Ancient History Matters
Studies Presented to Jens Erik Skydsgaard on His Seventieth Birthday

«L’ERMA» di BRETSCHNEIDER
Ancient History Matters

Studies Presented to Jens Erik Skydsgaard on His Seventieth Birthday

Edited by
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The publication date of the present volume was originally planned to coincide with two concurrent events: Professor Jens Erik Skydsgaard’s seventieth birthday and his formal retirement on April 16, 2002. As it turned out, however, Jens Erik Skydsgaard took most of us by surprise by deciding that the addition of ‘emeritus’ to his title should occur less than a year earlier, on August 1, 2001. Yet, even though he quite unwittingly came to upset slightly the editorial team’s plans, we still think it fit to celebrate both events on a single occasion and to honour him with the presentation of this Festschrift.

Our gift to him cannot but be a modest token of appreciation and thanks, especially when we consider the immense contribution which he has made to so many fields within Danish academic life for over forty years. As holder of the chair in Ancient History (at the University of Copenhagen) since 1970 he has faithfully guided hundreds of students not only through the delights and complexities of Greek and Roman history, historiography and archaeology, but also through the often daunting paths of Greek and Latin philology. He has endeavoured to instil generous chunks of his enormous learning into all those who have attended his classes and seminars, a number of whom later were fortunate to become his younger colleagues. But, above all, he has sought to infect his students with his passionate adherence to three principles: methodological stringency, the need to intermarry the written and material record, and the obligation of the historian to combine painstaking analysis of the source material with innovative reflection on the wider historical perspectives. Jens Erik’s main distinguishing marks, many will agree, are: compassion, unfailing readiness to offer counsel and assistance, an insatiable thirst for knowledge in any possible area and, not least, his fine – even if sometimes acidulous – sense of humour. Whether on an Etrurian hilltop site, or on a Peloponnesian plain, or at the findspot of an ancient olive-oil press, or, again, in the corridors and classrooms of his home-base in Copenhagen, he has been an ever inspiring, tireless mentor and a dependable friend.

But the circle of persons and institutions which have benefited from Jens Erik’s Wirkung is much wider than this. Always in an outstandingly cooperative spirit, he has put his personal energy and professional capabilities into supporting an exceptionally onerous administrative burden at his own Department and Faculty. What is more, throughout his entire career he has embraced every single institution, educational or otherwise, concerned with the study of Antiquity; an old and very special beneficiary is of course the Accademia di Danimarca at Rome.

So, this is the appropriate moment for us to reciprocate by thanking him for all these and many more things. But above all else, we wish to thank him for constantly reminding us, in his characteristically unpretentious fashion, that indeed Ancient History matters.

The present volume would not have come into being without the generous help and support we have received from many colleagues, friends and institutions. It is to them we now want to offer our very warmest thanks. First of all to each and everyone of the contributors, who have engaged in the
project with exemplary enthusiasm and co-operativeness. Trine Madsen has offered invaluable technical support during the crucial stages of the publication process and Ittai Gradel has helped us more than once during the editing work. Professor emeritus Johnny Christensen and his wife Lis Christensen have been lavish with their time and professional counsel. Thanks are also due to Professor Ole Feldbæk and Højesteretssagfører Torben Ingemann Hansen. We also wish most gratefully to acknowledge the generous financial support we have received from Dronning Margrethe og Prins Henriks Fond, Det Danske Institut i Rom (Karen Ascani's Fond), Landsdommer V. Gieses Legat, Hielmstierne-Rosencroneske Stiftelse, Krista og Viggo Petersens Fond, Velux Fonden and the Department of History at the University of Copenhagen. Last but not least, our thanks to the Director of the Accademia di Danimarca, Professor Gunver Skytte.
The "great debate" on the ancient economy continues to grumble on, like some near—extinct volcano, from which every now and then a puff of smoke appears, proving that old fires still burn beneath the surface. One facet of the debate is the question of industry and trade, another the productiveness of the agrarian sector — to which Jens Erik Skydsgaard has notably contributed. The central issue for both, which will never be resolved to everyone's satisfaction, is not so much the existence of industries like that of textiles nor the fact of surplus food production for export, but how to understand their size and significance. Perhaps, therefore, a new approach will help. In the last two decades a vigorous discussion has emerged among modern economic historians about "proto-industrialization", a theme which was adopted at the XVIIIth International Economic History Congress held in Budapest in 1982. That is appropriate, since it was so often at various International Economic Historical Congresses that Jens Erik and I met to discuss our mutual interests.

The basic premise of the proto-industrialization debate is that agriculture and manufacture do not, as in our modern society, occupy two different worlds. The theory, for which the word was invented, was conceived as a key to explaining the development of capitalism in the sixteenth to nineteenth centuries by tracing the progression from domestic, cottage industry to modern industrial manufacture. That in itself was nothing new, since it was what economic historians from Sombart onwards had attempted. But they did so with little regard to the surrounding agrarian economy. With this in the background Franklin Mendels thought to bridge the gap through his research into the Flemish linen weavers of the eighteenth century Flanders, from which in 1969 he formulated a model.

Since then, as a result of many more empirical studies and in the light of some fierce criticism, all of Mendels' central propositions have been challenged, including the assumption that the model was relevant only to a particular period in the early modern history of the industrial revolution. Some scholars have questioned its very value as a model, calling it merely a "suggestive hypothesis", although most, I think, would now regard it as a useful heuristic device, even if one which needs to be made more universally applicable to other periods of history. Whilst, however, its application to the Middle Ages and to the Third World has been fruitfully discussed, since almost all agrarian societies develop a symbiotic relationship between rural and industrial activities, no one, as far as I know, has thought to extend its relevance to the ancient world. Yet there, as much as in other societies, the basic question remains of what were the conditions necessary for a rural proto-industry to develop into capitalist industrialism. Or, to put it from the perspective of antiquity, what prevented such developments in the Roman Empire, when all or many of the conditions for proto-industrialization were present.

To summarize the debate briefly, the definition of proto-industrialization is more or less agreed, even by its critics, and was most clearly laid out in a modified form by Mendels in 1984. Proto-industrialization im-
plies that in the society under investigation - manufacture developed beyond supplying the needs of purely regional markets; the concept of export beyond the region, therefore, is fundamental; - but peasant and rural households still participated in the manufacture, often (although not always) because the land was poor, and often in periods of slack seasons on the land—the important point being the availability of surplus labour; - at the same time there was complementarity between large land owners who produced “commercial” surpluses and petty farmers who needed secondary, usually seasonal, employment to make ends meet; - despite a variety of different technologies and physical characteristics of the locations, both had an input, as did opportunity costs in terms of either foregone alternatives—that is (usually) when agricultural production was low—or political and fiscal privileges.9

What Mendels calls the hypotheses attached to the definition—by which he really means the centres of debate and controversy—are

- the demographic effect of proto-industrialization; Mendels believed that expansion of the population, stimulated by increasing production, was the key to economic change, since it led to fragmentation of land-tenure, proletarianization of peasants and thus greater elasticity of the work force; empirical studies, however, have failed to prove whether population increase was the cause or the effect, even if most historians allow that it played a role;10
- the urban dimension; Mendels agreed that the part played by towns was fundamental, since the traders who disposed of the rural exports for interregional trade lived in and used the markets of towns, beginning as operators of a simple entrepreneurial system (Kaufsystem) and ending by providing the capital for a “putting-out system” (Verlagsystem);11 but, as he and others have pointed out, the division between town and country is not so neat, given the many “quasi-towns” or “new agglomerations” that grew up around rural industries.19
- proto-industrialization, therefore, produced an experienced entrepreneurial class and a trained work force available for industrial take-off. Yet not always. As advocates of the model have been the first to admit, there were many cases where proto-industrialization ended in a dead end. But one of the fiercest criticism has been that insufficient attention has been given to investigating why, therefore, take-off did not occur.13

* * * *

This, therefore, is my excuse for using the pottery manufacture of Roman Gaul, and in particular the production of terra sigillata at La Graufesenque, present day Millau in the Aveyron department of southern France, in order to ask whether the concept of proto-industrialization can, at least “help us to think more clearly about economic development.”14 It is not my aim to describe the industry exhaustively, since this has been often done by those far more knowledgeable than myself. The intention is simply to put what is already known about pottery production into the context of the proto-industrial debate, in order to clarify the questions rather than to produce dramatic conclusions.

Whether Gallo-Roman potteries deserve the name “industry” has long been debated, and the discussion is made no easier by the fact that overall very little is known of the manufacturing process.16 Protagonists on the one side perceive industrialization to mean the entry of dynamic capitalism into the ancient economy,16 others as simply a factual description of a very large manufacturing operation.17 Proto-industrialization to some extent cuts through the debate, concerned as it is with only the potential and the conditions for ultimate capital development.

There is no doubt that by its size and productive capacity that the manufacture of terra sigillata (hereafter TS) at La Graufesenque qualifies as a proto-industry.18 The
Proto-industrialization in Roman Gaul

The pottery complex covered a surface of about 10 hectares and is estimated to have contained about 50 kilns, although only four, including the “grand four”, have as yet been fully excavated. In its boom period of forty years in the mid-first century AD over 600 names of potters are known—that is, perhaps, about 200 working together at the same time on the same site. Over the whole period of production about 450 potter’s stamps have been catalogued, 130 mould makers’ names identified and 270 names recorded on 200 fragments of graffiti, most of them kiln tallies. Production in the boom period of the first century AD is estimated to have been about 600 million assorted pieces, or about 15 million per year. To show this was not an isolated phenomenon, comparable figures for the production of TS at Montans near Gaillac in the Tarn valley took place over a surface area of 20 hectares, where 47 kilns have been found, including a large kiln with a capacity for about 4,000 pieces at each firing.

Similar, impressively large figures can be projected for the transportation of the goods for export. The product of the workshops at La Graufesenque (if one assumes, as one must, that it was transported by carts, each carrying 1,000 pieces) would have required 15,000 loads in a season restricted by the weather to perhaps less than eight months. That is to say, about 55 carts had to be organized for loading each day, and maybe about four times that number, when one counts in the round trip to exporting depots like Narbonne on the coast. To fire the kilns was an equally daunting task of organization. It is estimated that every kilogram of clay needed some five kilograms of wood for firing, and that, therefore, to fire the 50 kilns at La Graufesenque needed some 900,000 tons of wood or the equivalent of 10,000 hectares of forest. The calculation is reinforced by the fact that palaeobotanic studies show an area of about 40,000 hectares around La Graufesenque and its subsidiaries where signs of ancient woodsmen have been detected engaged in distilling pine resin from small branches.

One can in theory, at any rate, trace a linear progression, although not always chronological, in the manufacture of pottery from a “cottage industry” to large scale manufacture by examining other centres of TS production in the south-west of Gaul. Beginning with the centres of pottery which seems to have been linked to or located in the grounds of small villas, such as Aspirans, Jonquières and Saint Saturnin in the Narbonnaise and Valéry and Carrade in the orbit of Montans, they were limited to supplying local consumers. But the activity needed a qualitatively different organizational base with the establishment of the large centres like La Graufesenque and Montans.

Nor is there any doubt that La Graufesenque and other centres like it qualify as proto-industries through their foreign exports, which carried TS far beyond the region at the time of its greatest prosperity. There is no need to labour the point, since distribution maps are enough to show the pottery from the workshops reaching every part of the empire and beyond—from the frontier camp at Haltern in Germany, as early as the reign of Augustus, to Scotland, the Danube, North Africa and Palestine. As to the means of distribution and its commercialization, a crate of unopened La Graufesenque pottery was found in the ashes of Pompeii and another load of 3,000 pieces recovered from a shipwreck off Cape Creus on the Catalan coast, both dating from about AD 70. As far as one can judge, there was always a particular pull towards military centres, especially those on the northern frontiers. The impression is confirmed by tracing similar exports from Bannassac, one of the subsidiaries of La Graufesenque in the upper Lot valley, and especially those from the early Arretine subsidiary at Lyon. This makes the notion of special army contracts attractive, although no one would wish to go as far as to say that they accounted for all the distribution.
There is, however, much more doubt about how the manufacture was organized and whether the name of "industry" is appropriate for the large production centres. While some think that potters were free, independent manufacturers rather than employees, others believe that potteries like La Graufesenque or Lezoux in Central Gaul were industrial complexes without individual officinae, where a single patron was served by groups of master potters. Often the description is left ambiguous. Take, for instance, the following conclusion about the production of TS at Mittelbronn on the Moselle: "It was a great industry (my italics) occupying a large number of people permanently and supporting a flourishing trade". The leading authority on the Central Gallic potteries considers that to talk of the industrial organization of the dispersed centres of production around Lezoux, would be "an extremely unwise hypothesis", but he nevertheless goes on to speak of a "structured organisation" developing into "industrial" production. The arguments can be set out side by side.

A. In favour of free, independent co-operatives are the extraordinary graffiti found at La Graufesenque. The kiln tallies show groups of potters who used the same kiln for firing their pots—artisanat groupé is the current phrase. But it is clear they were not always tied to the same kiln, since the same names appear with other groups on different tallies, without any sense of a cartel. Nor is there any sign of a hierarchy between the names, all of which appear to belong to free Gauls, some Latinized. In other words, there were no slaves among those who brought their pottery to the kilns for firing, and the potters were literate in the local Gallic spoken by the Ruteni, while some of them were literate in Latin, too—or, rather, they could read the tallies, which does not necessarily mean literacy. Some of them enjoyed a relatively good standard of living—including, apparently from archaeological discoveries, a diet of oysters, foreign wines and olive oil from Spain—although, if we can extrapolate from the evidence at Lezoux, there was also extreme poverty.

The graffiti show how the pots were brought to the kiln, lined up and docketed in stacks by size and type and then loaded into the kiln along with a tally of the totals against each potter's name scratched on an unfired plate. That proves that there was a kiln-master to carry out the skilled task of loading, presumably aided by a checker, who scratched a symbol and sometimes the word "legitu[m]". Although the kiln-master never appears by name, the absence of a name against the pottery totals on several of the tallies could indicate that the kiln-master was firing some of his own pottery. Some of the plates used for tallies also possess the moulded imprint of a name, which might indicate a kiln-master using his own plates for the tally.

It was also necessary on the tally to number the firing in a series over a five year lustrum, which was dated by the name of the current flamen (or cassidanos in Gallic). That means there was an archive for the originals of the tallies, which is perhaps confirmed by a unique graffito recording the work-days completed by some slaves. It also shows that the potters were closely linked to a religious organization, led by an elected priest, as one might expect from the Gallic fanum on the site. That has led to observations about their similarity with collegia, whether professional or funerary associations of workers, in other parts of the Roman world, although there is no reason to think the flamen was the same as a magister collegii figurorum recorded elsewhere in Gaul (CIL XIII: 8729).

It is evident, of course, that potters, whether working in independent teams or not, must have needed to co-operate in quite a number of the activities, such as the digging and preparation of the clay, the acquisition of the wood and other materials, or in the maintenance of the buildings and kilns on the site. There are a number of cases where two potters are recorded on the tallies or on the mould stamps as working together. But despite all this we are warned not to exaggerate the complexity of the operations and the size of the workshops. The actual technology required was not great
and sometimes had existed before the Romans arrived. There were only a few really skilled jobs, like that of the kiln-master or the die-stamp maker, required in the production process. No great capital outlay was needed for equipment such as wheels, moulds and dies, and even they could be circulated or hired. In theory it was quite easy for anyone to become a potter and some evidence seems to indicate workers from outside the workshops.

B. So much for the argument in support of free collectives of artisans. But was the organization of the potteries in some fashion imposed and controlled from above? The idea is not much favoured by most studies. But a remarkable fragment of a graffito has turned up recently at the Lezoux complex (which need not, of course, have been the exact twin of La Graufesenque) recording Gallic names in alphabetical order, which it is difficult to see as anything other than a list of employees. There are, too, many signs of strict quality control of the products emerging in its hey-day from the kilns at La Graufesenque in the form of rejects with quite minor faults which were dumped. The potters appear to have been consciously targeting the export market when they changed their Gallic names into a Latinized form—such as Tritos changed to Tertius—in order to add prestige to the goods. None of this absolutely proves an imposed order but it must remain a serious possibility.

To this we must add a fact that has often been noted, the apparent lack of competition between the individual potters and between the various centres of production. The same forms, the same decorations and the same names turn up at different sites, whether because the potters themselves travelled or because the moulds and die-stamps circulated. At La Graufesenque, for example, some potters signed pieces which came from moulds bearing other signatures. In some cases there is a chronological progression from one site to the other, but that will not serve as an explanation for the same forms and designs turning up at the same time at La Graufesenque and Montans. In Central Gaul two pots were found at Martres-de-Veyre identical in every respect but with different potters’ names stamped on them. The subsidiaries of Montans and La Graufesenque had similar products but seemed to have their own areas of supply, although with some overlap. Could all this have happened by voluntary co-operation rather than through central control?

It is abundantly clear than the production centres at La Muette in Lyon, and at La Graufesenque were founded by or closely associated with the manufacturers of TS at Arezzo in Italy. The Italian and Lyonnais establishments were certainly organized by owners who employed slaves as potters, although there is no real evidence of this at La Graufesenque. The direct link with Italian potteries does, however, account for the same names, parallel die-stamps and moulded forms, and at La Graufesenque or Lezoux it is thought to explain the sudden take-off and high quality of the early products. Both the take-off and the sudden decline of exports to world markets at La Graufesenque look like decisions being made by top executives for commercial or for other reasons.

In the end the debate comes down, for lack of positive proof, to judgements. Could a free co-operative of not-so-affluent potters within a couple of generations of the Roman conquest have really arranged the quite substantial road construction and metalling, such as has been found on the Larzac plateau, which was first laid down to military standards but soon enlarged to take the heavy traffic of pottery exports to the South? Could they have organized the considerable teams of carters and animals which we saw were required to move their exports? Where were the four hundred or so animals stabled? Could such an essential part of the operation have been left to entrepreneurial traders? There is some slight evidence of the potteries themselves being involved in marketing from a single graffito recording the workdays and various tasks of slaves (pueri) belonging to a lady called Atelia, including “for the market” (mercatu). But it is impossible to tell whether it is a record of slaves
hired by a pottery co-operative or an account being rendered by a master potter to a wealthy proprietor.

Above all, are co-operatives of free, rural artisans consistent with the overall picture of Roman Gaul in the first and second centuries AD? In a rightly celebrated article, entitled *pauvres potiers, pauvre misère*, published twenty five years ago about the potteries at Lezoux, Vertet described the abject poverty of some of the free workers in the workshops based upon the graves on the site, the diets of the workers and their huts. These workers, he concludes more recently, must have been servile, even if not slaves, and organized at first by rich Romans, subsequently by rich Gauls. It must surely be significant that among all the hundreds of names known, in a profession that was the commonest in Gaul, no potter (with a couple of possible exceptions) has left an inscription, a memorial or a record of civic office. That there were some skilled artisans is evident from their work, and no doubt they were the ones who left traces of a higher standard of living at La Graufesenque or whose richer burials can be seen in the necropoles near to Lezoux. Perhaps they were like the man who practised *ars cretaria* at Lyon and achieved some standing by being admitted to the *collegium of fabri* and getting exemption from entry fees. But while current scholarship has abandoned the old notion of Gaul covered with gigantic estates and serf-like estate workers in favour of a scenario containing many more small peasant-farmers, grouped around the local *vici* (like that of *Condotomagus*, modern Millau), the land was still dominated by a huge deferential divide between rich and poor.

This militates against the more romantic picture of vigorous, independent and self-regulating collectives of artisans producing massive quantities of high quality goods for the international market. On balance, I conclude, though with great hesitation, that the probabilities favour the concept of outside capital and direction at the large pottery sites like La Graufesenque. It is this stage, which was greater than a small villa workshop but less than a full blown industry, that proto-industrialization theories seek to identify.

* * * * *

When it comes to capital investment, by whom and how the proto-industry was stimulated, it is almost impossible to do more than speculate. Although some of the big names are known in the manufacture of TS at Arezzo and at its subsidiary at Lyon—Attius, *Aco* and the like—nothing similar is known at La Graufesenque. Possibly one is the *Germanus* whose name appears often at La Graufesenque and on over half the moulds at Bannasac, or *Castus* whose stamp appears on the plates used for the kiln tallies and whose pottery is found all over the western provinces. Both names also appear on construction parts of the kilns. Castus may have been a master potter and kiln-master, but his name also appears as just another potter on some of the other dockets. Money certainly was required for some capital costs, even if the actual tools of trade were simple, and it must be doubtful whether any potter could raise them. The land, for instance, was an important item and, in the case of La Muette (Lyon) or Lezoux, the sites were well situated and valuable, since previous buildings had to be demolished to make way for the workshops.

If the Gallic potteries had conformed to the theory of proto-industrialization, the capital outlay would be presumed to have come from urban merchants interested in maximizing their turn-over. Indeed, a study of northern Gallic traders in pottery claims that what had begun as primarily an operation of military suppliers ended as urban merchants of considerable wealth and position taking over control of the production. But the evidence for such a conclusion is limited to a handful of inscriptions in the whole of Gaul. Two of them are recorded also as traders in wine and one in cloaks, but none of them is particularly impressive, even though they are found in an urban-based context. What is interesting, however, is that many were apparently closely linked to the
As far as opportunity costs are concerned, it is easy to suggest, although difficult to prove, how the production of pottery would have been attractive. The Ruteni (who inhabited the Rouergue, which is approximately the same as the modern department of the Aveyron) cannot have gained large agricultural returns from the rye-growing regions of the Ségals, and the limestone plateaux of the Causses around La Graufesenque. Although the Romanization of Narbonnensis stimulated early, local TS pottery production on the Languedoc plain to the South, the sudden appearance of the large military market in the reign of Augustus must have looked attractive, and, as has been well documented, much of the produce of the kilns of La Graufesenque and its subsidaries passed through the communities of the Herault on to the great port of Narbonne, from where it followed the trade routes to the northern frontiers. Montans and its potteries, meanwhile, followed the route of the Tarn-Garnonne on to the Atlantic routes and the North.

The close association of military supply lines with inscriptions recording traders has led to speculation as to whether there were usually direct contracts between traders and army units, for which we have some evidence. As we know, such merchants gained fiscal exemptions, which must have given them distinct financial advantages in trading on the civilian market, also. What cannot be proved is that the military contracts for supply were somehow associated with the dramatic rise and fall of production at La Graufesenque, although this seems at least plausible as a contributory cause. Current orthodoxy stresses that the uneconomic location of the site must have been fatal when in competition with other centres such as Lezoux and the eastern Gaulish potteries, the latter especially well situated to supply the Rhine army; or it is said that overproduction at the southern workshops led to a decline in quality. But if TS was never profitable enough to be worth exporting much in its own right on a free market, and was only a tracer for other products, the argument
is unconvincing. There is no sign of economic rationality in the location of kiln-sites or transport costs in the east Gaulish pottery centres. And one might ask why, for example, the Arretine subsidiary at Lyon failed so soon, when it was ideally situated at the economic hub of Gaul?

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The proto-industrialization hypothesis requires the context of a population increase, although whether as the cause or the effect is unclear. In ancient Gaul there is no argument about the demographic effect of the Roman conquest, even if the estimates of growth vary considerably. The reasons were various but similar all over the Roman world—that is, peace, greater stability, better communications, increased trade and (on average) a better standard of living. But no ancient historian would suggest that manufacturing ever had more than a marginal demographic influence, even if it brought some prosperity and would hence have encouraged family growth. But land parcels would also have become smaller. The important part of the theory, however, is that more labour would, for whatever reason, have been available for the production of goods. Since there was probably also loss of land tenure and traditional ownership with the introduction of Roman census, we should not be surprised if, as has been shown at Lezoux, the period of boom coincided with the greatest evidence of poverty.

Which brings us to the last characteristic of proto-industrialization—seasonal employment in symbiosis with rural labour. Evidence from the study of Oxfordshire pottery in later Roman Britain has suggested that pottery was produced as a part time activity in the agricultural year, in order to provide a “cash crop” addition to the rural income. “On balance”, concludes a specialist in ancient pottery manufacture, “the concept of tenant potter-farmer seems most attractive.” This is quite common today in many third world countries and must also have been true of Roman Gaul. But just how the year was divided is difficult to calculate. The graffiti from La Graufesenque provide us with a timetable for the firings of the kilns from March to September, while the winter was probably used for preparation of the clay and wood cutting by relatively unskilled labour. One of the rare indications of the presence of slaves, recorded on the graffito of Atelia shows one of them hired ad materiem erigendum—stacking the wood. That means, I think, that, although master potters were at their busiest during the summer, the “ouvriers subalternes” would have been available for rural work from spring to autumn. Presumably the lady Atelia, who hired out her slaves, also used them in summer for work on a farm she owned.

What kind of rural work this was, which was carried on symbiotically with the potters’ routine, is a matter of speculation. The principle rural activity around Millau today, as it must have been in antiquity, is sheep and stock farming—that is, sheep reared on the Larzac plateau to provide milk for the famous cheese made at the caves of Roquefort nearby and cows from whose milk a fine Bleu des Causses cheese is produced. Although there is no reference to cheese made in the Rouergue (the territory of the ancient Ruteni) in antiquity, unlike in that of neighbouring regions, “faiselles”, the holed containers for straining and pressing the cheese, have been found fairly often. There are also ancient references and/or archaeological traces of work that derived from stock farming such as wool, weaving and leather. This together with the export of blocks of pine-pitch provides some evidence for a vigorous exchange of goods with the Narbonnaise and gives us some idea of the symbiotic activities in the countryside.

To pursue the possibility of cheese further, its importance in this part of ancient Gaul is documented by Roman writers. The Elder Pliny noted the fame in Rome of cheese from the region of the Gévaudan and the Lozère in the Cevennes, near to Millau, while Gregory of Tours recorded a religious ceremony from the Aubrac plateau, not far
to the North, which involved ceremonial throwing of the *formes casei*—the cheese “fourmes” or moulded forms—into a lake as an offering. Neither refer specifically to Roquefort or the Ruteni, nor to the famous blue cheeses which would preserve well for export. But there is nothing implausible about the antiquity of cheese-making, since prehistoric and Roman cult relics have been discovered in the grotoes whose temperature and humidity contain the secret of the maturing process of Roquefort. The association of cheese with religious rituals and mystery has been a universal feature of European society from time immemorial. The earliest secure reference to Roquefort cheese is in the eleventh century, when its donation of cheese to the great Abbey at Conques is recorded, although older tradition tells of two mule-loads of “mouldy” (i.e. blue) cheese being given to Charlemagne. It is interesting, too, to note that the produce of the Lozère and the Givaudan used to be brought to Roquefort for maturing until the last century.

This is not the place to expand upon the importance of cheese production as a major rural activity in the region of pottery manufacture. But it is worth adding that, since for the maturing of cheese salt in large quantities is essential, salt perhaps fills a gap in our knowledge of what came back in empty carts that had carried the pottery southwards for export. The Roman road from La Graufesenque to Beziers and Narbonne passed through Saint-Thibery, near Beziers, one of the many ancient sites along the Golf de Lion important for the production of salt that was sent to the interior. Interestingly, a load of La Graufesenque TS was found at another salt-producing site nearby, Sallelès-d’Aude, near Beziers.

The “campagne” (or calendar) for cheese making at Roquefort was and still is seasonal; that is, between August and November there is no manufacture, and the milking, which is the most labour-intensive part of the process, used to last only 75 days from May to July before the introduction of modern methods. Thereafter the “fourmes” were made on the individual farms before being carried to the “caves” for the “affinage” or maturing process. If we put this alongside the calendar for pottery making, which had unskilled labour available during the period between March and September while the potters took charge, we can perhaps begin to see the possibilities of how the rhythm of the countryside allowed both activities to flourish symbiotically. But this, of course, is only a guess. Cheese production, in any case, was only one of the rural activities which existed alongside pottery making. In later periods of the history of Millau a leather glove industry flourished which also depended symbiotically on the cheese of Roquefort, since it used the skins of the young lambs that were slaughtered while the ewe’s milk went to the dairies. Woven woollen cloth from the region was famous and sold in the medieval fairs of Europe.

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Why the proto-industry of pottery at La Graufesenque did not take off but collapsed about AD 120, as suddenly as it had begun in about AD 20, is still something of a mystery and several explanations have already been discussed. One of the most interesting is that there was a change of taste. What was once a desirable rarity became a common object no longer sought by the discriminating, and the product reverted to a purely local market. An interesting example of an attempt to take TS up-market is the imitations that were made of luxury vessels by the addition of a metallic glaze. My own belief, however, is that, since the Roman army never ceased to use TS, the change in the centres of high production must have had more to do with the choices made by state, military contractors than free markets. In other words, the explanation for failure was non-economic, although traders may have been influenced in their behaviour by some economic factors such as distance and accessibility. But those factors alone are not enough, since they do not explain the re-
placement of Gallic pottery by African in later periods. If TS was never valuable enough to trade on its own, then it is to other exports, such as foodstuffs, which we should be looking in order to explain the decline of the potteries. “The role of the state,” says Ogilvie, “is one of the least-researched aspects of proto-industrialization.”

I began by saying that proto-industrialization is not a model but a useful check-list against which to compare and enquire. The uncertainties over organization at La Graufesenque may perhaps be one of the ways that this particular manufacture did not conform to the hypothesis. But the hypothesis does help us to investigate broader questions about the ancient economy-questions of the sort raised by a recent paper on another “industry”, that of wool, which failed to take off in ancient Gaul. If land was the main source of wealth, then inevitably it was land that interested the imperial regime fiscally. Trade, however, was essential to supply the city of Rome and the army, and in these two sectors access and fiscal advantages were provided by political decisions. But when those markets collapsed, then too, did the manufactures which had benefited. While many of the conditions of proto-industrialization were present-capital, rural skills, surplus rural production and commercial organization—the manufacturing sector failed to survive autonomously because the market was too small and too controlled.

BIBLIOGRAPHY AND NOTES

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1. See, for example, the forthcoming publication of articles in Mattingly & Salmon 2001.

2. For the ancient history sections at these congresses, see Garnsey & Whittaker 1983; Whittaker 1985.


7. Schlumbohm 1996: 18; Hudson (1996: 49-51) dismisses P-I as a model, but agrees it provides "an agenda of interesting questions".


9. This point was added to Mendels' list by Ogilvie 1993: 162-164.


11. This facet of the theory was put most forcefully by German Marxists, primarily interested in the transition from feudalism to merchant capitalism; Kriedte, Medick & Schlumbohm 1981.


13. Coleman 1983: 445, quoting from Pollard 1981: "The concept fails to deal with what ought to be one of the most fundamental aims of enquiry: the way in which some of the regions affected were able to convert to full industrialization, while others de-industrialized." Cf. Dyom 1996: 40.


21. See the brief surveys by various authors in Bémont & Jacob 1986.


32. Marchal (1988: no 74) proves that this magistrate was not the kiln-master.


34. The facts and figures come from Vernhet 1991, 1993a and Marichal 1988. Obviously there will be some disagreement about any projected figures for production.

35. More so at Lezoux that La Graufesenque; cf. Vertet 1986, who speaks of "teams".


40. Vernhet 1986: 41 for the “fosse de Gallicanus”.
42. Martin 1988: 58.
44. Vernhet 1986: 41.
45. Favory 1974: 94; most recently Bourgeois, 1999: 181, with references. The name Vitulus, a slave of Nae-
vius, a potter at Puteoli, has been found at La Graufes-
que. But it could be a coincidence.
54. Stroebel 1985 has supported this view forcefully, with stress upon the contractual obligations with traders undertaken by a pottery manager (officinator).
58. Raepsaet-Charlier 1988: 64, “la prise en charge du produit chez les fabricant et, dès lors, la mainmise sur toute le processus de commercialisation.”
60. Listed in Favory 1974: 93; note the legionary veteran who became a negotiator at Lyon—CIL XIII:1906.
61. CIL XII: 8350; AE 1975 (from Colijnsplaat; but the name Secund(inius?) is not certain); Raepsaet-Charlier 1988: 49-50 & 53; Goudineau 1974: 107, links the name Secundinus, associated with the largest pottery workshops in the eastern Empire, with Gallic traders (cf. from Trier, CIL XII: 654).
62. Drinkwater 2001, with earlier references. CIL XII: 6366 records trade in cloaks and pottery by the same merchant.
63. CIL XIII: 1111, 11179; he rose to become a decurion of Trier, implying that he had become a large land owner; but by that time he may have been no more than a patron; Drinkwater 2001: 300.
64. See the remarks of J. Le Gall in Vertet 1990: 34.
66. Vertet 1998: 127; Dr. Plicque, an earlier excavator at Lezoux, believed he had found villas belonging to the negotiatores rei etribia, Vertet 1974: 89. Monsieur R. Aussibal, who has spent his life in the region, informed me that he has seen plenty of evidence of villas around Millau and Roquefort.
78. Peacock 1982: 27-28, describes the teams of pot-
ers in Crete; cf. Drinkwater 1983: 179 - “For, in a situ-
ration where most work was seasonal, one may suppose
villa-owners and villa-managers to have been unwilling, and indeed probably unable to maintain throughout a full year the size of a workforce that was required at cer-
tain critical times…”
80. At Bannasac there is one mould stamp with the name Germanus followed by SE[R...]; but it is unlikely
to refer to a slave; Hofmann in Bémont & Jacob 1986: 107.
82. Dausse 1993: catalogue nos.157-159; cf. Delmas
in Gruat & Delmas 1993: 127-156, for medieval parallels.
83. For a survey, see Gruat in Gruat & Delmas 1993:
53-75; for resin production and exports, see Vernhet
84. Plin. HN 11.97; Gregory of Tours, vita S.Hilarii.
For a discussion of these passages, see Albence 1948:
259-260.
85. Aussibal, oral information (see n. 66).
86. Camporesi 1985: 47-77.
88. See further, Whittaker & Goody (forthcoming).
89. Thomelin 1998: 44.
93. Whitaker & Goody (forthcoming).