

THE THEORETICAL POSSIBILITY OF EXTENSIVE INFANTICIDE IN THE GRAECO-ROMAN WORLD

We have extremely strong reasons for supposing that the exposure of infants, very often resulting in death, was common in many different parts of the Roman Empire, and that it had considerable demographic, economic and psychological effects. The evidence for the first of these propositions has been reviewed or alluded to in several recent publications.¹ However, a thorough new study, covering the whole of Greek and Roman antiquity, would be worth while. In the meantime Donald Engels has declared that in the Greek and Roman worlds the exposure of children was 'of negligible importance' ('The problem of female infanticide in the Greco-Roman World', *CPh* 75 (1980), 112–20).

Unlike those who have previously argued for this opinion, Engels has read some demographic studies. He is unlike them too in that, apart from the inescapable reference to Polybius 36. 17 (contemporary Greeks refused to bring up more than a few of their children), he completely ignores the ancient texts concerning child exposure – a remarkable piece of scholarly bravura. He also ignores a great amount of comparative information that has been collected by anthropologists and historians. Instead the author relies on a demographic argument about what was 'impossible', an argument which is in fact fallacious. Since the topic is important and the hasty reader of *CPh* may not immediately see what is fallacious in Engels' argument, I offer this discussion – which obviously does not pretend to be a full treatment of Graeco-Roman infanticide.²

Engels' main mistake is to suppose that because the Graeco-Roman world cannot have sustained a high rate of natural increase (excess of births over deaths) in any large area over any prolonged period – not even a rate of 5 per 1,000 per annum – births cannot have exceeded *non-infanticidal* deaths at any significant rate. He assumes not only that 'birth and death rates were in equilibrium' (p. 118) (no doubt this was often true or nearly true), but that the birth rate and the non-infanticidal death rate were in equilibrium. As far as the Hellenistic and Roman periods are concerned, the latter supposition is pure fantasy.

The way in which Engels states his central argument is fatally misleading. He envisages a society with a roughly stable population, with birth and death rates both about 40 per 1,000 per annum, and then he *adds in* 20 per cent female infanticide, with abrupt results.

¹ W. V. Harris, 'Towards a Study of the Roman Slave Trade', *Memoirs of the American Academy in Rome* 36 (1980), esp. pp. 123–4; R. P. Duncan-Jones, 'Demographic Change and Economic Progress under the Roman Empire' in *Tecnologia, Economia e Società nel mondo romano: Atti del Convegno di Como... 1979* (Como, 1980), pp. 69–71; on the fundamental discussion by P. A. Brunt, *Italian Manpower, 225 B.C.–A.D. 14* (Oxford, 1971), 148–54, see below, p. 116; see also on the Hellenistic and Roman periods S. B. Pomeroy, *Goddesses, Whores, Wives, and Slaves* (New York, 1975), pp. 140, 164–5, 228. R. Etienne, 'La conscience médicale antique et la vie des enfants', *Annales de Démographie Historique* (1973), pp. 15–46, does not give a clear account of infanticide, but the comments of J. Bourdon (pp. 51–3) are worth reading.

² On the problems involved in defining infanticide see especially M. Dickeman, 'Demographic consequences of infanticide in Man', *Annual Review of Ecology and Systematics* 6 (1975), pp. 109–10. I shall not be concerned in this paper either with the infanticide of deformed infants or with infanticide by selective neglect (a topic much written about by recent anthropologists).

Such wholesale slaughter would obviously increase the population's death rate... [T]he killing of one-fifth of all newborn girls will immediately raise the death rate to 44 per 1,000 per year... [I]n about 45 to 49 years... since there would be only four-fifths as many women in the population as before... exterminating one-fifth of infant girls will effectively reduce the population's birth rate by one-fifth, or in this case to 32 per 1,000 per year.³

The unreality of this should be plain. No doubt there were periods and places in the Graeco-Roman world in which fatal child exposure gained in acceptability (though it may have done so gradually). However, it may have become acceptable in various different demographic circumstances, and with various different demographic results. Self-evidently people are most likely to begin tolerating fatal child exposure when they think that too many children are being born, or too many of one sex – and some if not all such periods will correspond with periods of genuinely high natural increase (Engels' model requires practically continuous population stability). Then the overall effect of introducing heavy infanticide may have been great or small: great, for example, if it reduced swift population growth to stability, or changed stability into swift decline (in the latter case, which is the one envisaged by Engels, we would expect infanticide to ease off after a certain period); or small, if the factors determining fertility reacted to the spread of child exposure (the prevalence of this practice would, for example, make possible such changes as a decrease in the number of abortions and an earlier female age at marriage).

The point is that infanticide is merely one of many factors determining population. As to the factors which determine the actual level of fertility in any society, they are reasonably well known,⁴ and include the age at which its female members begin to practise coitus, coital frequency, fecundity, the extent of use of effective contraception, and foetal mortality from voluntary and involuntary causes. Some of these factors are obviously quite unmeasurable as far as the ancient world is concerned. But one at least can be measured for the Roman period: we know that the age of girls at marriage was low,⁵ i.e. favourable to high fertility. This, I suspect, was made possible largely by the exposure of infants.⁶

There is no theoretical obstacle to the following figures, which are given by way of example: average life expectation at birth < 25 years, birth and death rates 40 per 1,000 per annum, non-infanticidal death rate 36 per 1,000 per annum. The latter figure results from imagining that an average of 10 per cent of all infants were fatally exposed or otherwise killed. It may well have happened that some regions of the Roman Empire witnessed rates of infanticide notably higher than this without suffering abrupt population decline.

In a somewhat unclear penultimate paragraph (pp. 119–20) Engels seeks to buttress his argument by asserting in effect that a society which practised infanticide on a large scale and which in consequence (according to him) experienced severe population decline could not have halted the decline just by increasing its birth rate, i.e. without also giving up infanticide. It scarcely seems worth while to unravel the confusion in

³ Engels, pp. 118–19. In fact the death rate would not rise quite to 44 per 1,000, since in any ancient society normal mortality included many infants under one year of age, i.e. some of the victims of infanticide would have died of other causes during their first year.

⁴ See for example G. Hawthorn, *The Sociology of Fertility* (London, 1970), pp. 18–19, drawing on K. Davis and J. Blake, 'Social structure and fertility: an analytic framework', *Economic Development and Cultural Change*, 4 (1955–6), 211–35.

⁵ See K. Hopkins, 'The age of Roman girls at marriage', *Population Studies* 18 (1965), 309–27.

⁶ For another formulation of the relationship between infanticide and early marriage see Brunt, pp. 151–2.

this,⁷ since no historian has ever hypothesized such a train of events and no historian who believes in extensive infanticide in antiquity has any need to do so.

It must be added that Engels' contention that historians have long since established that fatal child exposure was unimportant among the Greeks and Romans is a travesty. He cites some works of the twenties and thirties, but the best and latest of these (A. Cameron, 'The Exposure of Children and Greek Ethics', *CR* 46 (1932), 105–14) holds the opposite view.⁸ Nothing is said of the later work of Tarn, R. Tolles and others.⁹ But the most extraordinary omission of all is that of any reference to Brunt's *Italian Manpower*, without question the leading work in the field of Roman demography. After a careful examination of the evidence relevant to Italy, Brunt concluded that 'infanticide was common'.¹⁰ A similar judgement is expressed in the only other monograph of recent times on the population of the Roman world, that of P. Salmon.¹¹ Indeed, it is obvious that anyone who seriously wanted to maintain the point of view put forward by Engels would need to demonstrate the irrelevance of the evidence cited in these and other recent studies, beginning perhaps with Plutarch's exaggerated but still very important statement that 'the poor do not bring up children' (περὶ τῆς εἰς τὰ ἔγγονα φιλοστοργίας 5 = *Mor.* 497e).¹²

As for anthropologists and demographers, from whose camps Engels may seem to be fetching his ammunition, their work does not help his argument at all. Both the older and the more recent anthropological literature is replete with information about societies which have practised heavy infanticide,¹³ frequently killing more female than male infants. Demographers do not demur, and the author of the most recent demographic study cited by Engels is no exception to this.¹⁴ A very thorough recent discussion under the title 'Demographic Consequences of Infanticide in Man' sums up its findings as follows: 'at rates of 5–50 per cent, [infanticide] occurs in hunter-gatherers, horticulturalists, and stratified agrarian societies...'.¹⁵ There is no theoretical reason why it could not have occurred among girls in the Graeco-Roman world.

Columbia University

WILLIAM V. HARRIS

⁷ The basis of Engels' argument here seems to be that an increase in birth rate necessarily produces an increase, over both short and long term, in death rate. But the only such increase which would inevitably follow would be a temporary one resulting from a temporary rise in the proportion of infants in the population.

⁸ 'That the practice was common in Roman times is universally admitted...', p. 105; 'exposure was familiar even in Athens of the classical period', p. 107.

⁹ W. W. Tarn, *Hellenistic Civilization* (third ed., with revisions by G. T. Griffith, London, 1952), pp. 100–2; R. Tolles, *Untersuchungen zur Kindesaussetzung bei den Griechen* (diss. Breslau, 1941).

¹⁰ *op. cit.*, p. 153.

¹¹ *Population et dépopulation dans l'Empire romain* (Brussels, 1974), pp. 70–2.

¹² cf. Harris, *op. cit.* p. 123. The Loeb translator (W. C. Helmbold) mistakenly gives 'when poor men do not rear their children, it is because...'.
¹³ Very many instances are mentioned in A. M. Carr-Saunders, *The Population Problem. A study in human evolution* (Oxford, 1922), pp. 146–9, 169, 179–80, 190–1, 196, 216–22, 255–62 (Rome: 258–9). For more recent bibliography see J. F. Marshall, etc., 'Culture and Natality: a Preliminary Classified Bibliography', *Current Anthropology* 13 (1972), p. 274, and above all Dickeman, *op. cit.* pp. 134–7. On prehistoric infanticide see S. Polgar, 'Population History and Population Policies from an Anthropological Perspective', *Current Anthropology* 13 (1972), p. 206. On female infanticide in modern historical periods see the bibliography provided at the beginning of J. Knodel and S. De Vos, 'Preferences for the Sex of Offspring...', *Journal of Family History* 5 (1980), 145–66.

¹⁴ W. Petersen, 'A Demographer's View of Prehistoric Demography', *Current Anthropology* 16 (1975), esp. p. 234.
¹⁵ Dickeman, p. 130.