manufactures. In the Swiss mountain areas studies by Rudolf Braun, cottage textile manufacturing oriented toward Zurich displaced the subsistence agriculture of the uplands. In the Leicestershire agricultural villages studies by David Levine, cottage industry provided the context for proletarianization where the landlord tolerated it, but dairy farming produced a later, slower and more subtle form of proletarianization where the landlord would not tolerate manufacturing. In the Flanders studied by Franklin Mendels, the proletarianizing populations of the coast moved into agricultural wage labor, while those of the interior moved into a mixture of agriculture and textile industry, and shifted their weight from one to the other as a function of the available wage.

Parallel paths led away from the world of artisans. Artisans skidded

into the proletariat as cheaper. production processes reduced the demand for their wares and as entrepreneurs assumed control over the means of production. But a few artisans climbed into the bourgeoisie by becoming successful entrepreneurs. Herbert Kisch gives us the contrast between Silesia and the Rhineland (Kisch 1959, 1965, 1968). In both places the growth of rural textile production undercut the urban craft guilds. But in Silesia the process was one of almost pure proletarianization, as a small number of chartered merchants worked with large landlords who were happy to have weaver-serfs contributing to the incomes of their estates. In the Rhineland proletarianization was likewise the main trend, but a few master craftsman in Cologne, Barmen, Aachen and elsewhere accumulated capital and made themselves pivotal figures in textile production. Although Kisch does not give us the details of labor force recruitment, lifetime movement from artisan to proletarian must have been a common experience in both regions. In neither case, however, is it likely that reclassification was the main component of the proletariat's growth. Natural increase and migration must have been important in both Silesia and the Rhineland.

#### Natural Increase

Natural increase or decrease is the net effect of births and deaths. The proletariat grows through natural increase when, in any given period, more proletarians are born than die. Perhaps we should distinguish between the proletarian children of non-proletarian parents and the proletarian children of proletarians. In the first case we are midway between reclassification and natural increase: if at a given succession a peasant holding fragments into pieces too small to support the heirs, we may debate how much of that family's move into the proletariat is due to natural increase. The same is true of the "extra" child of a peasant family who spends life

as a servant or day-laborer. Yet at least some of the resulting expansion of the proletariat is attributable to natural increase.

The least ambiguous, and most important, case is somehow the most ignored. It is the natural increase of full-fledged proletarians. If, on the average, the natural increase of wage laborers were greater than that of peasants and artisans, that fact alone would be sufficient to produce a relative growth of the proletariat without any skidding of peasants or artisans and without any in-migration of proletarians. I suspect that differential natural increase was the principal component in the relative growth of the European proletariat from 1500 to 1900. More precisely, I suspect that the principal component was natural increase resulting from the difference between fairly high mortality and very high fertility. More precisely yet, I propose the following hypothesis: on the average, proletarians responded to economic expansion with greater declines in mortality and greater increases in fertility than the non-proletarian population, and responded to economic contraction with greater increases in mortality but **no greater declines** in fertility than the non-proletarian; the consequence was a disproportionate natural increase of proletarians in good times which was uncompensated by the natural decrease of bad times. Since the period we are considering was on the whole a time of economic expansion, such a system would have produced a significant tendency for the proletariat to increase more rapidly than the rest of the population. My hypothesis is that it did.

In one muted form or another, the hypothesis is quite old. In his pioneering study of the Vale of Trent, J.D. Chambers noted the higher natural increase of parishes with rural industry during the years from 1670 to 1800. Although they lack crucial evidence concerning the components of

growth, Karlheinz Blaschke's analysis of Saxony, Arnost Klíma's discussion of Bohemia and Rudolf Braun's portrayal of the Zurich Uplands all bring out a similar contrast between slow-growing regions of agriculture and fast-growing regions of rural industry. In his fairly direct attack on the problem, David Levine identifies a relationship between rising natural increase and rural industrial growth in eighteenth-century Shepshead, between rising natural increase and agricultural proletarianization in nineteenth-century Bottesford.

If such a relationship holds, it reverses some of our conventional wisdom. We commonly think of rural proletarianization as a consequence of rapid population growth -- too many people for the available land. But the possibility we see here is that proletarianization may induce rapid population growth. Of course, both may be true. Then a process of proletarianization initiated by some such action as enclosure will tend to perpetuate itself up -- or, rather, down -- to the limit set by starvation.

How and why would the natural increase of proletarians tend to exceed that of non-proletarians? The critical relationships link fertility, marriage and the availability of employment. In a world in which most households control their own means of production, the chief opportunities for young adults are to inherit positions within their own households, or to enter other households. In the world of European artisans and peasants, the capital of a household set stringent limits on the number of persons it could sustain; household capital thereby limited the number of children who could remain home into adulthood, and especially into marriage and parenthood. The only way to enter another household was a full-fledged adult was to marry in. Persons who entered as servants, apprentices, day-



laborers and the like ordinarily acquired no control over the household means of production, and no right to marry or to procreate. Opportunities to marry, to have children, and to place one's own children in full-fledged adult positions thus depended on the rate at which senior positions in households were opening up. Mortality was the chief determinant of that rate. But on occasion out-migration or the putting of new land into cultivation also provided new adult opportunities.

Under these circumstances, couples adapted both their marriage rate and their fertility to the probable availability of adult positions and to the probability that their newborn children would survive to adulthood. As a result, marriage and fertility surged after famine or pestilence wiped out many adults, and slowed when mortality declined. Or so it seems. Any hypothesis which implies widespread, deliberate fertility control before the nineteenth century is controversial in the present state of our knowledge. Furthermore, the main relationships are hard to disentangle empirically from other contrary effects. It is likely, for example, that improvements in nutrition boosted fertility and depressed mortality simultaneously (McKeown 1976, Lee 1977b). It is quite possible, as William Langer has suggested, that the expanding cultivation of American plants such as the potato significantly improved life expectancy, and thus contributed to natural increase without any necessary rise in fertility. Yet the general hypothesis that people adjusted marriage and fertility to the availability of adult places in crafts and on the land is not absurd. In one form or another, it has been around since Malthus. And it is compatible with many forms of fertility control short of the self-conscious efficacy of twentieth-century contraception.

Proletarians faced a different set of circumstances. To the extent that the world around them was proletarian, they had both the incentive and

the opportunity to marry and form their own households early. They could acquire the means of survival as adults at quite a young age. The characteristic organization of work and the characteristic lifetime curve of earnings provided further encouragements to marriage and fertility. Especially in the many variants of domestic industry, the standard labor unit was not a single individual but a household -- for example, a weaver plus several spinners and tenders (see Tilly and Scott 1977). To work in these arrangements, it was almost essential to form a household. The fact that children began bringing in income at an early age and the further fact that income peaked early in life and then declined with enfeebling age increased the incentives to high fertility. So long as employment opportunities, however marginal, were expanding, a proletarian strategy of early marriage and high fertility made sense. At least it made sense in the short run.

#### Net Migration

Migration figured in the formation of the European proletariat in two rather different ways: as a crude component of growth, and as a process affecting reclassification and natural increase. From the perspective of Europe as a whole from 1500 to 1900, the chief contribution of migration was negative: the continent shipped out many more migrants than it took in, and the bulk of the out-migrants were proletarian. Before 1750 the net outflows were small: colonists to the Americas, Slavs into continental Asia, trickles of settlers into other parts of the world. With the accelerating population growth of the later eighteenth century, out-migration speeded up as well. A plausible estimate for the period from 1800 to World War I is a net loss of 50 million Europeans to extracontinental migration. Before 1900, those out-migrants came disproportionately from the British Isles. From 1846 to 1890, for example, an estimated 48% of all European out-migrants came from England, Scotland, Wales or Ireland (Kosínski 1970: 57). The

loss of migrants was equivalent to a fifth or a sixth of the continent's entire nineteenth-century population growth.

Most of those millions were proletarians. A prototype of the transatlantic migration was the outflow from seventeenth-century Tourouvre-au-Perche (Charbonneau 1970). The roughly 300 migrants from Tourouvre and vicinity and their numerous descendants played a major part in the settlement of Quebec. Labor recruiters intervened into a local but very active system of migration, in which wage-laborers already predominated. The recruiters drew a high proportion of young men in their twenties, most of them apparently servants and day-laborers. In Canada, to be sure, their grants of land transferred them out of the proletariat. In the European reckoning, they were simply a loss of a few hundred proletarians.

Or take one of the best-documented flows after 1800: from Denmark to America (Hvidt 1975). Denmark's nineteenth-century population ran in the vicinity of two million people. That small country sent almost 300 thousand migrants to North America between 1840 and 1914. The bulk of the migrants were servants, wage-laborers and other proletarians. The ideal candidates for emigration seem to have been young people who had already made the move from farms and villages to a nearby, slow-moving regional center. Many -- probably the great majority -- moved within chains of friends, neighbors and kinsmen who kept information about American opportunities flowing back to Denmark, and who helped the migrants find the passage money, jobs and housing. The chains also made it easier for those who disliked America to return home. But their main effect was to facilitate the flow of emigrants from Denmark. Their demographic effect was a net loss of some 200 thousand Danish proletarians.

Migration also influenced the growth of the proletariat indirectly

through its effect on reclassification and natural increase. One of the most valuable by-products of recent European historical demography has been the accumulating evidence of high mobility levels before the period of large-scale industrialization. Contrary to the idea of an immobile pre-industrial world, historians of many different parts of Europe turn up village after village with annual migration rates of 10% or more (e.g. Bukatzsch 1951, Cornwall 1967, Gaunt 1976, Hammer 1976, Hollingsworth 1971, Patten 1973, Poussou 1974, Sabeau 1971). Americans of the last century have considered themselves exceptionally mobile because in the average year about 20% of the population have changed residence -- and a great many of them have moved within the same community. Comparable levels of mobility are showing up in many parts of Europe before massive industrialization.

That high pre-industrial mobility, however, requires several qualifications. First, that earlier Europe was not pre-industrial in a strict sense of the term. Dispersed, small-scale manufacturing played an important part in rural and small-town life, occupying a significant part of the population at least part-time. People working in small-scale industry were a relatively mobile segment of the population. They also comprised a significant part of the European proletariat. Second, most of the moves were quite local. They consisted largely of exchanges of labor among nearby villages and of a small city's making up its natural decrease through the recruitment of youngsters from its immediate hinterland. Third, the most active migrants were proletarians. Proletarianization itself produced migration, as when a household displaced by enclosures left the land or an extra child of a peasant family trudged off to work as a mercenary soldier or domestic servant. In addition, the proletarian

worker had the least to tie him to any particular locality, and the greatest incentive to follow the trail of better wages into a new labor market. The local authorities of seventeenth-century England considered the ever-present wanderers as potential workers in good times and as "vagrants" in bad times (Slack 1974). In good times or bad they were quintessential proletarians.

The pattern of proletarian mobility affected the performance of reclassification and natural increase as components of the growth of the proletariat. The existence of well-established flows of migrants probably facilitated the proletarianization of the population in two ways. First, it helped produce a whole series of intermediate positions between the full artisan or peasant and the full proletarian -- the Alpine peasant who walked off to be peddler in the winter, the weaver who followed the harvest in the fall, and so on. What appeared to be temporary expedients imperceptibly became a proletarian life. Second, the existence of well-established migratory flows withdrew the proletarianizing populations from the communities in which they had rights and solidarity, and placed them in communities in which they had neither. If the choice had been sharper and more dramatic in either regard, one might suppose that the proletarians would have resisted their fate with greater determination and effectiveness. When the choice was sharp and the proletarianizing populations still embedded in their communities, they did often fight back. They fought by attacking others who were seizing control of the means of production, and they fought by adopting family strategies which limited the strain on household resources: strategies of late marriage, low fertility, regrouped inheritance, and so on. That fight against proletarianization pervades eighteenth-century peasant struggles against enclosures and

alienation of common rights, nineteenth-century artisanal struggles against work-discipline, twentieth-century winegrowers' struggle against big producers. It was a losing battle, but passionately fought.

#### Caveats and Conclusions

In hacking out the contours of this massive problem, I have neglected all the graceful refinements which make the problem interesting. For example, the detailed timetable of proletarianization matters a good deal. Surely the absolute number of peasants, artisans, and other non-proletarians increased substantially in the centuries after 1500; is it possible that at first they increased more rapidly than the population as a whole, and in that sense the sixteenth century was a time of de-proletarianization? The geography of proletarianization likewise cries out for attention. At a minimum we need contrasts among the legal enserfment of essentially landless laborers on the large estates of eastern Europe, the creation of a legally free proletarian labor force in England, and the emergence of landowning peasants and cash-crop farmers in important parts of western Europe. Finally, a historically useful portrayal of the demography of proletarianization cannot stop with the tabulation of reclassification, natural increase and net migration as separate components. It must specify their interplay. All this requires a more refined and sophisticated analysis than I have provided here.

Back at the beginning of this long discussion I said there were three steps to the appropriate sociological procedure: the delineation of the components of growth, the separate explanation of each of the components, and the integration of those explanations into a comprehensive account of the whole process. We have not, by any means, completed that entire program. Yet the fragmentary observations we have made point to

the utility of a modified Marxian account of European proletarianization. The most important modification consists of the large significance attributed to natural increase within the existing proletariat. Marx implicitly made lifetime entries of non-proletarians -- that is, reclassification -- the major component of the proletariat's increase. The modification fits nicely with that brand of Marxian analysis, typified by E.P. Thompson, which emphasizes the continuity of working-class culture from one generation to the next.

Now, that is a gratifying conclusion for a reason we have not discussed at all. It tells us we need not make some drastic choice between "quantitative" and "qualitative" analyses, between numbers and people, between demographic characteristics and cultural characteristics, between sociology and history. In the particular context we have been exploring, the available sociology has the advantage of helping specify what is to be explained, and of helping sort out the available explanations. But it leads right back to honest history, history rooted in real times and places.

Despite my initial disclaimers, I seem to have unfurled a banner. A red flag, you might say. The idea of Karl Marx as the master historical demographer contains something to offend historians of almost every theoretical persuasion. That includes Marxists. Yet I have not woven the flag of whole cloth. On the contrary: it is a thing of gaps and patches. The available sociology traces a broad pattern across the banner's riotous fragments. It is up to historians who know the real people, places and processes involved to reweave the material into a coherent and valid design.

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