

Egyptian agriculture in historical perspective

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ALAN K. BOWMAN AND EUGENE ROGAN (edd.), *AGRICULTURE IN EGYPT FROM PHARAONIC TO MODERN TIMES* (Proceedings of the British Academy 96, Oxford 1999). Pp. xxviii + 427. ISBN 0-19-726183-3. £40.

Egypt was famed in antiquity for its agricultural wealth. Even though it probably had a relatively high level of urbanization compared to most Roman provinces, it remained above all the land of the Nile and of the rich farms that river made possible. The powers that ruled Egypt over the millennia concentrated much of their energies on making sure that this agricultural potential was properly exploited and, especially, that a sizable part of the production found its way into the hands of the ruling power. Hence vast amounts of documentation: for the Hellenistic and Roman period, intimidating piles of papyri, but they have their counterparts for other eras. The texts lead us if anything to undervalue other aspects of economy and society, as some of the papers in this volume point out.

Scholars have been duly intimidated. The last serious attempt to write an agricultural history of Graeco-Roman Egypt was M. Schnebel's 1925 book covering the Hellenistic period.¹ In a foreword, Schnebel's *Doktorvater*, W. Otto, recounts the long history of the book, which incorporates earlier work done by Otto himself (two decades before) and by another of his students F. Pluhatsch, who was killed in the First World War. Laying experience aside in favor of optimism for a moment, Otto remarked, "Zum Schluß kann ich nur wünschen, daß es der Arbeitskraft Herrn Dr. Schnebels gelingen möchte, auch den zweiten Teil, der den Haushalt der Landwirtschaft behandeln soll, möglichst bald zu vollenden und zum Druck zu bringen." It was not to be; volume 2 never appeared.

For Roman Egypt, with proportionately richer evidence, we have not had even a Schnebel. Numerous works have dealt with one or another aspect of agriculture, but no one has undertaken a wider survey. It would be a daunting task. To go still further and write a book ranging from the Old Kingdom to the 20th c. would be beyond the expertise and audacity of anyone today, and the result — as so often nowadays — is a conference volume: 16 conference papers, plus an introduction and one additional paper, give us a kind of substitute for the book no one will write. Such things are not, in their nature, as coherent as a reader might want, but this is among the best examples of the genre, with as good a coverage of centuries and topics as one could reasonably ask and a very high standard of scholarship throughout. With an excellent introduction which strives quite successfully to tie the whole together, and with meticulous editing of the papers, Bowman and Rogan have put together what will be the standard starting point for work on Egyptian agriculture for years to come. They reject firmly the facile notions of eternal Egypt that come so easily to the visitor and, unfortunately, many scholars, and emphasize instead the patterns of change that make Egypt's agrarian experience historical rather than static.

At the editor's request, I shall pay most attention to the 6 articles dealing with the period from Alexander to the Arab conquest, but it is important to give at least a brief idea of the context in which they sit. The comparative dimension, indeed, was one of the major purposes of the conference and the volume, and much is lost if it is not considered closely, for the papers on pre-Greek and post-Roman Egypt offer many valuable points of comparison and help us to see the changes that took place in "our" millennium in the perspective of both cyclical and linear development.

¹ *Die Landwirtschaft im hellenistischen Ägypten I: Der Betrieb der Landwirtschaft* (München 1925, repr. Milan 1977).

The first two papers are on Pharaonic Egypt. C. Eyre ("The village economy in Pharaonic Egypt") makes many points in a wide-ranging survey. Among those of most direct interest for the Graeco-Roman period are that there was much variation from period to period in the impact of the central government on the local economy, and that this economy varied a great deal also from place to place; both themes are important for J. Manning's paper on Ptolemaic Upper Egypt. Eyre argues "that even in the earlier historical period the basic unit of the agricultural regime, which is fundamental for understanding the social and economic structure of the village, was the local family-based enterprise rather than a bureaucratic organisation of dependent workers" (52). S. Katary's "Land-tenure in the New Kingdom: the role of women smallholders and the military" focuses on the famous Wilbour papyrus, where she interprets the numerous female smallholders as being mainly wives and particularly widows of military men.

The Graeco-Roman papers are evenly divided between B.C. and A.D. but the Roman period is a little under-represented, with the fourth and fifth centuries not really covered. Manning's "The land-tenure regime in Ptolemaic Upper Egypt" provides an overview of a position he has argued in other articles, namely that the Ptolemaic monarchy was considerably weaker in Upper Egypt than in the Middle Egyptian nomes from which most of our papyri come. The Ptolemies, think Manning, changed arrangements relatively little in places like Edfu, leaving structures inherited from the Persians and Saites in place. This is not a new idea, but Manning shows that earlier views (particularly Rostovtzeff's) of what was inherited need revision to recognize the existence of much property that was effectively in private hands even if not so denoted in official terminology.

The first of D. J. Thompson's two papers ("Irrigation and drainage in the Early Ptolemaic Fayyum") was first published in a volume difficult of access² and was intended as a survey. It deals above all with the reclamation work under Ptolemy II as we know it from the Zenon archive and from *P. Lille I 1* in particular. She describes the calendar of works through a normal year, concluding with a reminder of the risks posed to all such works by the variability of the Nile, which affected the Fayyum just as it did the rest of the valley. Her second paper ("New and old in the Ptolemaic Fayyum") starts from Strabo's description (17.1.35) of the area's crops. The geographer describes an abundance of grain, pulses, wine, and olives but comments that the olives are not well collected and thus do not make good oil. Thompson shows how, with the coming of the Macedonian settlers, wheat replaced emmer and the volume of wine production grew dramatically. But she suggests that success with the olive was probably much later in coming, and the early Roman visage of the Fayyum was probably a recent development in this regard.

With J. Rowlandson's "Agricultural tenancy and village society in Roman Egypt" we arrive at the Empire. This article is an offshoot of her book on the Oxyrhynchite nome, which appeared shortly before the conference,³ but it devotes as much attention to the Fayyum as to Oxyrhynchos. The method, although not without a statistical dimension, is more nearly one of "looking in close detail at groups of leases within their local context," arguing that it is possible to "provide a much sounder basis for using the leases in more general comparisons" (141). Most of these leases are short in duration, with a single year the most common and four years relatively long. The short terms, however, by no means precluded landlord-tenant relationships for the long term by way of renewals. Still, they must have caused some tenants to think twice before making investments in properties to which they had no long-term claim.⁴

Rowlandson finds in the Tebtunis lease-material evidence that every segment of society and every type of land were involved in leasing, but that landlords and tenants had many possible uses for leases, ranging from stability of income (for wealthy metropolitan owners) to diversification of risk (for villagers renting from several landowners). Tebtunis also brings to light the rôle of villagers as lessors, often as middlemen in managing public land. The same person may

2 *Transactions of the 16th International Congress on Irrigation and Drainage* (New Delhi 1996) vol. I-6, 43-59.

3 *Landowners and tenants in Roman Egypt: the social relations of agriculture in the Oxyrhynchite nome* (Oxford 1996).

4 See most recently D. P. Kehoe, *Investment, profit, and tenancy* (Ann Arbor 1997) esp. 183-94, with references to earlier literature.

be both a landowner and a lessee simultaneously, seeking to supplement his own holdings with leased-in parcels that complement them. Rowlandson closes with a warning about the likelihood that patterns of discovery of papyri can give a false impression of change in leasing habits; as she puts it, "the papyrological discoveries of a single man, Achille Vogliano,⁵ significantly affect our impression of the viability of tenancy during the second century, not only in Tebtunis, but in the Fayyum as a whole, and it may be just chance that no comparable third-century evidence survives from anywhere in the Fayyum" (156).

The 2nd-c. Fayyum is also the focus of M. Sharp's paper ("The village of Theadelphia in the Fayyum: land and population in the second century"). This is a rich and detailed analysis of various documents but especially the various land and tax registers known for this village. Sharp argues for a village with a population of some 2,100 to 2,300 around A.D. 160, which would mean roughly 425 to 470 households, if the averages found elsewhere hold up. He calculates that there were some 400 or more landholders in the village (after subtracting absentees). If 15% of these were women, it would still be the case that something like 70-80% of village households had landholdings of their own.⁶ For public land, Sharp calculates a Gini coefficient of .445, which is in line with other figures for village landholdings in Hellenistic and Roman Egypt and suggests a relatively equal distribution of land. The papyri do not allow such a calculation for private land. At any rate, a very high proportion of households will have had a reasonable amount of land, public or private, under their control. Sharp devotes some attention to what may have happened to Theadelphia as a result of the Antonine plague, although he recognizes the tentativeness of his argument that the plague did indeed have a substantial effect in reducing the amount of land under cultivation and in leading to the allocation of more of it to vineyard. In his conclusions, Sharp remarks that "there was probably a broad base of landholding among the population, with the huge areas of public land providing an outlet for those with insufficient of their own. Nevertheless, concentration of landholding did occur, and is particularly visible in the case of the more valuable vineyards and garden land" (189).

The last of the papers on Egypt before the Arabs is J. Banaji's "Agrarian history and the labour organisation of Byzantine large estates." Banaji has little patience with recent tendencies to minimize the dominance of these large estates, and he argues that they ran mainly on permanent wage labor. As one might guess, the ancient evidence comes largely from the Apion archive. Banaji believes that the kind of world depicted for the Principate in the articles of Rowlandson and Sharp was largely gone.⁷ Assertions like "the Egyptian peasantry of the sixth century was a deeply stratified mass" (197) provide an opening for a claim that the situation resembled that of the early 19th c., when there started to be large-scale development of capital-intensive agricultural enterprises with a wage-earning labor force. (See below for G. Alleaume's article on that period, when workers' housing on large estates, reminiscent of some known from the Roman period,⁸ was constructed.) His concentration on the Oxyrhynchite

5 Such, at any rate, was Vogliano's claim; but it looks as if G. Bagnani actually directed the excavation in question, with Vogliano working on the material as Bagnani sent it back to the dig-house: see D. J. I. Begg, *BASP* 35 (1998) 185-210 at 204-7.

6 My figures are slightly different from Sharp's because of a somewhat more conservative multiplier applied to male taxpayers 14-62 to get total population. He cautions rightly that such calculations can be only approximate, not least because some households may have had two landholders listed. Discounting for female landholders here is intended to remove some of that risk. But it is possible that women were listed in such registers most often when there were not male heads of household present, in which case the percentage of households with landholdings would be over 80%.

7 See the concluding remarks (213), denouncing historians who believe "that a large and stable class of 'peasant proprietors' existed which was not drastically undermined even by the renewed expansion of large estates in late antiquity," a view that he believes "has little basis in the evidence."

8 See D. Rathbone, *Economic rationalism and rural society in third-century A.D. Egypt* (Cambridge 1991) 31-33 on this type of housing.

evidence, however, leaves open the question of how representative the Apions and the other great houses were of the larger tendencies of the 6th c. He makes no serious effort to reconcile the information from Aphrodito or the Hermopolite with his thesis, and his claims seem to me exaggerated. It is in fact difficult to demonstrate just how much change had occurred since the 4th c. (when such a massive concentration had not yet occurred), and the aggressiveness of the presentation of the argument here is perhaps inversely proportional to the strength of the evidence. All the same, it is a vigorous and stimulating challenge to almost everyone who has written on the subject.

The second half of the book covers the last 1350 years. T. Wilfong ("Agriculture among the Christian population of Early Islamic Egypt: practice and theory") analyzes the deficiencies of the Coptic evidence from an agricultural point of view, but describes the so-called farmers' almanacs and translates one. G. Frantz-Murphy treats "Land-tenure in Egypt in the first five centuries of Islamic rule" in some detail, looking particularly at the changing methods of taxation, which was in the early centuries left largely in local hands, but eventually taken into Arab hands under 'Abbasids. Numerous revolts resulted from the ensuing pressure on cultivators.

A. L. Udovitch, on "International trade and the Medieval Egyptian countryside", uses that quintessentially urban body of material, the Cairo Geniza, to investigate the growing and trading of flax in Middle Egypt in the 11th c. The surviving papers concentrate on the buying and exporting of flax grown around the village of Busir in what had been the Oxyrhynchite nome — an area from which there is considerable evidence of flax cultivation in the Roman period. Merchants had to buy from the local owner/producers, who were mostly of modest scale, and Udovitch stresses the dynamic character of the rural market economy in this period and its close connection to the Mediterranean economy.

The 13th c. yields the survey of the Fayyum by an-Nabulsi, studied here in J. G. Keenan's article ("Fayyum agriculture at the end of the Ayyubid era: Nabulsi's *Survey*"). This unique document describes the villages of the Fayyum in great detail, giving figures for their taxes in all manner of produce and telling us a great deal about their condition and their relationship to the water-distribution system. Keenan closes with a translation of one entry, that for the village of Talit. Nabulsi was alert not only to the present condition of the Fayyum when he surveyed it, but to the recent changes that had produced that condition, and even though the document is a snapshot it gives a good sense of just how much constant transformation there was.

We now skip over more than five centuries to a cluster of papers dealing mainly with the 19th c., for which the documentation is rich. K. M. Cuno's "A tale of two villages: family, property, and economic activity in rural Egypt in the 1840s" deals with two localities in the eastern Delta on the basis of census records (from 1848) and cadasters. There is an enormous amount here to stimulate thought about changes in the household and the village, and the uncanny similarity of the census records (a sample is reproduced on 311) to the Roman *κατοικίαν ἀπογραφαί* should not lead to a comforting (or despairing) "plus ça change". When the study of the 1848 census is completed, it will certainly provide a rich data-set to which to compare our more lacunose Roman census information. The rural Egypt examined by Cuno had far more manpower of working age available in farm families than the acreage held by those families required, by a factor of two or three. The result was a much larger proportion of the population engaged in non-agricultural work than is likely in any ancient village, and probably a fair amount of under-employment.

G. Alleaume ("An industrial revolution in agriculture? Some observations on the evolution of rural Egypt in the nineteenth century") provides the modern comparanda for the development of capitalist, hired labor-dependent enterprises that Banaji sees as characteristic of the 6th c. Alleaume describes the expansion of cultivation, the restructuring of the irrigation system, and the multiple changes in institutions of land tenure and rural credit that made these developments possible. The most famous crop grown in 19th- and 20th-c. Egypt, long-staple cotton, is the subject of R. Owen's paper ("A long look at nearly two centuries of long staple cotton"). Owen deals particularly with the comings and goings of government intervention in the cotton market, both through direct orders about how much land to plant and through more indirect subsidies of some of the inputs. Cotton was not a significant crop in the Nile valley in antiquity because it requires irrigation in summer, something the ancient inundation régime could not provide, but it was grown in small quantities elsewhere.

"Irrigation in contemporary Egypt," by N. Hopkins, traces the roots of the current situation, in which Egypt stands on the brink of water shortage, and analyzes the pressures and the sentiment building for a more market-oriented treatment of water rights, counterbalanced by cultural and political forces that see provision of free water as a state obligation. The state's double intervention in landholding, with first the Nasserist

reforms to give tenants security on the land, and since 1992 their partial reversal, are the subject of R. Saad's fascinating "State, landlord, parliament and peasant: the story of the 1992 tenancy law in Egypt."

It is hard to escape the usual reviewer's peril in dealing with a volume of this kind: the review is too short to do justice to the depth and subtlety of the individual contributions, but too long by normal review standards. The attempt to create a view of the *longue durée* is not wholly successful — I have noted some of the gaps, of which the editors are well aware — but it does manage overall to allow the reader to see the recurrence of the major themes: the contrast between strong, centralizing states and decentralized régimes; the persistence of small-holdings and their perennial vulnerability to loss in difficult times; the impact of the introduction of new crops (more on this would have been welcome, especially for the postclassical period); the transforming power of changes in irrigation and drainage methods and technology; the opportunities for capital-intensive, large-scale agriculture opened up when technological change meets institutional support; the vacillations (until the 19th c., at least) between a shortage of agricultural labor and a surplus, with all the implications for land-use and social relations that accompany them. Some of these can still be seen at work today, and for the ancient historian the more modern papers in this volume open up both a lively sense of how some of these processes work in societies we know better than we do antiquity and a set of questions that we can take back to the ancient documents, hoping against hope that we can glimpse their outlines in the accounts, leases, receipts, and letters that we possess in such fragmentary form. There can be few subjects in ancient history where a comparative method has so much to offer, and this volume confirms the sense of pleasure and profit that I felt by the end of the conference in 1996.

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Le mythe d'Europe en mosaïques romaines

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ODILE WATTEL-DE CROIZANT, *LES MOSAÏQUES REPRÉSENTANT LE MYTHE D'EUROPE (Ier-VIe SIÈCLE): ÉVOLUTION ET INTERPRÉTATION DES MODÈLES GRECS EN MILIEU ROMAIN* (De Boccard, Paris 1995). 313 pages, 25 fig. in texte et 31 pl. hors texte coul. et n. et bl. ISBN 2-7018-0091-9.

Cet ouvrage a l'ambition d'être une monographie à caractère iconographique et iconologique dont la visée est l'étude exhaustive d'un groupe d'une quarantaine de mosaïques ayant appartenu à toutes les époques et à toutes les régions du monde romain. Il s'inscrit dans le courant d'études monographiques du même type¹ suscité par les progrès récents des études sur la mosaïque antique, qui ont fait apparaître que celle-ci fournissait un corpus d'images parmi les plus riches du monde antique et les mieux inscrites dans leur contexte sociologique et historique.

Un avant-propos rappelle les cheminements de la recherche de l'auteur, évoque quelques uns des problèmes rencontrés et annonce quelques aspects du plan de l'ouvrage et certaines de ses conclusions. Une première partie se propose d'évoquer les origines grecques de la légende d'Europe et de sa représentation: ch. 1, sur l'étymologie du nom et les possibles origines du mythe; ch. 2, sur les sculptures archaïques; ch. 3, sur les sculptures et peintures de vases d'époque classique haute; ch. 4, sur les figurations du IVe siècle av. J.-C. et

1 Mais portant sur des corpus de définition très variée: depuis la monographie fondée sur un document unique à caractère exceptionnel (M.-H. Quet, *La mosaïque cosmologique de Mérida: propositions de lecture* [Paris 1981]; W. A. Daszewski, *Dionysos der Erlöser. Griechische Mythen im spätantiken Cypern* [Mayence 1985]), jusqu'à l'étude d'un vaste corpus de documents appartenant à une même région (I. Morand, *Idéologie, culture et spiritualité chez les propriétaires ruraux de l'Hispanie romaine* [Paris 1994]) ou à un groupe de provinces (J. Lancha, *Mosaïque et culture dans l'Occident romain, Ier-IVe s.* [Rome 1997]), en passant par la prise en compte de l'ensemble du décor en mosaïque d'une même maison (cf. mon *Nymfarum domus* [Leyde 1980], ou encore l'ouvrage de C. Kondoleon, *Domestic and divine. Roman mosaics in the House of Dionysos* [Ithaca, NY 1994]). La monographie d'I. J. Jeznick, *The image of Orpheus in Roman mosaic* (BAR S671, Oxford 1997), prend en compte, comme le fait O. Wattel-de Croizant, un corpus de représentations en mosaïque d'un même mythe classique à l'époque romaine.