

David Arnold, in *The Times Higher*, October 16 1998, p.23.

In the 200 years since Thomas Malthus published the first edition of his sometimes celebrated, often decried, *Essay on Population*, the world has become a much-changed place. An earth which then supported fewer than a billion people now holds six times that number, more than half of them above subsistence level. Alan Macfarlane's book does not address itself directly to those left behind in misery and hunger (though their predicament is implicit on every page of *The Savage Wars of Peace*), but to the conundrum Malthus and his contemporaries found so hard to resolve – how any society could ever escape from the depressing cycle of poverty, disease and starvation.

The arguments presented in Malthus's *Essay*, especially the revised edition of 1803, frame Macfarlane's attempt to explain what he sees as the remarkable exceptionality of England and Japan in attaining by the 18th and 19th centuries a relatively low level of mortality combined with a fairly stagnant or low rate of population increase. Brushing aside the many critics, Macfarlane takes as substantially correct for agrarian societies around the globe Malthus's fundamental claim that human reproduction will always tend to outstrip available food supplies, until population increases are forcefully constrained by the "positive checks" of war, famine and pestilence or curbed by the prudent exercise of such "preventive checks" as late marriage and celibacy. Even when society is able temporarily to augment its food supply, Malthus believed the gains would be short lived, soon being swallowed up by having yet more mouths to feed.

Escaping from this Malthusian trap seemed to defy logic as human nature, and yet, Macfarlane argues, both England (and he means England, not the rest of Britain) and Japan did achieve this exceptional feat. Though his interest is ultimately perhaps greater in explaining the English rather than the Japanese case, he imaginatively uses evidence about the latter to suggest clues as to what made England exceptional.

Comparisons between Britain and Japan are hardly new. Ninety years ago, after success in the war against Russia, when Japan seemed bent on an industrial, naval and imperial career not unlike Britain's, many contemporaries saw much in common between two island empires, situated at opposite ends of the Eurasian landmass, guarded by sea from continental turmoil and tyranny. Macfarlane does not entirely eschew such explanations. In looking for immediate answers to the Malthusian conundrum, it is evident to him that islands enjoyed certain practical advantages. For example, island status, supported in the case of Japan by a long policy of deliberate isolation, kept at bay epidemics from plague to cholera.

A favourable climate, the benefits of internal diversity and efficiently agriculture can all be adduced as mutual assets, but Macfarlane has the good sense not to be satisfied with simple determinist arguments nor seduced by superficial similarities. Indeed, most of this fascinating and closely reasoned book is given over to explaining how, despite following very different routes, England and Japan were able to arrive at the same happy condition of combining low birth-rates with low mortality. By waving together contemporary testimony with the knowledge derived from modern demography and epidemiology, Macfarlane demonstrates the complex and interconnected nature of the factors that contributed to this remarkable outcome.

Disease, so often deployed as a kind of biological battering ram, forms here a subtle connecting thread within and between societies. The factors affecting disease are not only vital in explaining the absence of the high peaks of mortality commonly taken as characteristic of the demographic *ancien regime* elsewhere; they are also the means by which to relate raw demographic data (this, significantly, is a book without graphs and tables) with the texture of human life. What people eat and drink, how (and whether) they bathe, the kinds of clothes they wear or houses they inhabit, tell us much about the manner in which, often quite unconsciously, they interact with their environment, enhancing or diminishing their fertility or their susceptibility to parasites and pathogens.

In almost every respect, Japan and England followed singularly different paths. England's agriculture rested on fertile soils, reliable rainfall and a high proportion of livestock – meat formed a large part of the English diet, even among the relatively poor, animals provided manure for the fields, and the country could afford the luxury of pasture for sheep and cows and grain to make ale and beer. Meat and beer together provided a relatively high level of nutritional and, despite the dangers in excess, helped produce a relatively good state of health.

By contrast, Japan, struggling with poor soils, had by early modern times developed a far more intensive system of agriculture, centred on rice, almost devoid of livestock, and using human excrement to fertilise crops. This careful nurturing of labour and scarce resource enabled Japan to sustain a much higher population level than England. Rice, supplemented by vegetables, fish and seaweed, sustained its own species of healthy and dependable diet, while drinking tea, rather than unboiled water, reduced the risks run by the Japanese, like the English with their beer, from intestinal diseases. Macfarlane is well aware of the negative effects any chosen route might entail – malaria might be less common in a society largely without animals and well-protected by mosquito nets, but such a society could remain susceptible to beri-beri from an over-reliance on rice or from bilharzia spread through paddy fields. But, on balance (at times a shade too predictably) the positive factors win out or institute positive linkages of their own. Thus the general absence (and intolerance) of animal milk in Japan saved the population from milk-borne diseases but also favoured long periods of breast-feeding, which in turn encouraged extended periods between conceptions.

Cultural values at times came more consciously into play. Exceptionally, in both England and Japan there was a social imperative to control fertility. In England late age at first marriage, or the absence of marriage altogether for a significant section of the population, was an important constrain on fertility (as Malthus himself began to realise). In Japan, not only was marriage relatively late, but sexual intercourse within marriage seems to have ceased early; abortion and infanticide further constricted family size. The nature of systems of inheritance, the concern in both England and Japan to match family size to resources and the needs of heirship, were also influential, exemplified in Japan by a highly flexible system of adoption. But the cost of escaping the cycle of poverty and disease was high and fell, Macfarlane observes, especially heavily upon women. In Japan, heavy physical working in the fields, short periods of rest after parturition, the physical and emotional strain of abortion and infanticide, all took a heavy toll. Even in those societies that did manage to escape the

Malthusian trap, it seems from this rewarding and innovative book, there were still “savage wars” to be fought.

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