
One of the delights in studying the history of Graeco-Roman Egypt is the availability of large amounts of detailed written evidence of a kind usually unparalleled from the rest of the ancient world which permits the illumination of aspects of life that tend otherwise to be confounded by problems and obscurity. The 300 or so census-returns on papyrus which have been published to date are a case in point. These provide detailed information on the composition of Egyptian households, including not just family members but often also tenants and slaves, and were drawn up in association with the census held every fourteen years in that country from early in the reign of Augustus until the middle of the third century AD. In reviewing the ancient evidence for the demography of the Roman world in his book Demography and Roman Society (Baltimore and London, 1992), Tim Parkin considers that this body of documents alone provides a reasonably reliable set of data with potential demographic use, although he also emphasises the problems arising from their relative paucity (19ff., 58f.). Bagnall and Frier go further and assert that they are 'quite possibly the best available source for any population prior to the Renaissance' (50). A classic study published in 1952 collates the information contained in the census-returns known at the time and attempts to discuss it from a demographic standpoint (Hombert, M. & Préaux, C., Recherches sur le recensement dans l'Egypte romaine [Leiden]), but since then the quantity of available documents has increased by some fifty per cent. Moreover, the science of demography has progressed by leaps and bounds since the early 1950s, particularly in its development of models for investigating the character of imperfectly-known populations. There was thus a need for a new study of the kind splendidly produced by Bagnall and Frier.

The book consists of two halves. The second is a catalogue of all known census-returns which sets out admirably clearly the information to be derived from them. This is largely the work of
Bagnall, who himself checked all the texts and in many cases improved the readings; corrections are listed in an appendix and reference is given to the articles in *B.A.S.P.* in which these are justified. The first half, largely the work of Frier, progressively builds up a detailed and complex picture of the structure of the population of Roman Egypt based on the information laid out in the catalogue together with the use of appropriate models derived from modern demographic research.

The opening chapter discusses the census process and the formal aspects of the returns. While much of this is derived from Hombert and Préaux, some new thoughts are offered on questions such as the beginning and end of the census. I ought, however, to mention a point of disagreement relating to the interpretation offered of the phrase ἔξ ἄττογραφής κω μογραμματέων μβ (ἐτοὺς) at *P.Oxy.* ii.288.41-2, which occurs at the end of the copy of a declaration arising from the *epikrisis* of the 41st year of Augustus (11/12 AD). Bagnall and Frier (4f.) understand the *epikrisis* to refer to a census held in that year (although this is not the term used in later census documents), citing as confirmation *P.Mil.* i.3 (recently completed by the publication of its lower part as *P.Col.inv.*8), a census declaration filed in January 12 AD. They then suggest that the phrase occurring in II.41-2, which they translate as 'of the declarations of the komogrammateis', implies that the officials proceeded in the year after the census to draw up their registers on the basis of the declarations. However, the context of the phrase must be considered; what follows is the name of a one-year old child, Thoonis the son of Dionysios, one of the men listed in the document above. In the 41st year of Augustus Tryphon son of Didymos declared the male members of his household in an *epikrisis*; after he did, however, a grandson was born, who was registered with the village-scribes the following year when one year of age. (The verb used in documents notifying the birth of children is sometimes ἀπογράφομαι; moreover such notification did not have to take place immediately after birth, with intervals of several years attested in some cases.) Appeal to the confirmation of *P. Köln* v.227 is irrelevant; this document is an official daybook recording transfers of a special category of private land (katoikic) apparently dated to the 42nd year of
Augustus and mentioning records of the 35th year, but ownership of agricultural land had nothing whatsoever to do with the census, which was purely a registration of population (and residential property insofar as it was inhabited or not). However, the problems multiply. Can we be sure that the term *epikrisis* in *P.Oxy. ii.288* refers to a general census of the population and not to a special census of a particular élite group, just as it is later used to designate the verification procedure employed in the case of those seeking privileged status, such as membership of the gymnasium or the gerousia? If the former, why were only male members of Tryphon’s household registered in the census, given that women were also registered in the contemporary *P.Mil. i.3*? Moreover, how do we deal with *S.B. x. 10220*, not mentioned by Bagnall and Frier, which is apparently an extract from a register drawn up in the 42nd year of Augustus which lists the same male members of Tryphon’s household as appear in *P.Oxy. ii.288*, all of whose ages have been increased by one year? Would this point to the drawing up of registers based on the declarations the year after the census as the authors imagine happened? The authors refer to an *epikrisis* held in the 34th year, which they understand to have been a general census on the basis of their interpretation of *P.Oxy. ii.288*. However, the only document which they cite in support is that published at *Aegyptus 54* (1974), 29f., and while it does mention some sort of registration process undertaken in that year, it seems to me far from clear that this was a general census. Nor do I find it convincing to have to count exclusively in order to establish that the description as ‘6th year’ of the 9-year old son registered in 11/12 AD by *P.Mil. i.3 + P.Col. inv.8* means that he was first registered in a census taking place seven years before. But enough of these technical points, which at least show that Bagnall and Frier have still not, in spite of their enormous efforts, managed to solve all the problems relating to the early history of the census in Roman Egypt.

The rest of the first half of the book is devoted to demographic questions and is wonderfully clear and logical in its development. Bagnall and Frier show great awareness of the problems involved in using the census returns as demographic evidence. They derive almost entirely from three nomes—the Arsinoite (the Fayyum)
and the Oxyrhynchite in Middle Egypt and the Prosopite in the Delta—and the great city of Alexandria is not represented at all. Moreover, they are concentrated chronologically into the second century A.D., with comparatively few deriving from the centuries on either side. Geographical and chronological concentration of the evidence are problems faced by all those studying Graeco-Roman Egypt, but the authors stress that it is their aim simply to reconstruct a hypothetical population on the basis of the data contained in the census returns which probably corresponds to that of the Arsinoite and Oxyrhynchite nomes, may bear a close relationship to that of Roman Egypt as a whole, and may reflect that of the entire Roman Empire. In their conclusion, however, they try to go further by identifying what aspects of this population may have been unique to it and what common to other populations in the pre-modern Mediterranean world. In general, it seems that there is very little that lies outside the range of the normal for such populations; apart from an obvious peculiarity like the prevalence of brother-sister marriage, it is in the complexity of the structure of its households that the census population most stands out. A fascinating chapter is devoted to the discussion and categorisation of these households according to the Cambridge typology, and due consideration is paid to the complexity of their life cycles, with illustration from the cases of those seven for which returns survive from two or more successive censuses.

Although Bagnall and Frier demonstrate that the returns display no significant tendency to age-rounding and argue that any social bias is unlikely to be great, they do identify further problems with the data. Chief among these are the tendency to conceal young males, or to list them with ages lower than their actual ones, in an effort to evade the poll tax levied on adult males aged 14 up to 62 and the significant underrepresentation of the villages, which account for only half of the returns but probably at least two-thirds of Roman Egypt's population. The former problem probably creates some of the difficulties surrounding the age-specific sex ratios attested by the returns, while the authors attempt to alleviate the latter problem by weighting all figures relating to the villagers according to their
estimated proportion of the overall population. However, the overall size of the sample is small—just 300 returns, of which only 233 contain usable information about residents. This is too small a number to allow for the detection of change over time, but, while there were no doubt frequent substantial fluctuations in the size of the population, whether throughout Egypt as a result of the Antonine plague or in individual localities, the likelihood, derived from a comparison with other well attested pre-modern populations, is that, viewed over the space of three centuries, the rate of growth in the overall level of the population remained very close to zero. Nevertheless, the authors do use the evidence to detect what they cautiously argue to be a rise in the growth-rate of the population in the aftermath of the Antonine plague, a suggestion that strikes me as being highly plausible. What pleases me greatly is the positive attitude displayed by the authors in their approach to the evidence, notwithstanding that they display an admirable degree of caution throughout. Yes, the sample might be small and contain many, sometimes insurmountable, problems, but we should take advantage of our possession of such a good source of evidence and do what we can with it.

I have only had space in this review to give a taste of this magnificent book. I thoroughly enjoyed being initiated into the realm of statistical and demographical methods and models by such clear and lucid guides and was fascinated by the ways in which these could be applied to the data of the census returns. This study will prove indispensable to all those working not just on the social and economic history of Roman Egypt but indeed on the ancient world as a whole.

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