FLOWS OF CAPITAL AND FORMS OF INDUSTRY IN EUROPE, 1500-1900

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Early Forms of Capitalist Industry

"Manufacture," writes John Merrington, "enormously expands the social productivity of labour by the multiplication of detailed functions, subordinating whole areas of the country and branches of production to the urban capitalist . . . " But, says Merrington:

> Production is only modified by subdivision of tasks; the labour process itself is merely taken over from preceding modes of production. With the advent of machine production this framework is qualitatively altered; capital seizes hold of the real substance of the labour process, dynamically reshaping and diversifying all branches of production by the technical-organisational transformation of the productive process. The removal of all fetters on the mobility of labour and the separation of one secondary process after another from agriculture . . . opens the way to an accelerated, permanent urbanisation based on the 'concentration of the motive power of society in big cities' (Marx) and the subordination of agriculture as merely one branch of industry. The dominance of the town is no longer externally imposed: it is now reproduced as part of the accumulation process, transforming and spatially reallocating rural production 'from within'. The territorial division of labour is redefined, enormously accentuating regional inequalities: far from overcoming rural backwardness . . . capitalist urbanisation merely reproduces it, subordinating the country on a more intensive basis (Merrington 1975: 87-88).

Merrington's gloss on Marx challenges the unilinear view of industrialization that took hold of western thought during the nineteenth century. Not for Merrington, or Marx, the idea of a backward countryside in the midst of which progressive centers of concentrated manufacturing grew up. Not for either one the notion of "penetration" of slow-moving rural areas by urban ideas and goods. The Marxist account of industrialization begins with an intensive interaction of city and village.

Yet Merrington's summary -- and many another like it -- holds to the conventional emphasis on machine production as the great break within the process of industrialization. Prior to that break, he tells us, "Production is only modified by subdivision of tasks; the labour process itself is merely taken over from preceding modes of production." There Merrington (and perhaps Marx as well) slips into error. For the more European historians delve into the early experience of industrialization,

process itself, to a stage in which they strove -- on balance, successfully -- to reshape the entire process on their own terrain, and their own terms. Even in the stage of drastic technical change, the concentration and reorganization of capital played a central part.

This paper, then, continues the discussion restarted by John Merrington's useful gloss on Marx. It draws extensively on recent local and regional studies, especially those that have swirled around the controversial concept of "protoindustrialization". It ends up agreeing with the main points of Merrington's analysis, but cavilling with a number of Merrington's details and emphases. The paper's main tasks are:

1. to sketch how that transition to capital-concentrated manufacturing occurred,

2. to place protoindustrialization and deindustrialization within the process,

3. to bring out the importance of shifts in the deployment of capital,

4. to show the continuous interaction of city and country throughout the process, and

5. to stress how much of the whole transformation occurred in the countryside, prior to the massive development of factories, steam power, and large-scale machine production.

That the sketch will be sketchy goes without saying. If it helps reveal what is at stake in the current scholarly debates over protoindustrialization and deindustrialization, it will serve its purpose.

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

the more they discover profound transformations of the relations of production prior to the extensive mechanization of industry. The farther the inquiry goes, the more it appears that redeployment of capital and labor makes the big differences, and that mechanization is only one of several means by which that redeployment occurred in Europe. More careful examination of the ostensibly peripheral processes of "protoindustrialization" and "deindustrialization" reveals two important facts: **first** that far from being marginal to the main processes of European industrialization, protoindustrialization and deindustrialization were essential features of the growth of capital-concentrated urban industry; **second**, that despite their apparently antithetical character, protoindustrialization and deindustrialization resulted from similar causes, and depended closely on each other.

It would not do, however, to dissolve the distinction between the labor process of protoindustrialization and the labor process of mechanized urban industrialization. The techniques of production and its supervision changed relatively little in European protoindustrialization; the big alterations occurred in the connections among producing units and in the relations between the suppliers of capital and the suppliers of labor. Yet those alterations had widespread consequences: they produced a scattered but fast-growing population of families that were essentially dependent on the sale of their labor power for survival -- a proletariat, in the classic sense of the word. With the concentration of capital, the urban relocation of production, and the introduction of machines with inanimate sources of power, the routines of work and the relative power of capitalists and workers to control them changed dramatically. The active sites of proletarianization moved to cities, factories, and other large organizations, as proletarians took on their more familiar guise: producing on other people's premises with other people's materials and tools, working on fixed schedules under close surveillance. Broadly speaking, manufacturing went from a stage in which capitalists sought out labor wherever they could find it, and intervened rather little in the labor

population before the massive population redistribution of the nineteenth century. Finally, there is the interdependence between the pre-factory 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, 364,000 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):

	1550	1750	1843
peasants	73.5	38.6	20.4
gardeners, cottars	6.8	47.9	70.9
village labor	18.8	12.7	8.2
noble landlords	0.8	0.8	0.5
total	99.9	100.0	100.0

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):

peasants	17.6
petty trades	27.3
handicrafts	29.1
shop workers	26.0
total	100.0

82.4 percent of the workers in this eighteenth-century "rural" area, that is, earned their wages outside of agriculture.

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):

	1675	1700	1750	1800
peasants	22	22	21	25
dependent workers	36	38	36	26
independent day-laborers	10	12	13	17
non-agricultural trades and crafts	32	28	30	32
total	100	100	100	100

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 1969: 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.

What Must We Explain?

Nineteenth-century economic historians, from Marx to Schmoller, were well aware of cottage industry and related forms of production. In the early twentieth century, Sombart wrote extensively on the Verlagssystem -- the system in which small merchants gathered raw materials and moved the materials through a scattered network of pieceworkers until they had finished goods to market. All subsequent economic histories have given rural industry a place in the European landscape. Nevertheless, the last few decades' work has renewed the question. The renewal has had several features:

1. revealing the enormous extent of small-scale industrial production before the rise of the factory, and establishing its predominance in many rural areas;

2. displaying the frequent regional correspondence between intensive but small-scale and rural production before 1850 and rapid large-scale industrialization -- especially outside of heavy industry -- after 1850;

3. showing that small-scale rural industry competed effectively with larger-scale urban production for a century or more;

4. developing a sense that small-scale rural production may have played a crucial role in the development of industrial capitalism.

The fourth feature has inevitably excited the greatest controversy. The controversy has heightened when it has come to hypotheses that the growth of small-scale rural production a) provided the prime means of primitive capital accumulation, b) had recurrent demographic consequences which accelerated population growth and tended, in the medium and long run, to immiserate its workers, c) therefore promoted the

growth of a poorly-paid proletariat, which eventually became a major source of labor power for large-scale capitalist production.

At their extreme (for example, in the statements of Kriedte, Medick, and Schlumbohm) these hypotheses sum to an alternative account of the transition from feudalism to capitalism: alternative to the classic Marxist account in which merchant capital, capital accumulated in urban manufacturing, and agrarian capital wrested from a dispossessed peasantry coalesced to provide the basis for large-scale production; alternative to the classic liberal account in which expanding trade and developing technology interacted to make large-scale production more efficient than other forms. With so large an outcome at issue, small wonder that bitter arguments continue to rage. Small wonder, furthermore, that the very word "protoindustrialization" (with its suggestion of a distinctive but standard stage in the creation of modern industry) should raise objections, and make some scholars prefer the unthreatening simplicity of "cottage industry".

Terminology will not resolve the historical questions. Nevertheless, I see great advantages in adopting a broad, dynamic, question-posing definition of protoindustrialization. Protoindustrialization, in my view, is the increase in manufacturing activity by means of the multiplication of very small producing units and small to medium accumulations of capital. Negatively, it consists of the increase in manufacturing without large producing units and great accumulations of capital. Such a definition differs from the semi-official statement proposed by Franklin Mendels and Pierre Deyon -- protoindustrialization as the presence of peasant production for an extra-regional market in a situation of tight interdependence between agriculture and industry -- in two crucial ways. First, my definition is dynamic; it refers to a change. Second, it is at once open and agnostic; it leaves open to investigation the conditions under which the multiplication of small units and small capital accumulations actually occurs; in principle, it allows for the possibility that proto-

industrialization occurred in cities, isolated from agriculture, strongly oriented to nearby markets. Thus the agriculture-industry interdependence and the extra-regional markets become promising hypotheses concerning the conditions for protoindustrialization, rather than features of the process which are present by definition.

Given such a broad definition, there is no question that during the two centuries after 1650 Europe underwent substantial protoindustrialization: manufacturing grew rapidly via the multiplication of small producing units and modest accumulations of capital. Large units and big capital may well have experienced a relative decline. Not that everything stayed the same: far from it! First, as the networks of producers and merchants proliferated, the structure of trade altered, and large industrial regions came to life. In the world of cheap goods and cheap labor, middlemen grew up as never before. Second, protoindustrialization transformed the lives of workers -- expanding the time they spent on non-agricultural pursuits, increasing their dependence on the demand for their products, confronting them with petty merchants who had a strong interest in cutting their costs, and especially their costs of labor. Most likely -- but this is where the controversy begins -- protoindustrialization also tended to promote population growth, proletarianization, and a way of life in which fluctuations in employment opportunities affected family strategies and welfare as never before.

The "protoindustrial model" framed by Mendels, Medick, Levine, and others enters the intellectual scene at exactly this point. It states a set of connected hypotheses about the causes, correlates, and consequences of protoindustrialization. The main arguments run as follows:

> 1. In so far as population density was high, agriculture within a compact region was divided between large commercial farms and smallholdings, opportunities for profitable out-migration were few, and external markets for goods whose production required low capital investment were available, petty merchants were likely to promote protoindustrialization.

2. To the extent that these conditions obtained and protoindustrialization -- an increase in manufacturing through the multiplication of small producing units and modest concentrations of capital -- occurred, the populations involved were likely to reorient their family strategies from the inheritance of places on the land or in restricted crafts to opportunities for paid employment.

3. The simultaneous or seasonal involvement of industrial workers in agriculture (both on their own account and as wage-labor for large farmers) reduced the reproduction cost of labor, raised the land productivity of agriculture, and accentuated the orientation of worker families to paid employment.

4. Frequently, this reorientation to employment opportunities meant rising marital fertility, increased nuptiality, and an asymmetrical response to good times and bad -- nuptiality and fertility rsing in good times, but failing to decline proportionately in bad times -- so that the medium-run consequence of fluctuations in the market for industrial products was increasing vulnerability, and immiseration.

5. The presence of such a vulnerable, miserable, and industrially-disciplined labor force promoted mercantile capital accumulation; given locational or technical advantages of concentration, it also facilitated the creation of large, capital-intensive units of production.

As we move down the list, the arguments become increasingly controversial. To the extent that we take them to describe the main conditions and mechanisms of Europe's shift from agrarian to industrial organization, they pose a dramatic challenge to conventional wisdom -- whether liberal or Marxist.

As things now stand, the fact of protoindustrialization is well established, but the evidence for each element of the "protoindustrial model" is mixed. Part of the problem is quantitative: not having a good enough inventory of relevant cases to know whether those populations whose behaviors fit the model were rare, frequent or preponderant. Part is qualitative: not having firm enough control over the well-documented instances to be sure how closely the relevant behavior -- the asymmetrical response to employment opportunities, the capital accumulation, and so on -- conformed to the model. Part of the problem, finally, is neither quantitative nor qualitative, but descriptive: specifying in which times and places protoindustrialization was actually occurring, and in which times and places the model should therefore, in principle, apply: does the fact that great landlods of Eastern Europe

sometimes forced their serfs into industrial production as a source of cash for the landlord's estate, for example, challenge the model? I think not -- but clearly we need a better specification of the model's domain.

For the moment, let us stop with a prudent understatement: before capital-intensive manufacturing became dominant, Europe underwent substantial industrialization through the multiplication of small producing units and modest capital concentrations over the territory of rural regions organized around mercantile cities; in regions where that happened, many of the changes described by the "protoindustrial model" seem to have occurred together. 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 understate 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 list included not only the Lille, Rouen, Barcelona, Zurich, Basel and Geneva mentioned by Milward and Saul, but also Leeds, Manchester, Milan, Lyon, and others as well. 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. Furthermore, the more capital-intensive branches of production, and those in which quick response to market changes was crucial, remained in cities or generated new, specialized urban centers. Finally, major port cities drew rural products into international trade. Consider Nantes and St. Malo, whose merchants shipped linens from hundreds of villages throughout Brittany, Normandy, Perche, Maine and Anjou to Africa and the Americas. Or think of Hamburg, which "drew linen from Silesia, Saxony . . . Westfalia, Bohemia, Moravia, Swabia, Styria and Switzerland, but also from closer regions such as Mecklenberg, Holstein, Bremen and Lübeck" (Pohl 1963: 126-127); with the possible exception of Bremen and Lübeck, these were essentially regions of rural protoindustry.

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 anticipate 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 Braun (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.

These changes amounted to an "implosion" of industrial production into cities, and its radical separation from agriculture.

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: that 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.

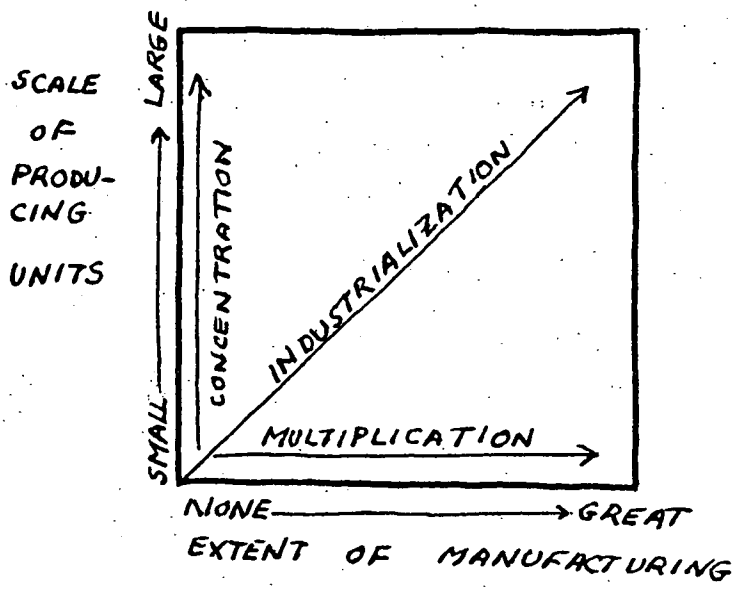
At the cost of oversimplification, diagrams 1 through 4 illustrate what is at issue. Diagram 1 points out that conventional ideas of industrialization are implicitly two-dimensional: they include both increase in the scale of producing units and expansion in the production of manufactured goods. In principle, increasing scale can occur without an expansion of production; we might call that extreme case concentration. Likewise, production can expand without increases in the scale of producing units; that extreme, we call protoindustrialization. A coordinated change in both dimensions deserves the full name industrialization.

That representation makes it easier to state the difference between standard accounts of industrialization and the accounts that have been emerging from a fuller appreciation of protoindustrialization. Diagram 2 caricatures the Industrial Revolution account: little increase in manufacturing occurred until the development of new technologies which entailed dramatic rises in the scale of production; the efficiency of the new technology and organization then produced a large expansion of manufacturing. Diagram 3 describes protoindustrialization without concentration: a large expansion of manufacturing without change in the scale of producing units eventually ceases when concentration elsewhere drives local producers out of the market; the subsequent decline in manufacturing leaves the area even less industrial than when the process began. Diagram 4, finally, sketches an ideal-typical transition from protoindustrialization to full industrialization: considerable expansion of manufacturing without increases in scale, followed by dramatic concentration.

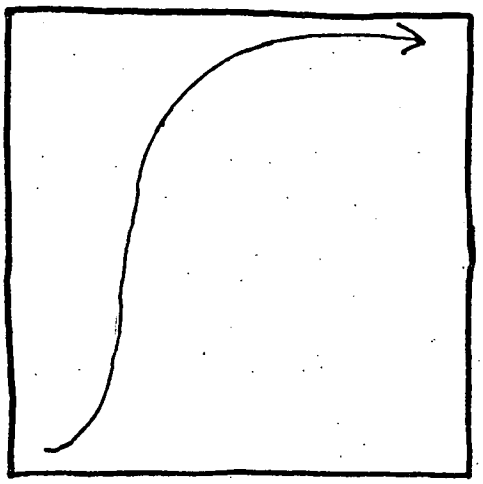
The quantitative argument in the growing literature on protoindustrialization runs something like this: area by area, the situation described by Diagram 2 -- "Industrial Revolution" -- was quite rare in Europe, confined mainly to places in which coal deposits made rapid large-scale industrialization attractive to capitalists.

SCHEMATIC VIEWS OF INDUSTRIALIZATION

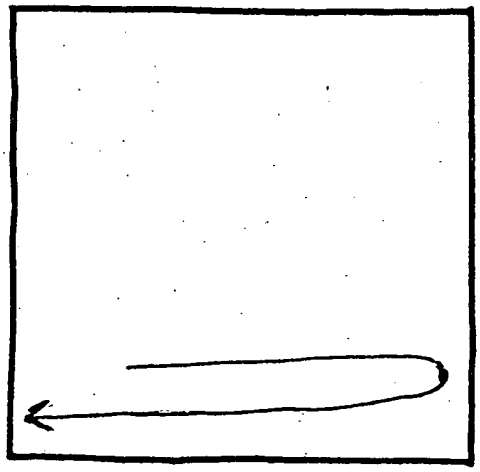
1. PURE TYPES



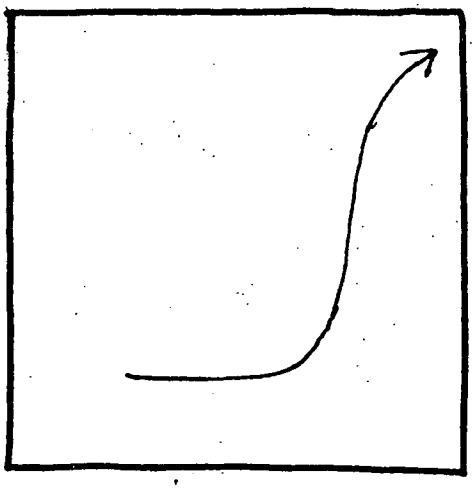
2. INDUSTRIAL REVOLUTION



3. PROTOINDUSTRIALIZATION / DEINDUSTRIALIZATION



4. PROTOINDUSTRIALIZATION / CONCENTRATION



Situation 3 -- protoindustrialization followed by deindustrialization -- was actually the most frequent circumstance; small area by small area, most of Europe entered the twentieth century more purely agricultural than it had been for centuries before. Situation 4, nevertheless, describes the most common path by which concentrated industry came into being: a path from protoindustrialization to concentration. If so, the three standard misconceptions -- the equation of industrialization with concentration, the identification of proletarianization with concentration, the a priori peasantization of the past -- badly distort the history of European industrialization.

The three misconceptions survive because they 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. For example, Abel Châtelain's review of temporary migration in France makes it clear how vast and lively were the networks of labor mobility before the growth of big industrial cities, and how in many instances the effect of industrial concentration was actually to fix people in place, to slow them down. 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 while some regions succeed some other regions will inevitably make an effort and fail. But the chief cases in point are normally 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: 186). 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 leap to the eye. 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:

	LOCAL	WITHIN REGION	INTERREGIONAL
WITHIN INDUSTRY	competition	reorganization	runaway shop
BETWEEN INDUSTRIES	change in specialty	reinvestment	flight

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.

Conclusions

An unwary traveler in Paris or London often straightens out the river in his imagination, and then makes terrible deductions about the shortest path from one place to another within the city. If he follows up those deductions without consulting a well-drawn map, he finds himself wandering, worn, and confused. Neither the Seine nor the Thames comes close to describing a straight line. Similarly, a straight-line model of industrialization is not merely inaccurate in itself; it leads to faulty, costly

deductions about the likely consequences and correlates of the whole process. The Industrial Revolution model of industrialization follows a straight line from agriculture to handicraft to full-scale industry, with handicraft a weak anticipation of full-scale industry. That model not only exaggerates the role of technology and foreshortens the history of industrial production, but also -- at least for the European experience -- misstates the relationships between urban and rural capital and labor. The classic Marxist model, with its intermediate stage of Manufacture drawing heavily on rural labor, improves our understanding of the historical terrain by putting an appropriate bend in the river of industrialization. It also improves on the Industrial Revolution model by drawing attention to the accumulation and redeployment of capital. Yet the classic Marxist model, too, exaggerates the importance of technological change, and underestimates the interdependence of changes in city and country, of alterations in the organization of industry and agriculture.

The accumulating research organized -- pro and con -- around the idea of protoindustrialization points the way to an enriched understanding of the whole process of industrialization. It not only provides a clearer sense of the centrality and complexity of small-scale production, but also shifts our attention from technology to movements of capital. That is all to the good. It will not do, however, to construct a new linear model in which protoindustry (however well described) becomes the standard intermediate stage in a march from an agrarian world with a few urban outposts of craft production to an industrial world coupling large cities to "industrialized" agriculture. For one thing, as we have seen, most European areas of protoindustrial production entered the twentieth century more purely agricultural than they had been for centuries before, and with the family farm the dominant setting for agricultural production. For another, at every stage we witness transfers of capital simultaneously causing rises in the industrial activity of some regions and declines in the industrial activity of others. Our new models of such a process must

not be linear, but dialectical.

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