PART ONE

THE PREPARATORY PERIOD

1700-50
CHAPTER I

FRENCH AGRICULTURAL LITERATURE
BEFORE 1750

It is quite remarkable that the important groups of studies on French agriculture in the eighteenth century lay the emphasis on agrarian theory; on the political, and even philosophical, aspect of the question, rather than on the technical. The authors of the standard works on these subjects are chiefly concerned with questions like the repartition of land, its mode of tenure, agricultural taxes, consequences of the feudal regime, and the connection of agriculture with the broader problems debated in that century, relating to political economy or statistics.

This tendency in the French agricultural literature of that period, though curious, is understandable. Questions of rural economy soon tended to leave the field of political economists for that of a more restricted group of specialized agricultural scientists. While both approaches to the question co-existed in the eighteenth century, the history of Agriculture in this period has often been treated by giving this word the wide meaning it possesses in English, whereas the history of Farming (a word for which there is no equivalent in French) has too often been disregarded.

In the eighteenth century itself, no distinction was drawn between them, since both studies were in their infancy. The public, not discriminating between the two tendencies, praised writings on both subjects with equal appreciation. The writings of the French agriculturists, however, have attracted the historians less than the more brilliant literature of the economists, with whom they have often been confused. This attraction is intelligible, in that the
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tradition of economic history writing in France derived from the
physiocratic movement, whereas the tradition of the agricultural
literature was continued in more purely scientific works. The former
led to the interpretation of the agrarian features of eighteenth-
century France and their general economic consequences; the
latter, to the elaboration of agriculture as an applied science. To
their contemporary readers, both points of view were of equal
interest; but discrimination between them today affords us a most
interesting angle from which to study the period 1750-89—a period
of important discoveries and of intense experiments, anticipating
certain features of French agriculture of the following century.

The whole question seems, in fact, to have been sometimes
misunderstood. In drawing one’s information from the statements
of the economists, the resultant picture of the state of French
agriculture at this period is rather gloomy. Half of the kingdom
is shown to be in a very poor state, the soil barren and the pro-
duction of corn enormously decreased since the end of the seven-
teenth century. Moreover, the most up-to-date studies, based on
statistics, tend to accept the view of an economic collapse before
1789.1 Other views, however, may be found in other contem-
porary sources.2 A certain author, famous in his day, thus celebrates
the revolution of agriculture in that same century:

What a great number of important things there are to be observed and
remembered! Not to mention many a minor item, all interesting and
important, there is the history of grinding, of mulberry trees and of
silkworms, of dye-plants, of potatoes above all . . . not to speak of the
history of veterinary schools, or horse-breeding and of studs, of the
economic and agricultural history of wood growing. . . . 3

1 On these problems see G. Weulersse, Le mouvement physiocratique en France,
Paris, 1910, and Labrousse, La crise de l’Economie française à la fin de l’Ancien
Régime et au débat de la Révolution, Paris, 1944.
2 Article: Agriculture, Dictionnaire des Sciences Naturelles . . . par plusieurs
3 Cours d’Agriculture . . . par M. le baron de Morogues, Paris, 1840, vol. 1, p. 88,
note 4.
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The disagreement is merely superficial and not deep-rooted. We shall be helped to understand it by considering the fact that two different words were used to designate those engaged in the study of so complex a thing as agriculture. This is important, showing that they were not all interested in the same aspect of the problem. The agronomes were concerned mostly with farming and to a much lesser extent with general economics.

This distinction explains the two different views expressed on French Agriculture.

It is certain that the form of government as it existed in France, together with its social system, its system of taxation, of economic regulations, the continual intervention of the State in the economy of society and the innumerable restrictions imposed on it, were the direct causes of the neglect and sluggishness in cultivating the soil and of the peasant’s indifferent exploitation of his land; in a word, of the rather poor returns of agriculture, when considered as one of the mainstays of the kingdom’s economic structure.

It is also true to say, however, with Sagnac, that at the end of the ancien régime, agriculture, ‘encouraged by better methods’, was making forward strides.


The word has therefore a more scientific implication which explains why it survived longer than ‘Physiocrate’ in French. It became extremely popular. The confusion has, however, been often made in modern writings.

2 See innumerable statements in Weulersse, op. cit. vol. i, pp. 317 ff., 451 ff.

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The teaching of the agronomes, although running parallel to that of the physiocrats, was nevertheless definitely distinct from it. More than the latter, the agronomes were experimental scientists,¹ and one may see, just as in other sciences such as botany, chemistry and physics (all of which contributed to their developments), a very real progress in the agricultural methods and technique between 1750 and 1789; or rather, a considerable advance in agriculture from the technical point of view.²

Even before 1750 the common root is visible which, branching out into science and political economy, ultimately flowered into a separate agricultural school. This common origin may be found in the great intellectual movement at the dawn of the eighteenth century, which was strongly marked with an English influence.³ English thought penetrated to the French learned circles, and one of its most important forms was Political Economy. Ten years before Voltaire revealed England to the French, the famous ‘Club de l’Entresol’ was studying questions embracing economics and politics, under the inspiration of the English ‘papers’ and of aristocratic English lecturers whose influence was great.⁴ It has been shown how agriculture came to be one of the main objects of the movement.⁵ After 1750 it possessed a life of its own, but it is

⁵ Weulersse, op. cit. vol. i, pp. 27 ff., also Weulersse, ‘Le mouvement préphysiocratique en France’, R.H.E.S., Paris, 1931, pp. 244 ff. in which the common English source of the physiocrats and the agronomes is clearly shown.
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well to remember that the English origin of the agricultural movement can be traced back to the beginning of the eighteenth century.

Nevertheless, it would not be wholly correct to associate French agronomy solely with experimental science and physiocracy, both of which were related to English thought. This agriculturist movement was afoot at the beginning of the century, before Locke’s and Cantillon’s works and the ‘Club de l’Entresol’ became fashionable in France, for a French tradition in agricultural writing was in existence. The number of works on husbandry published in France up to 1750 was relatively insignificant. There are a number of authors, however, whose names have been recorded in the annals of French agriculture, not only as representatives of a certain kind of writing, but also as symbols of a certain French craftsmanship. By the beginning of the eighteenth century, the time had passed when the King indulged in listening to the reading of speeches in favour of agriculture¹ which were at the same time valuable technical works. (Some instances are Olivier de Serres’ Théâtre d’Agriculture or Charles Estienne’s Maison Rustique, which have gained lasting fame for the advice they contain.) Louis XIV’s reign, in spite of Colbert’s efforts in rural matters,² was almost wholly engrossed in financial and trading problems. Agriculture throughout this long period produced only mediocre results, except in the annexed provinces, such as Flanders and Alsace, where technique was advanced. In fact, at the beginning of the eighteenth century, even though all the French provinces may not have been as barren as La Bruyère depicts them, French agriculture was indubitably at a standstill.³ The efforts of Henry IV and Sully failed, and only a century later, widespread indifference

³ A picture of this rather tragic situation can be found in Dom Leclerc, Histoire de la Régence, Paris, 1922, vol. 1, pp. Iviii ff.
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set in, which however, did not go as deep as it appeared to. Certain circles still retained an interest in agriculture. The gap between the last famous agricultural treatise (Liger’s *Nouvelle Maison Rustique, 1702*) and the agricultural revival of the seventeen-fifties, is not as wide as has been made out.¹ A number of such technical books are to be found listed in contemporary bibliographies;² and although the agricultural writers were naturally less numerous in France than they were in England at this time,³ the fact remains that as attention slowly shifted from pure politics to economics (as with Fénélon, Vauban, Boisguillebert, Boulainvilliers, Argenson, etc., all of whom were concerned with agriculture) interest in the technique of farming leant more and more for support on this early movement, until the discovery of English husbandry in 1750. Besides, even though no major work on husbandry appeared between 1702 and 1750, an unbroken movement, no matter how limited, in agricultural research runs throughout that period.

Since Colbert’s *ordonnance* on the *Eaux et Forêts*,⁴ a staff of specialists, often very competent men, was set up, from whom many an agronom of that time derived his knowledge of agricultural questions.⁵ The King’s taste for gardens brought into being a school of gardeners; disciples not only of Le Nôtre, but also of La Quintinie were working throughout France. The latter planned

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¹ This is the opinion of Wolters, *Agrarzustande und Agrarprobleme in Frankreich von 1700 bis 1796*, Leipzig, 1905.
² The Abbé de Petit, in his *Encyclopédie élémentaire* (3 vols), Paris, 1767, gives not less than 10 titles of books on agriculture, published between 1700 and 1750 in France (vol. 1, pp. 582 ff.). Many other titles will be found in the *Catalogue* of Huzard’s library.
⁴ See below, p. 122, n. 3.
⁵ For instance, Duhamel, Le Roy (who writes in the *Encyclopédie*), also many a minor one, like Thierry, ‘Conseiller du Roy, Garde Maitre de la Maîtrise des Eaux et Forêts de Chantilly’, who writes in 1764 *Instructions familiaires... sur la Culture des Terres.*
a kitchen-garden at the King’s command—the best example of its kind in Europe. This type of garden was much cultivated at first, and its products exported all over Europe.¹ The knowledge of these scientific gardeners was not confined merely to raising crops, but included general problems of agricultural and vegetable physiology; they were proud of their art, the dignity of which they praised:

Agriculture in general, may be look’d upon as a Science of vast extent and proper to afford Philosophical wits an infinite deal of Exercise, no part of Natural Philosophy yielding more excellent matter for contemplation, or being more fertile in useful and delightful experiments than that which treats of Vegetation. For I known there are abundance of fine and curious questions proposed in it; as for instance whether the sap circulates in Plants as the blood does in animals? Whether the roots do actively attract or only passively, without any action on their side, receive the juice which serves for the nourishment of every Plant...²

Some time later, the Abbé de Vallemont wished that ‘this important knowledge might spread among the people in the country’ and that he might ‘cause everything useful which had long since been discovered, to pass from Scientists unto the People’.³ This shows an interestingly fresh point of view, quite different from that of the more archaic authors, like Liebaut or Serres, and heralding that of the agronomes.

Besides these Royal or private gardens, which kept alive an uninterrupted tradition of research and experiment in France, there was a most important centre—the ‘Jardin du Roi’—which

¹ The famous orchards and kitchen-gardens of Montreuil near Paris are linked with La Quintinie’s efforts. De Pradt, De l’état de la Culture en France, Paris, 1802, vol. 1, p. 30, insists on the importance of this fruit growing, initiated at the end of the eighteenth century. No doubt the pupils of La Quintinie must have had some influence when working in the provinces for the nobility.
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was to prove extremely serviceable in agricultural research, the value of which was increasingly appreciated throughout the eighteenth century, while its links with the revival of husbandry were numerous. Although the ‘Jardin du Roi’ was at first in the care of pure scientists, like the botanists Tournefort or Du Fay, it counted among its pensionnaires people like Duhamel du Monceau whose work on agriculture was to prove so important. In this garden, the anatomy and physiology of plants were methodically studied, species were classified, compared and cultivated. This research did much towards improving agricultural methods later. All the scientists who were then working in the ‘Jardin du Roi’ were either members or associate members of the Royal Academy of Sciences. For during the greater part of the eighteenth century, husbandry was studied only by the Academic Boards of Chemistry, Botany or Zoology; it was not yet recognized as a science in itself.

It was also thanks to these two centres—the ‘Jardin du Roi’ and the Royal Academy of Sciences—that the English influence, the extent of which will be analysed in the following chapters, penetrated into the French scientific world interested in agriculture. The great controversy between Cartesianism and Newtonianism, had acquainted the majority of French scientific circles with English trends of thought. Acquaintance with English botanists, zoologists and chemists preceded the discovery of English

2 ‘Botany and Agriculture are a mutual support to one another; the one is the principle of the other; the latter works in order to prove the former useful.’ Contemporary Treatise, quoted by Calonne, La vie agricole sous l’Ancien Régime en Picardie et en Artois, Paris, 1883, p. 48.
3 It was constituted as such only after the example of English thought, mostly that of Bacon. See ‘Observations sur la division des Sciences par le chevalier Bacon’, Encyclopédie, 1751, vol. 1, pp. li–lii.
4 See important bibliography for the eighteenth century in Ascoli, La Grande Bretagne devant l’opinion française au XVIIe siècle, Paris, 1930, t. ii, pp. 297 ff. An instance of this exchange of scientific knowledge may be found in Robert