

CAMBRIDGE PHILOLOGICAL SOCIETY

Supplementary Volume no. 26

**PRODUCTION AND PUBLIC POWERS  
IN CLASSICAL ANTIQUITY**

- W.V. Harris, 'Between archaic and modern: some current problems in the history of the Roman economy', (in) ed. W.V. Harris, *The Inscribed Economy. Production and Distribution in the Roman Empire in the Light of Instrumentum Domesticum* (Ann Arbor 1993) 11–29.
- M. F. Hendy, 'East and West: divergent models of coinage and its use', (in) *Settimane di studio del centro italiano di studi sull'alto medioevo. XXXVIII: Il secolo di ferro: mito e realtà del secolo X* (Spoleto 1991) 637–74.
- K. Hopkins, *Conquerors and Slaves* (Cambridge, 1978).
- K. Hopkins, 'Taxes and trade in the Roman Empire', *JRS* 70 (1980) 101–25.
- C.J. Howgego, 'Why did ancient states strike coins?', *Num.Chron.* 150 (1990) 1–26.
- C.J. Howgego, 'The supply and use of money in the Roman world 200 B.C. to A.D. 300', *JRS* 82 (1992) 1–31.
- D.P. Kehoe, *The Economics of Agriculture on Roman Imperial Estates in North Africa* (Göttingen 1988).
- N. Lewis, 'A Jewish landowner in provincia Arabia', *Scripta Classica Israelica* 8–9 (1985–88) 132–7.
- N. Lewis, *The Documents from the Bar Kokhba Period in the Cave of Letters* (Jerusalem 1989).
- L. de Ligt, 'Demand, supply, distribution: the Roman peasantry between town and countryside', *MBAH* 9 (1990) 24–56; 10 (1991) 33–77.
- E. Lo Cascio, 'State and coinage in the Late Republic and Early Empire', *JRS* 71 (1981) 76–86.
- E. Lo Cascio, 'La struttura fiscale dell'impero romano', (in) ed. M.H. Crawford, *L'impero romano e le strutture economiche e sociali delle province* (Como 1986) 29–59.
- E. Lo Cascio, 'Weber e il «capitalismo antico»', (in) ed. M. Losito & P. Schiera, *Max Weber e le scienze sociali del suo tempo* (Bologna 1988) 401–21.
- E. Lo Cascio, 'Le tecniche dell'amministrazione', (in) ed. A. Schiavone, *Storia di Roma Einaudi* II.2 (Turin 1991) 119–91.
- E. Lo Cascio, 'Forme dell'economia imperiale', *ibid.*: 313–65.
- E. Lo Cascio, 'Considerazioni sulla struttura e sulla dinamica dell'affitto agrario in età imperiale', (in) ed. H. Sancisi-Weerdenburg, R.J. van der Spek, H.C. Teitler & H.T. Wallinga, *De Agricultura. In Memoriam Pieter Willem de Neeve* (Amsterdam 1993) 296–316.
- E. Lo Cascio, 'La dinamica della popolazione in Italia da Augusto al III secolo', (in) *L'Italie d'Auguste à Dioclétien* (Rome 1994) 91–125.
- E. Lo Cascio, 'How did the Romans view their coinage and its function?', (in) ed. C. E. King & D. Wigg, *Coin Finds and Coin Use in the Roman World* (Berlin 1996) 273–87.
- J.R. Love, *Antiquity and Capitalism. Max Weber and the Sociological Foundations of Roman Civilization* (London – New York 1991).
- F. Millar, 'Italy and the Roman Empire: Augustus to Constantine', *Phoenix* 40 (1986) 295–318.
- N. Morley, *Metropolis and Hinterland. The City of Rome and the Italian Economy 200 B.C. – A.D. 200* (Cambridge 1996).
- P.W. de Neeve, *Peasants in Peril. Location and Economy in Italy in the Second Century B.C.* (Amsterdam 1984).
- D.C. North, *Structure and Change in Economic History* (New York – London 1981).
- D.C. North, *Institutions, Institutional Change and Economic Performance* (Cambridge 1990).
- T. Pekary, 'Les limites de l'économie monétaire à l'époque romaine', (in) *Les «dévaluations» à Rome. Époque républicaine et impériale 2* (Rome 1980) 103–13.
- H.W. Pleket, 'Wirtschaft', (in) ed. F. Vittinghoff, *Handbuch der europäischen Wirtschafts- und Sozialgeschichte. I. Europäische Wirtschafts- und Sozialgeschichte in der römischen Kaiserzeit* (Stuttgart 1990) 25–160.
- D.W. Rathbone, 'The development of agriculture in the "ager Cosanus" during the Roman Republic', *JRS* 71 (1981) 10–23.
- D. Rathbone, *Economic Rationalism and Rural Society in Third-Century A.D. Egypt: The Heroninos Archive and the Appianus Estate* (Cambridge 1991).
- ed. J. Rich & A. Wallace-Hadrill, *City and Country in the Ancient World* (London – New York 1991).
- A.B.J. Sirks, *Food for Rome* (Amsterdam 1991).
- C. R. Whittaker, *Land, City and Trade in the Roman Empire* (Aldershot 1993).

## XII

### GOVERNMENTAL ROLES IN THE ECONOMY OF LATE ANTIQUITY

In trying to divide responsibility for this period with Jairus Banaji, I have taken as my domain the direct impact of the late Roman state on the production and distribution of economic goods. We have not found this an easy dividing line to observe. I shall concentrate on two levels of action, imperial and civic, leaving aside ecclesiastical actions. The reason for this omission is that the holdings and behavior of the church appear to me to mimic those of private individuals with large holdings much more nearly than they do those of any governmental body. Indeed, to the extent that there is any similarity at all between the church and governmental entities, it lies in the structures and methods of the management of landholdings, where the imperial state itself imitated private practices. Moreover, to include the church with public powers presupposes answers to questions about the nature of ecclesiastical organization in the post-Constantinian period that we shall not have an opportunity even to consider.

Within the time and space constraints placed on us, systematic investigation or vast synthesis over the entire empire is out of the question. I shall therefore concentrate on a more limited domain, the eastern empire rather than the western. Even that, however, is beyond my powers of condensation, and I shall focus on some examples from Egypt that I believe to be characteristic rather than exceptional from the standpoint of the empire as a whole. But I shall not be able to demonstrate this typicality here. These will come to a considerable degree from unpublished or recently published finds and research. On the one hand, I hope to show the directions that newer work has been leading; on the other, this exposition may elicit some of the presuppositions with which current work has been carried on. This evidence points to a rather limited governmental role in production, even if not as small as is sometimes supposed. It also points to an overall picture consonant with that of the preceding several centuries (cf. Dominic Rathbone's paper in this volume). The government's influence on the economy came, in my view, far more from the domains that Banaji will be treating – taxation, coinage, and political developments – than from 'direct' productive activity.

Production must in the first instance refer to agricultural production. Here we are very poorly informed, but the lack of documentation itself seems significant given the relatively good volume of material for the fourth century. The enormous quantities of Egyptian agricultural land nominally held by farmers as tenants from the government in earlier centuries had been formally privatized by the fourth century and could be

bought and sold. Though there was still an imperial *patrimonium*, it and its officials play a very small role in the published fourth-century texts, despite the centrality in these of wheat production, taxation and transportation. Nor do landholdings by cities appear to have been substantial. The overall structure of landholding was very much dominated by private individuals, both villagers and urbanites, with a much more marked concentration of ownership among urban landowners than among village holders (Bowman 1985; Bagnall 1992).

The same was true of transportation facilities, even those dedicated to transporting tax grain down the Nile to Alexandria for transshipment to Rome and later Constantinople. The boats in question were owned by private persons and entities, and an enumeration of these owners, as they are recorded in the papyri, shows a normal cross-section of the economic élite: imperial officials and military officers, both active and retired; members of the curial bodies of the cities; bishops and ecclesiastical bodies (Bagnall 1993: ch.1). Although ocean shipment of grain was heavily regulated and at least in part a liturgical obligation (Sirks 1991), riverine shipping appears to be a matter of private economic initiative by the holders of capital.

The one important area in which the government played a direct role in production and transportation remains one well known in the time of the Principate: the exploitation of mines and quarries. For the first and second centuries, an enormous mass of documentation has come to light in the last decade from excavations at Mons Claudianus, but none of the ostraka found there date after the second century (Bingen *et al.* 1992). It is often assumed that Roman exploitation of the resources of the Eastern Desert declined or vanished after the third century, but this is now proving to be an unfounded conclusion. Excavations by Steven Sidebotham at Abu Sha'ar on the Red Sea coast have shown the presence there of a military unit in the fourth century (Sidebotham 1992). I shall discuss the commercial aspect of this presence later on, but the proximity of this base to the quarries of Mons Porphyrites suggests that the latter are unlikely to have been closed. Indeed, the fondness of late Roman builders for porphyry columns points to a continued demand, and a fourth-century church inscription at Mons Porphyrites shows the presence of stonecutters.

So too, recent excavations of the University of Chicago at Bir Umm Fawakhir, off the Wadi Hammamat, have shown a continued or revived gold mining enterprise in the late fifth and sixth centuries. A village of more than two hundred stone houses has been identified and partly mapped, and at least seven outlying clusters have also been found. The duration of the settlement is not yet known, but it probably did not exceed a few generations (Meyer 1992, 1993). Until quite recently it was generally believed that gold mining was non-existent in the Eastern Desert in this period; we now know that this activity continued. Although there is not yet any direct evidence for government operation of the gold mines, it is most unlikely that this activity, always a government monopoly in Egypt, would have been left to private parties. Nor is it probable that any private entity could have produced the size of village found at this distance from the Nile Valley, given the logistical difficulties at stake.

Government procurement is another area of potential impact on productive activity. I shall take military uniforms as an example (cf. Sheridan 1998). The papyri show that in the second century the imperial administration acquired (whether by simple purchase or requisition and reimbursement is not clear) uniforms directly from clothing producers. By the fourth century, responsibility for the purchase of uniforms had been devolved to civic liturgists, who were reimbursed by the imperial administration at a set figure, which bore no necessary relationship to the actual cost of acquisition; they in turn passed these reimbursements on to village officials who were responsible for producing the village's quota of garments for the civic officials in charge at the level of the nome. In short, the imperial administration had added at least two levels of local liturgists between itself and the actual process of procurement from weavers. In 325, however, there is clear evidence (*P.Oxy.* LIV 3758) that it was nome-level liturgists who were responsible for the procurement.

In the 320s a further change takes place, in which the pretense at reimbursement disappears altogether. Debasement of the currency and the consequent inflation had eaten away the value of the reimbursements, which remained fixed for a quarter-century after Diocletian's edict on prices, until the reimbursements were fairly trivial as a percentage of the garments' value. After this point, the *vestis militaris* became a pure tax, assessed in proportion to landholdings like other taxes on land. At first it was assessed in terms of garments (*sticharia*, *pallia*, etc.) and fractions thereof per village, a practice documented in detail in a Columbia papyrus codex from the Hermopolite (Sheridan 1998). Rates set in terms of garments per iugum at a central level were reconverted to local measures of land. The *vestis militaris* was then turned in effect into a rate in gold per aroura, although actual collection at the village level took place mainly in bronze coinage, which collectors then had to turn into gold for delivery to the imperial authorities (on all this see Carrié 1993). These in turn used the proceeds to pay for requisitions of the needed uniforms – in effect returning to the procedures of two centuries earlier except for the addition of another stream of tax revenue.

Even this oversimplified description of the evolution of the *vestis militaris* may seem to belong to the realm of tax policy and not production. But it has a key conclusion to offer for our concerns. The government's interest lay in securing supplies and in distributing the burden of paying for them in what it regarded as an appropriate manner (in the same way in which most burdens were distributed, in fact). It seems to have been a matter of indifference who had the actual responsibility for ordering the uniforms and dealing with the impact of purchasing on the clothing industry. It can hardly be doubted that this impact could be substantial; when Oxyrhynchos had to send some leading citizens to Tyre to purchase what they owed, we can hardly escape the fact that the amounts did not seem trivial. But if, as seems likely, the military accounted for only about 1% of the population, it is unlikely that even this purchasing of uniforms had a large effect on the overall economy.

I turn now to the broad area of regulation, in which modern governments make such a mark on the economy. The Romans are well known to have introduced a systematic

census process into the provinces they governed; in Egypt this was taken at 14-year intervals. From it derived official registers which served as the basis for the assessment of capitation taxes in money, for the control of social and legal status, and perhaps for other purposes not now so evident. The census cycle was broken in Egypt after that held in 257, and never resumed. There was a census of persons in 310, from which we have two surviving declarations, but they are (unlike the earlier ones) only of males. After that there was apparently no census of persons (on the census see Bagnall & Frier 1994: ch.1). As declarations of birth and death also disappear by the early fourth century at the latest, the government evidently no longer had any means of maintaining systematic records of the population. Such a gap obviously forecloses a number of options for government intervention.

What remained, of course, was recording of the land. There is ample evidence that the government continued to keep registers of landholdings, down to the minutest fraction, and that these served as the basis for taxation, almost all of which now fell upon landed wealth rather than upon persons. The abandonment of public land as a significant category, mentioned earlier, made it difficult for this recordkeeping to support any kind of interventionist activity by the government, apart from taxation policy (which will be treated by Banaji). It was much harder, for example, to compel the cultivation of marginal land when it was all privately owned than when it could be distributed as required cultivation along with better land. Indeed, I believe that the Diocletianic flat tax on land would tend to drive marginal land out of cultivation. There is little sign, after Diocletian, of any significant attempt to keep land in cultivation if individuals abandoned it. The government could, of course, collect tax revenues from someone who theoretically owned this land, as long as the burden did not produce bankruptcy. But the ability of the graduated land tax rates of the second century to encourage the cultivation of marginal land disappeared in the rigidity of Diocletian's system.

One further area of government regulation much discussed recently is that of prices. The prices established in Diocletian's edict certainly did not last beyond the first decade of the fourth century as real market prices (see Bagnall 1985). But the government continued to demand declarations of prices from the corporations of dealers in various commodities for decades afterward. A sizeable addition to our body of such texts has been published in recent years, particularly by Revel Coles in *Oxyrhynchus Papyri* LIV (1987), showing that the practice continued at least as late as 359. Moreover, a group of fifth-century papyri (*P. Oxy.* LI 3628–36) show that the data from these declarations were at that time still compiled at the provincial level in a 'schedule (*brevion*) of purchasable goods being sold in the *agora*, for each city in accordance with the schedules submitted by the *tabularii* of each city' for a particular indiction year. This wording would appear to demonstrate that the prices declared by sellers are the prices at which they sell, not at which they acquire stock. But in some cases the goods declared by corporations are in fact those of raw materials, not the finished products. In at least these cases, then, the reports must be of prices paid, not prices charged. These declarations do little to inform

us about the government's reasons for requiring the submission of this information. There is (despite the views of Fikhman 1991/2) not one scrap of evidence to suggest that it was used to intervene systematically in the market-place to compel a given level of prices. Indeed, the monthly and local variations recorded in the fifth-century papyri appear to me to show the contrary beyond any doubt. It is conceivable that in case of wide swings the government could have used this information to intervene, but once again, there is absolutely no evidence that it did. It is conceivable that the price levels helped the central administration to set the appropriate level of taxation on trades (the *chrysargyron*, or *collatio lustralis*), which certainly varied by corporation. But it is most unlikely that direct evidence of such a procedure will come to light. What these summary charts look like, actually, is a body of material that could genuinely deserve the title 'statistics', in the sense that word was used by A.H.M. Jones or M.I. Finley, and in the sense in which they supposed statistics not to have existed in the ancient world.

Finally, it seems worthwhile looking at investment in infrastructure. The enormous decline in epigraphic evidence for the Greek-speaking world after the middle of the third century removes much of what we take for granted in earlier centuries: the documentation for civic spending on public facilities, many of which had not only a direct effect on economic activity through construction expenditures but also a broader impact through the provision of roads, water supplies, market-places, harbor installations, and security, to name only the most obvious. A much smaller portion of this spending came from the imperial treasury. The growing body of archeological material for late antiquity suggests that cities continued their spending at least until the latter part of the sixth century, often on quite a splendid scale. This certainly appears to be true in Asia Minor as well as in Egypt.

The excavations at Abu Sha'ar, mentioned above, show that at least some imperial activity of this sort went on as well. The dedicatory inscription of the fort there on the Red Sea coast shows that it was constructed by a military unit in 309–11. The text is very fragmentary, but one part clearly mentions *mercatores* and is probably to be restored 'ad us]um mercator[um]' or something close to that. I conclude that the activity of the military at this terminus of a desert road was not only useful to commerce but specifically intended for that purpose. (This confirms the views of Sidebotham 1986.)

Despite late antiquity's seemingly unshakable reputation for dramatic expansion in government bureaucracy and the burdensomeness of taxation and regulation, it remains difficult to demonstrate major alterations in the government's employment patterns or relationship to economic activity. In the provinces the numbers of imperial staff remained relatively small and the government's aims limited – though more ambitious, I would say, than those of the Ottoman empire. Direct ownership of productive enterprises appears to have been limited to areas where scale or logistics made it unlikely that private persons could carry matters through, as in large-scale mining and quarrying operations in the desert. Productive land was in private hands, and the imperial and civic holdings do not seem to differ from those of other large private owners.

The slightly more indirect areas of infrastructure provision and economic regulation are somewhat harder to assess. On the whole, it does not look as if either the imperial or the civic involvement in basic facilities supporting economic life changed very much; neither would it be justified to say that such support for the economy was merely a by-product of political purposes for such building. Price regulation, finally, is a classic case in which personal experiences tend to color scholarly reaction to the ancient evidence. It is probably not an accident that Fikhman, who has spent most of his life in a communist state, sees the price declarations as symptoms of an effort to control prices, where I, a resident of a militantly capitalistic country with an anti-regulatory bias, tend to interpret them as data-gathering! The later Roman empire was not very much like either the United States or the late Soviet Union, of course. But the character of the fifth-century summary reports seems to me decisively descriptive, not prescriptive.

Columbia University, New York

ROGER S. BAGNALL

### REFERENCES

- R.S. Bagnall, *Currency and Inflation in Fourth Century Egypt* (BASP Suppl. 5, Atlanta 1985).  
 R.S. Bagnall, 'Landholding in Late Roman Egypt: the distribution of wealth', *JRS* 82 (1992) 128–49.  
 R.S. Bagnall, *Egypt in Late Antiquity* (Princeton 1993).  
 R.S. Bagnall & B.W. Frier, *The Demography of Roman Egypt* (Cambridge 1994).  
 J. Bingen *et al.*, *Mons Claudianus. Ostraca Graeca et Latina I* (Cairo 1992).  
 A.K. Bowman, 'Landholding in the Hermopolite Nome in the fourth century A.D.', *JRS* 75 (1985) 137–63.  
 J.-M. Carrié, 'Observations sur la fiscalité du IV<sup>e</sup> siècle pour servir à l'histoire monétaire', (in) *L'«inflation» nel quarto secolo. Atti dell'incontro di studio* (Rome 1993) 115–54.  
 I.F. Fikhman, 'State and prices in Byzantine Egypt', *Scripta Classica Israelica* 11 (1991/2) 139–48.  
 C. Meyer, 'The Bir Umm Fawakhir survey project', *The Oriental Institute 1991–1992 Annual Report* (Chicago 1992) 34–41.  
 C. Meyer, 'Bir Umm Fawakhir: 1993 survey project', *The Oriental Institute News and Notes* 136 (Summer 1993) 1–5.  
 J.A. Sheridan, *Columbia Papyri IX. The Vestis Militaris Codex* (Atlanta 1998).  
 S.E. Sidebotham, *Roman Economic Policy in the Erythra Thalassa 30 B.C.–A.D. 217* (Leiden 1986).  
 S.E. Sidebotham, 'A Roman fort on the Red Sea coast', *Minerva* 3.2 (March–April 1992) 5–8.  
 A.B.J. Sirks, *Food for Rome* (Amsterdam 1991).

### XIII

#### STATE AND ARISTOCRACY FROM THE LATE EMPIRE TO BYZANTIUM

The chief economic impact of the late Roman state may be identified as the role it played in creating and sustaining the expansion of a powerful monetary economy based on gold. The monetary system of the Late Empire, as indeed of Byzantium, was a gold monometallism<sup>1</sup> based on a key denomination, the solidus, and a fractional coinage that comprised chiefly tremisses. This denominationally simplified structure worked in the fifth century in the absence of any significant copper coinage, and in the sixth in association with a reformed currency, the follis and its submultiples. However, it is clear that the solidus was the real focus of monetary policy, in the sense that the whole economic and social stability of the regime rested on preserving the purity of this coinage. This policy, implicit till the reign of Valentinian I, was clearly expressed for the very first time in the important monetary reforms of that emperor.<sup>2</sup> The fact that Valentinian I was also the first of the late Roman emperors to reflect and, indeed, consolidate the power of the military élite is obviously significant in this context.<sup>3</sup> The emperor's commitment to gold was symbolic of his commitment to the army, and, in particular, to the decisively important officer corps, and reflects the fact that key sections of the bureaucracy were powerful supporters of monetary economy, the 'social bearers' of – for the fourth century – an entirely new type of monetary and economic regime. Thus to define the crucial impact of the state in terms of its ability to sustain a stable monetary economy (or the system behind it) is to exclude other types of public intervention as candidates for such a role – above all, investments in the economy, that is valorising the resources of the empire – but also to draw attention to the social basis of imperial power and to seeing the state not as an inert (or 'practico-inert') administrative machine (in the tradition of so much late Roman history) but precisely as 'an ensemble of groups'<sup>4</sup> whose interests acquired (or already had) an autonomous social character. The author who expresses this sense of the late Roman state most clearly is Ammianus Marcellinus.<sup>5</sup> His obituaries of Constantius II and Valentinian I leave us in no doubt that Constantius' policy of resisting the aspirations of the military officials

<sup>1</sup> So Lombard 1971: 138.

<sup>2</sup> Amandry *et al.* 1982.

<sup>3</sup> The crucial text is Ammianus 27.9.4.

<sup>4</sup> The terminology is borrowed from Sartre 1960.

<sup>5</sup> See Matthews 1989.