

Introduction

Bernard Palissy is the hero of the final chapter of *The Conquest of Poverty: The Calvinist Revolt in Sixteenth Century France* which I published in 1986. In that book I represented Palissy as an isolated figure who, while appalled by the tragedy of the onset of civil war, was nevertheless unique in his understanding of the economic and social problems which had helped to provoke the crisis. While retreating into a religious vision in the face of an increasingly uncertain future, Palissy nevertheless singled out the agrarian problem as a key to France's troubles. Under-investment in agriculture, responsible for the grain shortages and the high cost of food, was at the heart of the difficulties which were exacerbating the political and religious crisis into which France had fallen.

I portrayed Palissy as more or less a lone voice and saw his proposed remedy of an agrarian capitalism as utopian in the French context. As I depicted it, the ongoing strength of seigneurialism and the absorption of the middle class into the ranks of the notables of the expanding state, foreclosed the possibility of a capitalist breakthrough in agriculture and a resolution of France's economic problems.

At a certain level there continues to be a certain truth to this view of France in the ancien régime. However, in pursuing my research on the wars of religion, I began to have doubts as to whether Palissy was quite the isolated figure I had imagined him to have been. By the middle of the sixteenth century France was on the threshold of a deep crisis. Were there not perhaps other Frenchmen beside Palissy who perceived the need to improve the productivity of French agriculture? Were there not possibly others, who, confronted by shrinking profit margins in industry, might have cast about for fresh answers? It seemed inconceivable that the monarchy, itself increasingly hard-pressed financially, would not have seen the need to promote economic innovation as a way out of its crisis.

These questions did not come to me out of a vacuum, I must hasten to add. Already in the 1970s I had been much affected by reading Charles Webster's *Great Instauration*, which demonstrated the close tie between English Puritanism,

¹ Leiden.

See additional evidence of a concern with agricultural improvement in Heller, Iron and Blood: Civil Wars in Sixteenth Century France (Montreal, 1991), pp. 52-3.



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the desire for social and economic improvement and the rising interest in Baconian science.³ If seventeenth-century Calvinists in England had made these connections, was it not possible that similar ideas might have surfaced in France during its period of political and religious turmoil in the latter half of the sixteenth century? Likewise in that decade, I was influenced by Joan Thirsk's Economic Policy and Projects.⁴ In that work Thirsk showed that the English government, in the face of the negative economic conjuncture of the later half of the sixteenth century, pursued a policy of economic protectionism, patents, monopolies and subsidies to stimulate the English economy. It was already well known that the government of Henri IV did likewise in the aftermath of the religious wars and growing English and Dutch economic success. It occurred to me that this kind of economic intervention might have begun even earlier in France and have its own history. It was with these questions in mind that I set off for a summer's research in 1989 into the Bibliothèque Nationale and Archives Nationales. On that first trip I was able to turn up a good deal of interesting material. But the highlight was certainly microfilm manuscript 63 of the Collection Lenain in the Archives Nationales. Among other things this manuscript contained a list of inventions patented by the crown during the wars of religion and in its immediate aftermath. This find revealed that the French crown during the reign of Charles IX, like the English government under Elizabeth, was, indeed, pursuing a policy of statesupported economic development in the face of the negative economic conjuncture of the late sixteenth century.

Most striking about the Lenain manuscript was the number of patents for new machines or processes in both agriculture and industry. Naturally, we connected this inventory of new patents with the mechanical inventions to be found in Jacques Besson's ground-breaking *Théâtre des machines*, a manuscript of which was presented to Charles IX in 1569. Besson's work was the first in a series of technological treatises published during the wars of religion. What was the reason for this notable interest in new inventions at this time? In part a concern with improvements in military technology could account for it. But, as a matter of fact, in Besson's work or in that of his nearest rival, Agostino Ramelli, military machines play an entirely secondary role. Most of the machines conceived by these two inventors were designed to do productive work.

My interest in Renaissance technology dates back to the days I sat in the history of science seminar of Henry Guerlac in graduate school at Cornell University. I remember the fascination I felt looking at the engravings of early modern machinery in the books I was then reading. What struck me at the time was the cleverness of these machines, which seemed to be the product of a creative impulse which was barely to be distinguished from the aesthetic inspiration of the

The Great Instauration: Science, Medicine and Reform, 1626-1660 (London, 1975).

Economic Policy and Projects: The Development of a Consumer Society in Early Modern England (Oxford, 1978).



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artists of the period. Both these marvellous machines and the idealized paintings of the Renaissance masters appeared to be inspired by a similar attempt to escape from the limitations of common existence. On the other hand, the specifically economic motivation behind the invention of such machinery, while it continued to fascinate, escaped me.

However, the economic interest in new machines in the context of the religious wars now seemed perfectly evident as I continued my archival research in subsequent trips to France. The introduction of machinery could be one way of cheapening the cost of labour and enhancing profitability. It was one possible path out of a situation of economic stagnation which characterized the second half of the sixteenth century. Whether such technological initiatives could lead to such an issue in the concrete circumstances of the French economy at this juncture is another matter. Indeed, I came to the realization that the reorganization of the workforce or forcing it to work longer or harder might serve as an alternative or complement to the introduction of new technology as a way of enhancing profitability. Nevertheless, the idea of linking up the history of technology and economic history after all these years was an enthralling one.

But this notion of enhancing the productivity of labour led me towards another aspect of the problem. If there was an increasing interest in new technology in this period, this somehow must have been related to the growing availability of labour which could work such machines. Looking at the engravings of Renaissance machinery in graduate school, I recall staring at the anonymous little men pictured at work around these machines, asking myself how one could ever get at the history of such obscure figures. Gradually, as I came to think more about the dispossession of the peasantry during the religious wars, I came to realize the probable connection between the rising interest in technology and the growing availability of wage labour.

For one of the striking things about the period of the religious wars is that, despite their destructiveness, the bourgeoisie actually seems to have become stronger rather than weaker as the conflict proceeded. How can this have been in the context of so much material destruction? As my research unfolded it occurred to me that, despite the devastation of the wars, it was not only the acquisition of land through the dispossession of the peasantry, but also the increasing availability of pools of exploitable labour which might help, among other factors, to explain the phenomenon of growing bourgeois strength. Underneath the apparent archaism of seigneurial reaction, the period of the religious wars was in fact a period of real capitalist advance.

In order to study the development of wage labour in the sixteenth century I determined to concentrate on its development in the city of Paris and the surrounding Ile-de-France. The Ile-de-France was the site of a major transfer of property out of the hands of subsistence peasants into the possession of an urban and rural bourgeoisie. The Parisian bourgeoisie was able to acquire a good deal of



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this property and to extend the tentacles of its economic activity over not only the Paris region but over a large part of the rest of France as well. The economic history of this region in this period has been much advanced by the work of Bezard, Fourquin and, especially, Jacquart. More to the point, the history of skilled labour could be illuminated by study of the hundreds of employment and apprenticeship contracts to be found in Coyecque's collection of Parisian notarial documents for the first part of the sixteenth century. But more broadly the police ordonnances to be found in the Collection Dupré in the Bibliothèque Nationale and the Collection Lamoignon at the Archives de la Préfecture de Police could be of inestimable value in reconstructing the history of both the skilled and unskilled workforce in both Paris and the Ile-de-France.

The manuscript which has emerged begins with a study of the role of Parisian merchant capital in the French economy in the sixteenth century. It proceeds to an examination of the Parisian labour force in the same period. It then investigates both public and private responses to the mid-century economic crisis. In the course of doing so it explores the growing interest in technology and the emergence of a concern with a new empirical approach to scientific investigation in the reign of Charles IX. It next studies the period of the religious wars linking the upheavals of that period with a partial proletarianization of the rural population and a continuing preoccupation with new technology. Finally, it deals with the economic recovery of the reign of Henri IV, tying together the economic programme of the crown with the further development of a wage-earning population and the rising interest in science and technology.

Reinterpreting the period of the religious wars by viewing it as a period which was much more economically vibrant than had previously been thought seemed to be a major gain of this research. It appeared to me that my study of the development of capitalism within the tissues of the ancien régime of France also made a fascinating contrast with the more successful models of capitalist development characteristic of Holland and England. Finally, my work seemed to throw some light on the French background to the Scientific Revolution of the seventeenth century.

But as I proceeded with this work it seemed especially important to me that my findings overall were at variance with the model of French history that I had imbibed as a graduate student and young university teacher who had been awestruck by the achievements of Braudel and Le Roy Ladurie. What did my research – with its preoccupation with technology, science, state intervention,

Ernest Coyecque, Recueil d'actes notariés relatifs à l'histoire de Paris et de ses environs au XVI esiècle, 2 vols. (Paris, 1905).

Yvonne Bezard, La vie rurale dans le sud de la région parisienne de 1450 à 1660 (Paris, 1929); Guy Fourquin, Les campagnes de la région parisienne à la fin du moyen âge (Paris, 1964); Jean Jacquart, La crise rurale en Île-de-France, 1550-1670 (Paris, 1974); Jacquart, Paris et Île-de-France au temps des paysans (Paris, 1990). See now the work of Jacquart's student J.M. Moriceau, Les fermiers de l'Île-de-France, XV^e-XVIII^e siècle (Paris 1994).



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proto-industrialization, proletarianization, and class conflict – have to do with their *longue durée*? The determinism of their approach seemed sharply at odds with the importance in my research of individual and collective volition.

At this point serendipity intervened. A friend of mine, Marie-Hélène Choisy, gave me a copy of a recent history of the *Annales* called *L'histoire en miettes* published by a young colleague of hers named François Dosse at the Lycée Jacques Prévert in Boulogne-Billiancourt.⁷ This tour de force brilliantly revealed the conservative prejudices which lay behind the environmental and Malthusian determinism of these two historians. Dosse's work helped to give me the intellectual and moral force to carry through my work, turning the last chapter of this book into a challenge to their stagnationist view of the ancien régime.

⁷ L'histoire en miettes. Des Annales à la 'nouvelle histoire' (Paris, 1987). This work has since been translated into English under the somewhat misleading title New History in France: The Triumph of the Annales, tr. Peter V. Conroy Jr (Urbana, Chicago, 1994).



I

The expansion of Parisian merchant capital

Has there ever been an age more flourishing than our own in philosophy ... and new inventions necessary to the life of men?

Jacques Peletier du Mans, L'arithemetique (1549)

France in the sixteenth century was hardly a unified state, let alone a national market. Although the monarchy was more powerful than it had ever been, the balance of political power still lay with local elites. Likewise, the overwhelmingly largest part of trade and manufacture was locally consumed. Indeed, this ongoing political and economic localism helps to explain the striking vitality of small and medium-sized towns in France in the first part of the sixteenth century. In this period of the Renaissance, the monarchy was nevertheless more powerful than it had ever been. The expanding capacity of the state was facilitated by a surge of economic expansion which promoted a growing economic interdependence between different parts of the kingdom at the higher levels of trade and exchange. One of the two focal points of this economic expansion – second only to Lyons in importance – was Paris. Taking advantage of its strategic location between Mediterranean and Atlantic and its growing importance as the political capital of the kingdom, the growth of the capital was a reflection of the economic dynamism and political integration of sixteenth-century France as a whole.

Paris was by far the largest city in France in the sixteenth century. At midcentury its population stood at more than 250,000 – four times the size of its nearest rival among French cities. The overwhelming majority of the inhabitants of the city were merchants, craftsmen, impoverished students and unskilled workers making up the bulk of producers and consumers. But the numerically smaller upper classes with their large disposable incomes exercised an inordinately large influence on the economic life of the city. For long intervals during the century the city served as the residence of the royal court. In addition to the Louvre palace the city contained the $h\hat{o}tels$ of some forty members of the high aristocracy or of princes of the Church. Hundreds and, at times, thousands of courtiers, nobles and their retinues were thus more or less permanently resident in the city, providing a pool of affluent consumption. The clergy's influence over

Philip Benedict, 'French Cities from the Sixteenth Century to the Revolution' in Cities and Social Change in Early Modern France, ed. Benedict (London, 1989), p. 9.



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the city, likewise, was of the greatest importance. A guide to Paris published towards the close of the century listed some forty-eight colleges on the Left Bank and a total of 129 monasteries, convents, hospitals, churches and chapels scattered throughout the city.² This clerical establishment further enlarged the market of wealthy consumers.

Paris was increasingly assuming the role of a modern political capital becoming the focal point of the kingdom's expanding system of justice, administration and taxation. As such it was able to draw to itself a large portion of the rents and taxes collected from throughout the kingdom, a major portion of which was spent on consumption by the court, clergy and the expanding elite of officials and magistrates.³ Such a throng of rich consumers made the city into an emporium of luxury consumption which favoured the growth of those crafts producing goods of high quality.

But the great size of the population provided an immense market for all types of food, clothing and furnishings. The merest journeyman ordinarily owned a feather bed made of good, sturdy oak set off by a canopy, tables, chairs, benches, pewterware, several linen shirts and at least one good robe made of wool for himself and his wife to wear on Sundays and holy days. Among 141 corporations in 1586, the largest fourteen, each with 500 or more members, devoted themselves entirely to providing food or clothing to the population.

A city the size of Paris required the importation of an immense amount of food and other commodities. At the time of the siege of the city by the army of Henri de Navarre towards the end of the sixteenth century, the dimensions of its commerce was described with admiration by Filipo Pigafetta:

Provisions of all kinds are brought to Paris from different regions by boats on the Seine which operate above and below the city. These vessels navigate not only on the Seine but on other rivers as well which are highly navigable and abound in fish. Beside these advantages Paris has that of being surrounded by the most fertile areas of France like Burgundy, Champagne, Brie, the duchy of Valois, the Vexin, Normandy, the region of Chartres, upper and lower Beauce and Hurepoix. By the rivers and principal roads these regions send fruits, foodstuffs and an infinitude of merchandise not even counting that which arrives by sea or land from more distant parts.⁶

Bertrand Gille, 'Fonctions économiques de Paris' in *Paris, fonctions d'une capitale*, ed. Guy Michaud (Paris, 1962), p. 128.

See for example the death inventory of Thomasse Chemynede, wife of Jean Audiguet, journeyman tailor, 7 February 1533 (n. st.), AN Min. Cent. étude XIX, 65.

Alfred Franklin, Dictionnaire historique des arts, métiers et professions exercés dans Paris depuis le treizième siècle (Paris, 1906; New York, 1968), p. 213.

Relation du siège de Paris', ed. A. Dufour in MSHP 2 (1876), 39. On Parisian food imports see Ronda Larmour, 'The Grocers of Paris in the Sixteenth Century' (Columbia University, Ph.D. Dissertation, 1963), pp. 63-4.

Enumeration in Les cris de Paris qu'on crie journellement par les rues de ladicte ville avec ce, le contenue de la despense qui se faict par chacun jour (Paris, 1584).



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Paris imported wheat and other grains, straw, hay, wood, charcoal, poultry, eggs, butter, fruits, vegetables, cheese, cattle and hides from the Ile-de-France. It drew to itself fish from Normandy, wine from Burgundy and Guyenne, silk from Tours and Lyons, paper from Champagne, Normandy and Auvergne, salt from Brouage, ironware from Champagne, Burgundy, Normandy, Berry and Nivernais and cloth from Amiens, Rouen, Beauvais, Reims and Meaux.

Paris did not merely import merchandise for its own use. On the contrary, it acted like a filter through which a large part of the goods produced in the centre and south of the kingdom passed on the way north to England, the Baltic and, above all, to Antwerp. Parisian merchant capital, reinforced by the power of the municipal government, was deployed to capture the flow of these commodities and to channel them through the markets of Paris. The presence of the court and the growth of royal administration accentuated the process of economic centralization.

THE GROWTH OF MANUFACTURERS

The drapers were the most important merchants of the city. Their operations were national and even international in scope, involving the finishing of cloth from Amiens, Rouen, Beauvais, Reims and Meaux as well as its re-export to all the provinces of the kingdom and beyond. At the height of their activity, towards the middle of the sixteenth century, as many as 600,000 pieces of cloth were dyed and finished annually at Paris. The fairs of Guibrey played an important role in disseminating Parisian cloth to the west of France. Lyons and Toulouse served a like role in furnishing the Mediterranean and Iberian market. The Parisian wool cloth industry was important not only to the working population of the city but to the livelihood of the inhabitants of small towns in the Ile-de France. Indeed, the Parisian drapers claimed that their industry provided employment not only for the populace of Paris but for a large fraction of the population of such towns as Melun, Rozai-en-Brie and Meaux which were dependent upon them. 10

The book trade was likewise an industry which was national and even international in scale. The paper manufacturers supplied the printers and book dealers from mills located in the Ile-de-France, Champagne, Normandy and the Auvergne. The paper manufacturer Pirette was in reality a great Parisian merchant

⁸ Gille, 'Fonctions économiques de Paris', p. 126.

Coll. Lamoignon, vi, fo. 362r.

Emile Coornaert, 'Anvers et le commerce parisien au XVIe siècle', Mededelingen van De Koninklijke Vlamse Academie voor Wetenschappen, Letteren en Schone Kunsten van Belgie (Brussels, 1950), p. 3.

Roger Gourmelon, 'L'industrie et le commerce des draps à Paris du XIIIe au XVIe siècles', Ecole des Chartes, position des thèses, 1950, pp. 61-3; Gourmelon, 'Etude sur le rayonnement commerciale des marchands drapiers parisiens au XVIe siècle', Bulletin philologique et historique (jusqu'à 1610) du comité des travaux historiques et scientifiques (1961), pp. 265-75; Jean-François Belhoste, 'La maison, la fabrique et la ville: l'industrie du drap fin en France: XV-XVIII siècle', Histoire, économie et société 13 (1994), 457-71.



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grocer who traded in a large variety of merchandise which he imported and exported abroad. At the same time he owned several paper mills in the hinterlands in which he produced a wide assortment of paper in substantial quantities. ¹¹ The firm of Guillaume Godard and Guillaume Merlin, which specialized in ecclesiastical literature, claimed to own thirteen or fourteen presses and to have 250 workers in its employ. The partners estimated that the firm required 100,000 sheets of paper per week to keep its presses in operation. ¹² Its inventory totalled no less than 260,000 volumes. ¹³ Books printed in Paris especially found a market in northern France but through Lyons found an outlet in the Midi as well as in Italy and Spain.

The leading merchants of the city were keenly aware of the national and international scope of Parisian economic life. Among the most important merchants in the community were to be found Italians, Germans and Flemings. The development of the maritime commerce of Rouen was in good part due to the capital made available by Parisian merchants. ¹⁴ In 1535 a Parisian merchant Thomas Noël operated some fifteen ships sailing from Rouen which were active in the salt trade and in the export of wine and pastel from southwest France to England. In 1563 the largest single investor in the spice trade at Marseilles was a Parisian, Guillaume Bassereau. In the second half of the sixteenth century Parisian entrepreneurs like the Gobelins, Lelièvre, Lamy, Saly and Rouillé became deeply involved with the Antwerp market. ¹⁵

The interests of these Parisian merchants were large and extensive enough to lead them to view matters of economic policy from a national perspective. Thus, they collectively remonstrated over the conclusion of the Anglo-French commercial treaty of 1564 which provided for increased English tariffs on French goods. On this occasion, the king explained to the Parisians that the objective of the French negotiators had been not to prevent the English from increasing tariffs, which was out of the question, but to moderate them as much as possible. The raising of tariffs by the English was designed to offset a trade imbalance which was overwhelmingly in favour of the French. Analysis of commercial exchanges between the two countries in the middle of the sixteenth century reflects a decisive French superiority. French exports to England consisted of a total of sixty-eight items as against only twelve commodities exported to France from England. Eighty per cent of French exports were manufactured or

Ibid., vI, fos. 507v.-508r. See Annie Parent, Les métiers du livre à Paris au XVI siècle (Geneva, 1974), p. 65.

Coll. Lamoignon, IV, fo. 6011.

Parent, Les métiers du livre, p. 211.

Michel Mollat, 'Rouen avant-port de Paris à la fin du moyen âge', Bulletin de la société d'études historiques, géographiques et scientifiques de la région parisienne 71 (1951), 1-8; Histoire de Rouen, ed. Mollat (Toulouse, Privat, 1979), p. 153; Larmour, 'The Grocers of Paris', pp. 65-8.

Mollat (Toulouse, Privat, 1979), p. 153; Larmour, 'The Grocers of Paris', pp. 65-8.

J.-P. Babelon, Nouvelle histoire de Paris. Le XVI' siècle (Paris, 1986), pp. 321-33. See also Larmour, 'The Grocers of Paris', pp. 29-30, 39-42, 44, 46.

¹⁶ Reg. BVP v, 463-4.



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processed goods, including canvas, linen, buckram, woollens, ribbons, knitwear and says. England's sole manufactured export was its cloth. 17 The dominance of French commerce undoubtedly reflects the greater strength at this stage of the French economy. 18

The year following the signing of this commercial agreement the leading merchants and notables of the city protested the establishment of a kingdomwide monopoly on the export of pastel, an item crucial to the dyeing industry of the city. Such a monopoly would have as devastating an effect on the cloth industry, they warned, as had the previous monopoly on alum of 1543-8 which had been controlled by the Italians Del Bene and Sardini. 19 Notable in this document is the emphasis on the importance of industry in the economic life not simply of Paris but of the kingdom as a whole. According to this remonstrance, France was poor in precious metals. Its only real resources were its agriculture and its industries. According to this text, the methods of agriculture changed little in the course of time. Its practice was tied to a fixed location. It could cease altogether for a while without its techniques being lost. In contrast, the crafts, like the arts and sciences, were in a state of constant flux. They were portable and could easily move from one country to another. Hence the techniques of different crafts had to be practised and developed constantly or they might be lost or transported elsewhere. Industries like the manufacture of wool, canvas and tapestry demanded the work of a lifetime and like the other arts had to be carefully preserved and transmitted from one generation to the next. On the other hand, this remonstrance warned, through waste or bad policy these skills could be lost in a brief span of time.²⁰

A remarkable feature of this complaint drawn up by these Parisian bourgeois is the knowledge it reflects of the complexities involved in the production of pastel, the cultivation of which was concentrated in the Lauragais, located hundreds of kilometres away. The production of pastel in this remote region was crucial to the cloth industry of the city. The awareness that the authors of this document had of the commercial activity, not only of Paris but of the whole kingdom, is similarly significant. Thus they note in passing that as a matter of fact there were only 600 merchants in the whole of France capable of carrying on overseas trade. 21 It seems that the merchants of Paris had a grasp of the entirety of the wholesale trade of the kingdom. Indeed, as our discussion has suggested, the merchant community of Paris had close ties with the merchants

Ibid.

Ibid., v, 464-6. At this point English cloth exports to France were of minor significance consisting of little more than some Devonshire kerseys chiefly of the coarser type. See G.D. Ramsay, The English Wool Industry (London, 1982), p. 30.

Prosper Boissonade, 'Le mouvement commercial entre la France et les Iles Britanniques au XVIe siècle', Revue historique 134 (1920), 193-225; 135 (1920), 1-27. Jean Delumeau, L'alun de Rome, XV'-XIX' siècle (Paris, 1962), pp. 211, 251.

²⁰ Reg. BVP v, 509.