PROTOINDUSTRIALIZATION, DEINDUSTRIALIZATION, AND JUST PLAIN
INDUSTRIALIZATION IN EUROPEAN CAPITALISM

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Prologue

Sometimes historians take a very long time to learn what people of the times they study took for granted. That is surely the case with our recent rediscovery of protoindustrialization. It is probably the case with our equally recent discovery of deindustrialization. It may also be the case with our current close examination of proletarianization. Not that seventeenth- or eighteenth-century Europeans uttered these late twentieth-century terms, or understood the processes they tag in the same way we do. No doubt we are better able to put the processes in historical perspective, and to sort out their interactions. But even that ability has only come to us after a struggle with the pervasive unilinear view of industrialization that took hold of western thought during the nineteenth century. This paper offers a brief summary of that struggle.

Not long ago, economic historians of Europe began to raise serious questions about the idea of industrialization as a rapid technological break with the past; when they looked, they found agricultural origins for industry, extensive industrial expansion in rural areas without major alterations in the techniques or scale of production, and the growth of a large proletarian population far from big cities and factories. The notion of protoindustrialization (Franklin Mendels' term for the second of these three processes) served as an indirect critique of optimistic theories concerning the exportation of industrial organization from the rich countries of the West to the Third World. Although seventeenth- and eighteenth-century Europeans had neither the concepts nor the models of the late twentieth century, they were amply aware of most of the changes we now call protoindustrialization.

More recently, deindustrialization has caught our historical fancy. Located in regions (such as the automobile-dependent Michigan in which I write) threatened with the loss of their industrial bases, we become sensitive to another recurrent feature of European industrialization: the decline of a once-thriving industrial complex as
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entrepreneurial activity, capital, production and, eventually, labor move elsewhere. There is, we learn, nothing recent about the phenomenon. The rise of new industrial centers has always threatened their older competitors, and has sometimes done them in. Protoindustrialization itself occurred at the expense of higher-priced urban industry. Whole regions of Italy and Germany lost their advantages as the poor villagers of Lancashire and Flanders took to producing low-cost cotton fabrics for subsistence wages. The Italian, German, English and Flemish workers who bore the cost of these shifts lacked our sophisticated terminology and theories, but knew very well that major changes were happening to their lives.

I am not satisfied with the statements on protoindustrialization and deindustrialization this paper makes. They range from the obvious to the dubious, with too little in between. Nevertheless, it seems useful to set down a reminder of things we know, and things we need to know. To render the paper a bit more useful, I have padded a thin statement with a thick bibliography.

Protoindustrialization

Thanks to the recent articulation of economic and demographic history, students of European industrialization are at last becoming aware of of three basic facts about the development of industrial capitalism. First, there is the widespread expansion of industrial production in villages and small towns, long before power-driven factories played a significant part in manufacturing -- protoindustrialization. Then, there is the considerable proletarianization of the village and small-town population before the massive population redistribution of the nineteenth century. Finally, there is the interdependence between the expansion of industrial production and the proletarianization.

Although Europeans of the seventeenth and eighteenth centuries had no reliable explanations of these changes, they certainly had an idea that some such changes were happening. As of 1688, Gregory King estimated that of the 1.4 million families
in England, 354,000 were "labouring people and outservants" and another 400,000 "cottagers and paupers" (King 1936/1696: 31). As of 1760, Joseph Massie was counting a total of 1.5 million families in England and Wales; of them, according to Massie, 100,000 were rural producers of wool, silk, and other fabrics, and another 100,000 were producers of "Wood, Iron, etc." in the countryside; Massie also counted 200,000 families of husbandmen and 200,000 families of rural laborers (Mathias 1957: 42-43). If so, roughly 40 percent of the entire population depended mainly on wages, and at least 13 percent drew their wages from manufacturing.

By 1803, Patrick Colquhoun thought that the 2.2 million families of England and Wales included 340,000 who were laborers in husbandry, 260,000 pauper laborers, and another 490,000 artisans, handicraft workers, mechanics, laborers in manufactures, building, mines, canals, etc., most of whom were landless wage-workers -- not to mention another 222,000 individuals Colquhoun called "vagrants" (Colquhoun 1806: 23). According to any of these informed guesses, close to half of all families in England and Wales lived chiefly from the sale of their labor power, and a sizeable minority worked mainly in manufacturing. Since no more than 750,000 of the 2.2 million families lived in towns of 2,000 or more, a great many of these proletarians clearly eked out their lives in the countryside.

England and Wales were neither precocious nor unique. In the Dutch region of Twente, well known through Slicher van Bath's careful studies, 25.2 percent of the population of 1502 were employed outside of agriculture; by 1795, the figure was 47.9 percent (Faber et al. 1965: 83). Karlheinz Blaschke's comprehensive enumeration of the Kingdom of Saxony for the three centuries after 1550 displays a great progression of the "gardeners and cottars" who supplied the bulk of the region's textile workers. The percentage distribution of Saxony's rural population followed this pattern (Blaschke 1967: 190-191):
In the case of Saxony, the absolute number of peasant households remained relatively constant over the three centuries; established places on the land were few. But the absolute number of rural proletarians grew enormously, with the result that peasants diminished radically as a share of the total population.

Saxony's creation of a rural industrial labor force had many parallels elsewhere. In 1774, the percent distribution of the labor force in Basel's rural hinterland went as follows (Gschwind 1977: 369):

<table>
<thead>
<tr>
<th></th>
<th>1550</th>
<th>1750</th>
<th>1843</th>
</tr>
</thead>
<tbody>
<tr>
<td>peasants</td>
<td>73.5</td>
<td>38.6</td>
<td>20.4</td>
</tr>
<tr>
<td>gardeners, cottars</td>
<td>6.8</td>
<td>47.9</td>
<td>70.9</td>
</tr>
<tr>
<td>village labor</td>
<td>18.8</td>
<td>12.7</td>
<td>8.2</td>
</tr>
<tr>
<td>noble landlords</td>
<td>0.8</td>
<td>0.8</td>
<td>0.5</td>
</tr>
<tr>
<td>total</td>
<td>99.9</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

82.4 percent of the workers in this eighteenth-century "rural" area, that is, earned their wages outside of agriculture. A similar investment in rural industry had occurred in Zurich's uplands (Braun 1960).

Let us take one last case from Bavaria. In a set of villages around Dachau, the distribution of the labor force changed only moderately between 1675 and 1800 (Hanke 1969: 243):
In the Dachau region, the later eighteenth century brought a decline in the proportion of dependent workers who lacked their own legal residences in the villages, a significant increase in the number of independent day-laborers, and a modest rise in the proportion of peasant households.

As time went on, according to Gerhard Hanke, the craft workers of Old Bavaria became a "semi-peasant" class; the population "re-ruralized". At all four points in time, nevertheless, more than half the labor force consisted of people employed mainly outside of agriculture. Elsewhere in southern Bavaria, rural industry remained the chief activity well into the nineteenth century; genuine "ruralization" came quite recently (Fried 1975). Yet, Hanke points out, historians of Bavaria long described the region as if it had been an essentially peasant economy. The "grounds on which previous research drew a picture of a peasant Old Bavaria" (as Hanke titles one section of his study) included both the nineteenth-century predominance of the peasantry and the tendency of the poor and the unofficially settled to elude seventeenth- and eighteenth-century documents (Hanke 1967: 221). A priori reasoning -- supposing that if peasants predominated in the nineteenth century they must have predominated even more in earlier centuries — made it easier to accept the myth.

The myth has crumbled. By now a generation's research has made it clear that important parts of the eighteenth-century European countryside teemed with non-peasants and hummed with manufacturing. We are gradually coming to recognize, furthermore, that "cottage industry" was not simply a pale anticipation of "real"
industry, and not simply a casual supplement to agriculture, but a powerful system with its own logic. As Milward and Saul sum it up:

Paradoxically, in spite of the very few successes which government policies of industrialisation achieved and the noticeable decay of many old-established industries, the eighteenth century was a period of marked industrialisation. The industrialisation was of a quite different kind from that which most governments had sought to establish. Its most general aspect everywhere was the part-time employment of the rural labour force in manufacturing activities carried on in their own homes... It is impossible not to be struck by the extraordinary growth of spinning and weaving in the countryside of many European areas. In some areas the manufacture of iron products, toys or watches developed in the same way, but textiles, whether of linen, wool or the newfangled cotton were the typical rural product. The technological transformations which initiated the Industrial Revolution in Britain, were heavily concentrated in these rural textile industries and their development on the continent may therefore be seen as the true precursor of the Industrial Revolution there rather than the older 'manufactures'. But setting on one side the developments of the Industrial Revolution itself and looking at the matter simply from the point of view of employment in industrial activities whether those industries were 'revolutionised' or not it would still be true to say that the most industrial landscapes in late eighteenth-century Europe, for all their lack of chimneys, were the country areas around Lille, Rouen, Barcelona, Zurich, Basel and Geneva (Milward and Saul 1973: 93-94).

Milward and Saul understated the extent to which rural industry served as a dominant and full-time employment in Europe's zones of intense protoindustrialization. But
their main point deserves emphasis, because the nineteenth century forgot it so completely: Europe industrialized significantly before 1800, and did so mainly through the employment of rural labor.

The dispersion of industry, however, did not destroy the orientation to cities. Broadly speaking, eighteenth-century Europe organized as a series of regions, each containing a dominant city, a subordinate hierarchy of cities, and an agricultural hinterland from which the cities drew the major part of their subsistence. Some of those city-hinterland sets constituted industrial systems: innumerable scattered producers, linked by petty merchants and manufacturers to the major markets and large capitalists located in the regional capitals. The bulk of the industrial labor force located near the sources of relatively cheap food, raised some of its own subsistence, and worked in agriculture some of the time. From the viewpoint of the industrial capitalist, therefore, the price of labor could remain below its cost of reproduction. Higher-priced urban craftsmen, dependent on the market for expensive food and organized to control production and bargain for wages, lost out. But city-based merchants played a fundamental part in creating and sustaining the system.

If we moved our imaginations back to 1750, blanked out our knowledge of things to come, and projected the future of such a system, we would most likely predict an increasing division of labor between town and country -- but a division of labor in which cities housed Europe's rentiers, officials and large capitalists as they specialized in marketing, administration and services, but not manufacturing. We might well project a countryside with a growing proletariat working in both agriculture and manufacturing. Rural sites, in that projection, would remain the active sites of proletarianization, while those who controlled the means of production would concentrate increasingly in cities.

**Capital Concentration and its Correlates**

That is not what happened. Many industrial regions underwent the sequence
described for the uplands of Zurich by Rudolf Eraun (1960, 1965): an eighteenth-century explosion of textile production into the previously poor, sparsely settled and agricultural hill country, followed by a nineteenth-century reflux to Zurich and nearby towns. After protoindustrialization, deindustrialization. In many rural areas, whether mainly industrial or agricultural, the nineteenth century brought an exodus of wage-workers, and then of smallholders, sharecroppers, and petty tenants. The result was to leave behind the larger farmers, both owners and leaseholders. It was often to make the farm less dependent on hired labor, and more dependent on family labor, than it had been for centuries (Friedmann 1978). After proletarianization, we might say, peasantization. The active sites of proletarianization shifted to the cities.

The phrase "industrial revolution" gives a misleading account of what changed. The account is misleading because it emphasizes technological changes, and draws attention away from the redeployment of capital. Nevertheless, the dramatic words signal that something drastic did happen in Europe during the nineteenth century. What was it? Here were the obvious features of that nineteenth-century reversal:

1. a great concentration of capital, combined with a readiness of capitalists to shift their operations from one locus to another, depending on the chances for profit;

2. an effort by capitalists to take control of the whole productive process, using cooptation, coercion, and reorganization to undermine the ability of workers to determine the allocation of the factors of production, including their own labor power;

3. grouping of the workers in common locales, on coordinated work schedules, under continuous surveillance and standard discipline, in order to increase the return from their labor;

4. reliance on machines and inanimate sources of power to accomplish those ends.

These measures, in their turn, had powerful consequences:

5. movement of the loci of production toward concentrations of capital and/or sources of power;

6. convergence of the labor force on those loci of production and employment;
7. departure of proletarians from the countryside;

8. withdrawal of proletarian labor from agriculture, with the concomitant necessity of drawing the full reproduction cost of labor from non-agricultural employment;

9. de-industrialization of many previously industrial areas.

Because changes of this sort prevailed when Westerners began formulating their theories of industrial capitalism, a number of historical misconceptions crept into those theories. Three of them in particular obscured the historical experience. The first was the idea that industrialization consisted of the expansion of disciplined production in large, power-driven, machine-based, spatially-concentrated units. The second was the notion that true proletarians worked under close surveillance in such units, and that proletarianization therefore occurred mainly in cities and in factories. The third embodied a false a priori argument, the same one Gerhard Hanke has criticized in Bavarian historiography: if the nineteenth-century countrysides were essentially peasant and agricultural, then of course the countrysides of earlier centuries must have been even more essentially peasant and agricultural. The three misapprehensions made it easy to forget what earlier generations had seen for themselves: the great protoindustrialization of Europe's hinterlands, and the massive proletarianization of its population before the nineteenth-century urban implosion.

The three misconceptions fit together neatly in a linear model of industrialization. If we think of industrialization as an irreversible technical, organizational, and cultural liberation from a traditional past, cumulative and ever-accelerating, then it is natural to imagine the past as monolithic and stable: Traditional Peasant Society. A whole series of related misperceptions reinforce the basic image: the supposed immobility of pre-industrial populations, the particularism and irrationality of peasant life, the spread of rational calculation with industrialism, the development of a "flight" from the countryside as urban diversions and
opportunities appeared, the decline in social control as a consequence of urbanization and industrialization, the shock and disorder produced by the first confrontation of rural migrants with the demands of urban life and work . . . in short, the commonsense sociology of the nineteenth century. As generalizations, all these ideas have shattered on contact with the research on European economic and social history of the last few decades. Yet the whole complex of ideas emerged at a time when current trends gave it some plausibility: in the later nineteenth century, migration from the countryside to cities was speeding up, cities were coming to monopolize industrial production, a new, massive, disciplined but often angry factory-based proletariat did seem to be forming, and so on down the list. The nineteenth-century errors were to generalize a momentary condition, to extrapolate its changes into a continuous one-directional process, to exaggerate the turbulence and disorder of the moment as compared to previous moments, and to adopt faulty notions of causes and effects. Those are serious errors, but common and understandable ones.

Deindustrialization

Similar errors have often affected discussions of deindustrialization. The frequency of deindustrialization is probably an even more difficult historical fact to grasp than the importance of protoindustry as the setting for the growth of the proletariat, because of the assumption that industrialization is an irreversible process. If the process normally moves in only one direction, then its reversal is abnormal, pathological, a failure. True, the purest liberal discussion of industrialization makes room for a competition in which some regions will make an effort and fail. But the chief cases in point are peripheral areas brought into the sphere of an expanding industrial power. Maurice Lévy-Leboyer traces the nineteenth-century deindustrialization under European influence in India, the Middle East, and Latin America, then remarks that "In Europe, the evil was not unknown, although it was less extensive," citing Sicily and southern Italy as prime examples (Lévy-Leboyer 1964: 184). He then
approves the recommendation of a Belgian commission which, in 1833, countered the pleas of Flemish merchants for restrictions on the export of flax with the argument that Flanders should be eager to sell its raw materials on the international market.

"The case of Flanders," continues Lévy-Leboyer,

is of general importance. International competition requires incessant adaptation to new structures. The balance among western countries is the result of multiple exchanges which involve the whole range of manufactured products, with none having priority. Manchester maintained its position in western markets by reorienting its sales upstream: for finished goods, its industrialists substituted spun goods, and then textile looms. One is hard put to see why new nations could not improve their level of living by specializing in primary industry. From that point of view, deindustrialization is desirable, on the obvious condition that the countries in question have crops which can be used by the West (Lévy-Leboyer 1964: 193).

To be sure, deindustrialization is always easier to advocate for other areas than one's own.

It is fascinating, nonetheless, to go through a collection of essays such as the Léon/Crouzet/Gascon Industrialisation en Europe au XIXe siècle (1972) looking for instances of deindustrialization in the European experience. The instances are, in fact, abundant. Jordi Nadal shows us the considerable decline of industrial activity in southeastern Spain during the nineteenth century. J.R. Harris sketches the collapse of skilled metal-working and textile production in Liverpool's hinterland as the port itself prospered during the same century. Yves Lequin maps out the expansion and contraction of several forms of manufacturing in the mountainous regions of the Isere, and so on. In case after case, we see signs of a deliberate movement of capital away from unprofitable industries, followed inevitably by a decline in employment, and often capped by the near-disappearance of manufacturing as an economic base.

Yves Lequin's evidence has a particular interest, since it provides a foretaste of the material presented in his later treatment of Lyon's region as a whole. Lequin's ouvriers de la région lyonnaise (1977) is one of our most valuable stimuli for
reflection on deindustrialization; it demonstrates the strong orientation of industrial activity throughout the region's scattered villages and towns to the great merchant city, the repeated relocation of different divisions of the textile and metal-working industries within the region, and the ultimate concentration of almost all industrial activity in Lyon, its immediate vicinity, and a few other important cities. His evidence makes a strong, if indirect, case for the peopling of Lyon's nineteenth-century industry by workers who came, not from agriculture, but from other industrial centers -- especially the deindustrializing towns and villages of the hinterland. Thus it portrays a dramatic instance of deindustrialization as a redistribution of capital and labor within the same regional system.

Not all deindustrialization, however, operates at a regional scale, or occurs in the course of the redistribution of the same industry. As a first rough taxonomy of the alternatives, we might divide up the net movements of capital which produce deindustrialization in this way:

<table>
<thead>
<tr>
<th></th>
<th>LOCAL</th>
<th>WITHIN REGION</th>
<th>INTERREGIONAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>WITHIN INDUSTRY</td>
<td>competition</td>
<td>reorganization</td>
<td>runaway shop</td>
</tr>
<tr>
<td>BETWEEN INDUSTRIES</td>
<td>change in specialty</td>
<td>reinvestment</td>
<td>flight</td>
</tr>
</tbody>
</table>

The nineteenth-century Lyonnais would then qualify mainly as a case of "reorganization": net movements of capital within the same industries in the same region, which deindustrialized important parts of the hinterland, but not the whole region. Clearly we want to distinguish that case from the runaway shop, or the simultaneous collapse of industry and industrial region. From the perspective of an individual village or villager, they may look quite similar; from the perspective of economic and social history -- or, for that matter, national policy -- they are fundamentally different. The research we undertake should tell us how and why.
ACKNOWLEDGMENTS

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REFERENCES

Kurt Ågren et al.

Sune Åkerman, Hans Christian Johansen, and David Gaunt

Eric L. Almqvist

Paul Bairoch
1971 "Structure de la population active mondiale (1700-1900)." Annales; Economies, Sociétés, Civilisations 26: 960-976.


Paul Bairoch and J.-M. Limbor

J.R. Bellerby

Karlheinz Blaschke

Grethe Authén Blom

J. Bourget

Fernand Braudel

Rudolf Braun

N. Caulier-Mathy

J.D. Chambers

Abel Chatelain

Hugh D. Clout

Jon S. Cohen and Martin L. Weitzman

D.C. Coleman

Patrick Colquhoun

J.P. Cooper

H.C. Darby
Pierre Deyon

Rudolf Endres

Ingrid Eriksson and John Rogers

J.A. Faber et al.

Michael W. Flinn

Edward Whiting Fox

Etienne Francois

Herman Freudenberger

Pankraz Fried

Harriet Friedmann

Fridolin Fürger

David Gaunt
1977 "Pre-Industrial Economy and Population Structure: The Elements of

Franz Gschwind

H.J. Habakkuk

Michael Hanagan

Gerhard Hanke

Herve Hasquin

Richard Herr

Volker Hunecke

V.K. Iatsunsky

Karlbernhard Jasper

E.L. Jones

Etienne Juillard and Henri Nonn
Hermann Kellenbenz

Gregory King

Herbert Kisch

Arnost Klíma

Wolfgang Kollmann

Peter Kriedte, Hans Medick, and Jürgen Schlumbahn

Witold Kula

David S. Landes
1969 The Unbound Prometheus. Technological Change and Industrial
Development in Western Europe from 1750 to the Present. Cambridge: Cambridge University Press.

R. Lawton

Pierre Lebrun

Pierre Leon, Francois Crouzet, and Raymond Gascon

Yves Lequin

Ron J. Lesthaege

Giovanni Levi

David Levine

Maurice Levy-Leboyer

Catherina Lis and Hugo Soly

Marian Malowist

Peter Mathias

Franklin Mendels
1972 "Proto-industrialization: The First Phase of the Industrialization


I.V. Meshalin

Alan S. Milward and S.B. Saul

Joel Mokyr

L.L. Murav'eva
1971 Derevenskaia prom'ishlennost' tsentral'noi Rossii vtoroi polovin'i xvii v. Moscow: Izdatel'stvo Nauka.

John Patten

Luciano Pellicani
1973 "La rivoluzione industriale e il fenomeno della proletarizzazione," Rassegna Italiana di Sociologia 14: 63-84.

N.J.G. Pounds
1979 An Historical Geography of Europe 1500-1840. Cambridge: Cambridge University Press.

Jean-Pierre Poussou

Jaroslav Purč

E.A.G. Robinson

Stein Rokkan

Josiah Cox Russell

John Saville


Lawrence Schofer

Domenico Sella


B.H. Slicher van Bath


C.T. Smith
1967 An Historical Geography of Western Europe before 1800. London: Longmans.

Joan Thirsk

Malcolm I. Thomis

E.P. Thompson

Louise A. Tilly

Louise A. Tilly and Joan W. Scott

Herman Van der Wee

Herman Van der Wee and Eddy van Cauwenbergh

Pierre Vilar

Gunter Vogler

Jan de Vries

1976 The Economy of Europe in an Age of Crisis, 1600-1750. Cambridge: Cambridge University Press.


Charles Wilson and Geoffrey Parker

Christer Winberg

Keith Wrightson and David Levine
E.A. Wrigley and Roger Schofield
London: Edward Arnold.

Hartmut Zwaehr