

# 1 The theories of proto-industrialization

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‘Proto-industrialization’ is the name given to the expansion of domestic industries producing goods for non-local markets which took place in many parts of Europe between the sixteenth and the nineteenth centuries. Often, although not always, such industries arose in the countryside where they were practised alongside agriculture; usually, they expanded without adopting advanced technology or centralizing production into factories.

This widespread industrial growth in early modern Europe has long been a subject of specialized study. But in the 1970s it began to attract much wider interest, when a series of stimulating articles and books christened it ‘proto-industrialization’, and argued that it was a major cause of the transition to capitalism and factory industrialization.

## **Proto-industrialization as the first step in industrialization**

The term ‘proto-industrialization’ was invented by Franklin Mendels, and first used in his 1969 doctoral dissertation on the Flemish linen industry (Mendels 1969/1981). It became widely known after the publication in 1972 of a now-famous article based on this research (Mendels 1972). For Mendels, proto-industrialization was the first phase of industrialization: ‘pre-industrial industry’, he argued, ‘preceded and prepared modern industrialization proper’ (Mendels 1972: 241). During this proto-industrial phase, a rural labour force became involved in domestic industries producing for supra-regional markets. The population was liberated from the agrarian resource base, and labour which had previously been unused because of the seasonal nature of agrarian production found employment. Subsequently, in order for production to expand further, specialization into regions of rural industry and commercial agriculture became necessary.

Mendels took for granted that all of early modern Europe (not just Flanders) saw the decline of traditional urban and guild regulation of

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industry, as manufacturing moved into the unregulated countryside. There, according to Mendels, proto-industrialization also broke down the traditional regulation mechanisms of agrarian society – inheritance systems and other institutional controls – which had adjusted population growth to available economic resources. For the regions of Flanders which he studied, Mendels sought to show that periods of economic upturn in proto-industry led to an increase in the number of marriages, and that this increase was irreversible – that is, even in periods of economic downturn, the marriage rate did not decline again. This, he argued, generated higher fertility and rapid population growth, which in turn led to further expansion in rural domestic industries. It was this self-sustaining proto-industrial spiral, Mendels argued, which ultimately generated the labour, capital, entrepreneurship, commercial agriculture and supra-regional consumer markets required for factory industrialization. Mendels explored and extended these theses over the years that followed (see Mendels 1975; and especially Mendels 1980).

### **Proto-industrialization and proletarianization**

During the 1970s and 1980s, Mendels' arguments were eagerly taken up by other historians, giving rise to separate schools of proto-industrial theory. One emanated from David Levine, who, in his doctoral dissertation on two villages in nineteenth-century Leicestershire, also viewed proto-industry as having revolutionized demographic behaviour (later published as Levine 1977). But for Levine, proto-industry and the associated population explosion were important mainly because they 'proletarianized' the workforce. By this he meant that they broke down the social structure and landownership pattern of traditional rural society, creating a large group of people who had no land to live from, and therefore had to work for wages. Levine viewed proto-industrialization as only one aspect of this larger process of proletarianization, which for him was the crucial precondition for capitalism and industrialization.

### **Proto-industrialization and surplus labour**

Another view of proto-industrialization, much less widely known than others but indirectly quite influential, was put forward by Joel Mokyr. Mokyr rejected almost all the arguments advanced by Mendels (Mokyr 1976: 377–9). However, he was convinced that proto-industrialization provided cheap 'surplus' labour, which fuelled European industrialization by means of the mechanisms described by W. A. Lewis in his dualistic growth model for modern developing economies (Lewis 1954).

While Lewis' model had been (and still is) enormously influential, it was becoming clear that there was little empirical evidence for the existence of much 'surplus' labour in the agricultural sectors of present-day less developed economies (Kao, Anselm and Eicher 1964: 141; Little 1982: 90). But Mokyr argued that in the pre-industrial European economy, surplus labour was provided not by agriculture but by proto-industry. Although for the most part this version of the theory has not been pursued, it is important because of its direct links with the economics of development, and because it is close to the view of proto-industrialization adopted by Jan de Vries in his influential theories concerning early modern European urbanization (de Vries 1984).

### **Proto-industrialization and the transition from feudalism to capitalism**

The proto-industrialization debate was intensified, first in German (in 1977) and then in English (in 1981), by the publication of a book by Peter Kriedte, Hans Medick and Jürgen Schlumbohm. Combining Mendels' and Levine's findings with earlier literature on domestic industry, particularly that of the German Historical School of National Economy, they turned the theory of proto-industrialization into a general model of European social and economic change in the period between the Middle Ages and the nineteenth century. In their own words,

Proto-industrialization ... as 'industrialization before industrialization' ... can be defined as the development of rural regions in which a large part of the population lived entirely or to a considerable extent from industrial mass production for inter-regional and international markets ... Viewed from the long-range perspective, it belongs to the great process of transformation which seized the feudal European agrarian societies and led them toward industrial capitalism. (Kriedte, Medick and Schlumbohm 1981: 6)

For them, proto-industrialization represented the 'second phase' of this transformation process, for it 'could establish itself only where the ties of the feudal system had either loosened or were in the process of full disintegration' (Kriedte, Medick and Schlumbohm 1981: 6). The cause of this loosening of feudalism in the 'first phase' of the transition to capitalism was, they argued, an increased differentiation in agrarian class structure and a bifurcation of agrarian production into commercial and subsistence types. This in turn had been caused by the commutation of feudal dues paid in kind into money rents, which had occurred in European feudal societies, particularly in western and north-western areas of the continent. The polarization of the rural population into two

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different groups – ‘peasants’ (who owned enough land to live solely from agricultural production), and a landless or land-poor ‘rural sub-stratum’ (who could not live from agriculture alone) – provided the basis, it was argued, for the subsequent integration of the rural sub-stratum into domestic industry. This integration was triggered by the expansion of supra-regional and international markets, and a resulting need to increase production. Industrial production could only be expanded if it was shifted to the countryside, because in the towns guilds restricted growth.

Once proto-industries had arisen in the countryside, according to this account, they led to a transformation in the organization of industrial production, through a succession of different stages of development (although it was emphasized that these stages should not be viewed as rigid or deterministic). The first stage was the ‘Kaufsystem’ (artisanal or workshop system), in which rural producers retained autonomy over production and selling. An increasing penetration of merchant capital into production led to a greater dependency of producers on merchants and putters-out, bringing about a general transition to the ‘Verlags-system’ (putting-out system). The most important element in this dependency was that the rural producers no longer had independent access to the market, either for buying raw materials or for selling their product. In the putting-out system, the merchants bought up the raw material inputs, ‘put them out’ to the rural producers who processed them in return for a wage, whereupon the merchants collected the output for transfer either to the finishing stages of production or to the final consumer market. Ultimately, according to this view, industrial production made the transition to a third organizational stage, the concentration of production into centralized manufactories and then into mechanized factories. Kriedte, Medick and Schlumbohm – like Mendels – explicitly mentioned (although without explaining) the possibility that this line of development might fail, resulting in de-industrialization and re-agrarianization.

As in the theory of Mendels, so too in that of Kriedte, Medick and Schlumbohm, the demographic consequences of proto-industrialization occupied a central position. The so-called ‘demo-economic system’ of proto-industrialization, developed by Hans Medick (and discussed in greater detail in Jürgen Schlumbohm’s contribution to the present volume), drew a systematic set of theoretical connections between demographic development and the family economy of the proto-industrial household. Medick’s concept thus sought to go beyond the direct relationships between proto-industry and marriage behaviour as they had been interpreted by Mendels.

Something often not acknowledged by either critics or proponents of the concepts advanced by Kriedte, Medick and Schlumbohm is that their theory actually advances two distinct assessments of proto-industrialization. Peter Kriedte and Hans Medick, in what they call their 'system concept', regard the proto-industrialization phase as a separate economic system: that is, it was a separate mode of production which prevailed during the transition from feudalism to capitalism, and which united elements of both feudal and capitalist modes. Jürgen Schlumbohm, by contrast, holds that although the proto-industrialization phase did have features of both feudal and capitalistic modes of production, it did not constitute a system of its own: it was a process, and remained part of the feudal mode of production.

### **Extensions to the theories of proto-industrialization**

At latest by 1977, therefore, the concept of proto-industrialization had proliferated into a family of different theories, which adopted rather different definitions of proto-industry and which disagreed quite fundamentally about the causes of economic development. Almost all that they had in common was that they located these causes in a certain sector of the economy – export-oriented domestic industries – and viewed this sector as having broken down the demographic equilibrium of traditional European society. Over the following years and decades, these various branches of proto-industrialization theory stimulated a huge outpouring of research into regions of domestic industry throughout Europe – and, indeed, beyond it (on the application of proto-industrialization theories to the non-European world, see the literature cited in Ogilvie 1993a: 178 n. 6).

By 1982, so influential and yet so variegated had the field of proto-industrialization become that Franklin Mendels and Pierre Deyon were invited to convene one of the three main sessions of the Eighth International Economic History Congress in Budapest, with proto-industrialization as their theme. Deyon and Mendels pre-circulated a draft definition and a set of hypotheses, forty-eight researchers contributed empirical papers (Deyon and Mendels 1982), and Mendels summarized the findings of the session in a 'General report', containing a revised definition and a set of hypotheses which have provided a basis for subsequent debate (Mendels 1982; revised version published in French as Mendels 1984).

The 1982 definition of proto-industrialization stressed certain key characteristics. Proto-industrialization was held to take place (and thus be most properly studied) not nationally or internationally, but *regionally*:

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‘within a small radius around a regional capital’. Within regions, proto-industries were held to combine three characteristics. First, they were distinguished from old-fashioned crafts in that they produced not for local or regional consumption, but for sale to export markets located outside the region. Second, ‘the most significant aspect of proto-industrialization’ was that it ‘provided employment in the countryside above all’: it was practised part time by peasants who also laboured in agriculture, and only in its ‘extreme or ultimate form’ did it involve full-time employment. Third, proto-industrialization involved the ‘symbiosis of rural industry with the regional development of a commercial agriculture’. A supplementary characteristic was ‘the dynamic element’: proto-industrialization was defined as a *growth* over time in the industrial employment of rural workers (Mendels 1982: 77–9).

Deyon and Mendels also put forward four hypotheses concerning the *effects* of proto-industrialization. First, it was supposed to have led to population growth and land fragmentation, by breaking down traditional regulation of demographic behaviour by peasants, landlords or inheritance systems. Second, it created profits which formed the capital for factory industrialization. Third, it provided merchants with the skills and experience they would need for factory industrialization. And fourth, it caused the commercialization of agriculture, which enabled subsequent urbanization and factory industrialization. The authors argued that it was through these four mechanisms that proto-industrialization led to factory industrialization, although they admitted that sometimes it led to de-industrialization instead (Mendels 1982: 80).

In his ‘General report’ of 1982, Mendels also proposed a list of revisions to some of the original proto-industrialization hypotheses of the 1970s. First, he admitted that the chronology of proto-industrialization varied, and had to be investigated in the context of the economic history of the particular region in question. Second, he acknowledged that proto-industrialization did not invariably lead to impoverishment; he suggested that producers’ incomes depended on the production function of the specific wares they produced. Third, although he still held that proto-industry invariably disturbed the demographic system, he admitted that its impact might be felt not just on nuptiality, but also on fertility and migration; and that it depended on household organization, the prevalence of a Hajnal-type ‘European’ family system (Hajnal 1965, 1983), the social position of women and adolescents, the degree of population pressure and the nature of domestic relations in the particular society in question. Fourth, he admitted that proto-industry could lead to either industrialization or de-industrialization, depending on a variety of factors, among which he highlighted transportation costs.

Fifth, he acknowledged that the effect of proto-industrialization depended on the larger world economy, which might make it risky to extrapolate to the modern developing world. Finally, he argued that the study of proto-industrialization should warn modern development economists of the dangers of simple linear views of development, involving straightforward transitions from static feudal societies to dynamic capitalist ones (Mendels 1982: 93–8).

### Criticisms of the theories of proto-industrialization

Somewhat more slowly than they attracted support, the theories of proto-industrialization also began to draw criticisms. Several components of the *definition* of proto-industry evoked lively controversy (Kriedte, Medick and Schlumbohm 1992: 70ff). For one thing, the precise size and structure of unit that qualified as a ‘region’ was unclear. Proto-industries could and often did extend beyond the radius around a single market town, or alternatively were sometimes found in only one or two communities in such a radius. Thus it was undesirably constraining to adopt this narrow geographers’ definition of a region. On the other hand, defining the region as simply the area within which a certain proto-industry was practised seemed, although pragmatic, to leach the concept of the ‘region’ of much of its analytic content. Moreover, there was no agreement about how large a proportion of the regional labour force must have been employed in proto-industry, nor how fast or sustained the growth of this labour force must have been, in order to qualify as ‘proto-industrialization’. Many researchers emphasized the importance of specific characteristics of the particular region, including the economic trends it experienced historically, and its situation within the wider national or international framework, in affecting the course of proto-industrialization.

There was also confusion about the precise theoretical importance of *export markets* for proto-industries; this is especially important given the criticisms from a number of historians of crafts and industry about the neglect of locally oriented rural and urban crafts. Even now, it remains unclear what proportion of production had to be exported in order for any given industry to qualify as a proto-industry instead of a craft. Finally, it is not clear how distant the final markets must have been, in order for trade in industrial products to count as ‘supra-regional’ rather than ‘local’ – especially given the ambiguity in defining the ‘region’ which has already been discussed. In sum, the precise demarcation between locally oriented crafts and export-oriented proto-industries remains indistinct.

Many commentators, especially historians of crafts and industry, criticized the *neglect of other forms of industry*. The theories of proto-industrialization concentrated solely on one sort of pre-industrial industry – namely domestic industry. These critics advanced strong arguments against such an over-emphasis on the role played by this single sort of industry in the transition to industrialization proper. They urged that historians also take into account the quantitative and qualitative importance of locally oriented rural and urban crafts, export-oriented urban industries, and centralized manufactories – all of which had been consciously neglected by the theories of proto-industrialization (Kaufhold 1986; Stromer 1986; Schremmer 1980: 422–3, 425–7, 442).

A related issue was the apparent *neglect of industrial technology and physical geography*. Although Mendels made passing references to the role of the production functions of particular industries in affecting rural impoverishment, and the key role of transportation costs in determining industrialization or de-industrialization of proto-industrial regions, these references remained for many years largely unexplored. Only recently have they been developed into a more systematic consideration of the role in proto-industries of technical requirements of different branches of industry and the effect on production costs of geographical and physical characteristics of the region (Mager 1993).

A fundamental substantive criticism levelled at all the theorists, but particularly Kriedte, Medick and Schlumbohm, was that they adopted a mistaken view of the structure and functioning of the *traditional societies* out of which proto-industrialization is supposed to have developed. This criticism was directed both at their view of the preconditions for the dissolution of feudalism during the ‘first phase’ of the transition to capitalism, and at their picture of agrarian society, especially that part of it which they termed the ‘subsistence type’ (Coleman 1983: 440ff; Eley 1984: 525ff; Houston and Snell 1984: 491; Linde 1980: 106ff; Schremmer 1980: 434ff; cf. on this Kriedte, Medick and Schlumbohm 1983: 92ff and the contribution by Schlumbohm in the present volume). This raised the question whether the model of the peasant family economy which they – like Mendels – had taken over from Alexander Chayanov, who had developed it for early-twentieth-century Russian peasants (Chayanov 1966), was really applicable to early modern European societies. Further criticisms were levelled at the contrasts drawn between subsistence-oriented proto-industrial producers and profit-oriented (i.e. capitalistically motivated) putters-out and entrepreneurs (Mosser 1981: 404ff). The exclusive subsistence orientation assumed for rural domestic workers was not found in empirical studies, and was inconsistent with the observed fact that proto-industrial



producers sometimes became traders, factors, putters-out and even manufactory operators; nor was it altogether consistent with the observed practice whereby proto-industrial workers saved up proto-industrial earnings to invest in land and agriculture.

Closely related to this issue was the argument that the theories were *inapplicable to certain European societies*. Some commentators argued that the preconditions for proto-industrialization assumed in the theory actually prevailed only in north-west Europe, so that the model could not claim to be generally applicable (Houston and Snell 1984: 476). However, others contended that England – an important part of north-west Europe – had to be excluded from the model, because commercialization and capitalistic structures were already far advanced in England before the establishment of proto-industries, and thus proto-industrialization cannot have brought them into being. It was also argued that the demographic postulates of the theory and the view it advanced concerning factory industrialization were not appropriate in the English context (Coleman 1983: 439ff; Houston and Snell 1984: 476). Ironically, German historians also claimed that the theories of proto-industrialization were inapplicable to Germany, which is often seen as having followed a ‘special path’ toward industrialization and modernization (Kuczynski 1981; Schultz 1983; Linde 1980).

Most commentaries also criticized the *demographic* component to the theories: both Mendels’ view of the relationship between proto-industry and demographic growth, and Medick’s ‘demo-economic system’. Because the demographic regime was subject to so many different influences in the various regions of early modern Europe, it seemed unlikely that all local and regional studies would support the postulates of the theory in all respects. As a consequence, the explanatory power and the validity of Mendels’ and Medick’s demographic postulates were questioned by a wide variety of critics, from both theoretical and empirical perspectives. Empirical case-studies of proto-industrial regions all over Europe were adduced to show that not all proto-industrial regions had greater population density, faster demographic growth, lower ages of marriage, higher fertility rates, larger households or a breakdown in the family and gender division of labour – all of which had been postulated in the original theories. Furthermore, case-studies of agrarian regions were used to demonstrate that many – even all – of these demographic characteristics could also be found in regions and time-periods when agricultural production was intensified and expanded (Coleman 1983: 442f; Linde 1980: 113ff; Houston and Snell 1984: 479ff; Schremmer 1980: 429ff; Kriedte, Medick and Schlumbohm 1993: 219–26).

The relationship between proto-industry and *agriculture* also remained unclear. It was pointed out that proto-industries were practised in the same region as many different kinds of agriculture, including both subsistence and commercial farming. Moreover, proto-industries derived their food and raw material supplies both from their own farming and from that of neighbouring or more distant regions of surplus. By-employment in proto-industry and agriculture was not the norm, but rather was sometimes present and sometimes absent. Finally, it was pointed out that in a number of proto-industrial regions, traditional agrarian institutions survived unaltered and rural social structure remained stable (Houston and Snell 1984; Linde 1980).

The theories were also accused of neglecting the economic role of *urban centres*. Although Deyon and Mendels acknowledged that 'the entire handicraft sector was organized or coordinated from the town', they appear to have regarded proto-industry as exclusively the *rural* component of this handicraft sector (Mendels 1982: 78). This is one aspect of the theories of proto-industrialization which has been most strongly criticized. An important current of thought argues that large *urban* export industries, or those involving centralized production units, should also be included under the rubric of proto-industrialization (Cerman 1993; Hohenberg 1991; Poni 1985).

A final major criticism focussed on *factory industrialization and de-industrialization*, and questioned the role of proto-industrialization in preparing the way for industrialization. It was widely acknowledged by both proponents and critics of the theories of proto-industrialization that de-industrialization and a return to agriculture were a not infrequent outcome in proto-industrial regions. According to the critics, this fact removed a great deal of the empirical content from any theory about proto-industrialization, especially since the factors which decided whether a proto-industrial region would industrialize or de-industrialize remained largely unclear (Clarkson 1985: 34ff; Houston and Snell 1984: 488ff; cf. on this the contribution by Clarkson in the present volume).

Each of the *mechanisms* by which proto-industrialization is supposed to have led to industrialization was shown to have weak empirical and theoretical bases. Research showed that the demographic effects of proto-industrialization were extremely various, as was its impact on the fragmentation of landholdings (as is acknowledged in Kriedte, Medick and Schlumbohm 1993: 219ff, 226ff). Proto-industrialization appears to have been only one of many sources of capital for industrialization, and in some cases proto-industrial profits flowed into agriculture, landholding, or socio-political investments. Proto-industrialization was also only one of many sources of entrepreneurial skills for industrialization,