

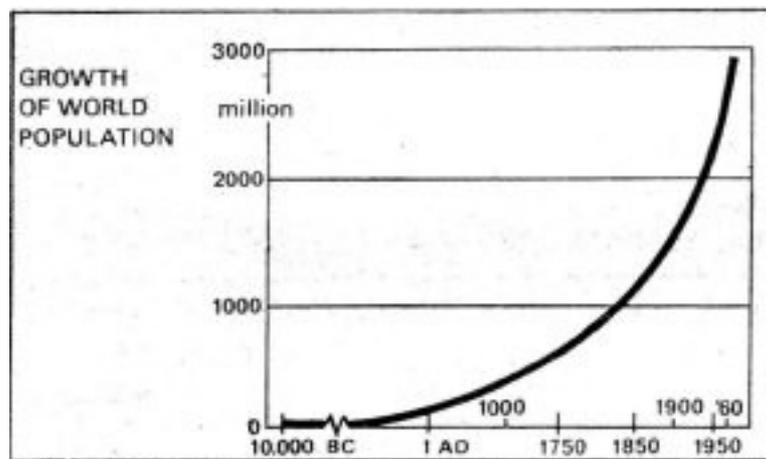
(Published in NEW SOCIETY no. 315, 10<sup>th</sup> October 1968)

## Population crisis: anthropology's failure

We are rapidly moving towards a population catastrophe which will make past plagues and two world wars seem insignificant by comparison. There will not be enough food to go round. By 1900, world population had reached about 12 billion: by the year 2000 it will be at least six billion, unless it is halted by thermonuclear war or massive epidemics.

In 1953 the United Nations warned people that it was "easily possible that the means of producing the necessities of life will not be increased as rapidly as population grows, and that the level of living of the world's peoples will be depressed as their numbers increase." Today, with the general failure of most family planning campaigns and a growth

FIG. 1



of population that in the 1960s outstrips even the highest United Nations projections of the early 1950s, the situation looks much grimmer. Probably islands - Mauritius and Java, for instance - will suffer first. Then America will no longer be able to feed India. When the "third world" collapses, our markets and supplies of raw materials will be closed. The western economy will topple.

What contribution may social anthropologists make to the urgent research needed to mitigate this disaster (it is already too late to completely avoid it)?

To live for a while in a pre-industrial society is a necessary part of a social anthropologist's training. This soon brought home the importance of birth, marriage and death to the early field-workers. These "vital statistics" and the social framework of reproduction (kinship and marriage), might have made ardent demographers of anthropologists. Surprisingly, this did not happen.

Demography is basically concerned with changes *over time* in the structure of population. Most anthropological studies have tended to be static cross-sections of a particular society at the point at which it was visited by the field-worker. Perhaps because of this, investigators have showed only a slight interest in demography. The normal field-situation means that the evidence gathered from informants is impressionistic and non-statistical. The description is either of what *ought* to happen or what was *thought* to happen. There has been the fatal tendency, inherent in every discipline, to let the nature of the evidence dictate the problems, rather than to start with the problem, and range through the evidence for answers.

Anthropologists are urged by their handbook, *Notes and Queries in Anthropology*, to collect "urgently needed" material "for the study of the relation between demographic conditions and social institutions." But they have seldom gone beyond broad classifications of the population by overall number, age and sex. Any latent enthusiasm for demographic information waned when it became clear that most native informants were hazy about their age and even hazier about past trends in population figures. Without written records, all attempts to assess population changes seemed doomed.

There are some exceptions to this picture; and from social surveys some extremely useful statistical data were extracted, particularly on Africa. But the continued absence of a general interest in the subject is shown by the various mouthpieces of the anthropological profession. *The Biennial Review of Anthropology* for 1959 to 1965, the *Journal* of the Royal Anthropological Institute, *Man*, the various monographs of the Association of Social Anthropologists and even the *British Journal of Sociology* scarcely contain any references or articles on population by British anthropologists. Practically the only worthwhile contribution is an article by Mary Douglas in the *British Journal of Sociology* for September 1966, which shows the vital importance of prestige, rather than direct economic factors, in determining population control.

Nor, to judge from the *American Anthropologist*, are American colleagues more interested. The textbooks offered to anthropology students scarcely mention demographic features. Neither "population" nor "demography" will be found in the indexes of the recent general textbooks by Beattie and Lienhardt.

If we compare the situation in anthropology to that in allied disciplines, the gaps seem even worse. In the last ten years the forceful application of demographic methods to historical material has not only revolutionized demography, it has cleared the space for a whole new discipline - historical sociology.

Already important works have appeared and special institutes have been set up to study "population and social structure" - for instance, that at Cambridge under Peter Laslett and E. A. Wrigley. Collections of essays such as *Population in History* edited by Glass and Eversley, and the very stimulating spring 1968 issue of the American magazine *Daedalus*, which is entirely devoted to "historical population studies," show the sophisticated state that analyses have already reached. The detailed examinations of particular regions in France and England by Goubert, Wrigley and others have destroyed many of the accepted theories and suggested others.

We are discovering that there was birth control in Stuart England: that Europe had a "unique marriage pattern," combining high age at marriage with a large proportion of never married persons; that the small "nuclear" family predominated in most of the pre-industrial west; that one of the major factors permitting the accumulation of capital and hence industrial expansion in the late 18th century was late marriage and the consequent slow population growth-roughly one quarter of 1 per cent per annum in the 200 years before industrialisation.

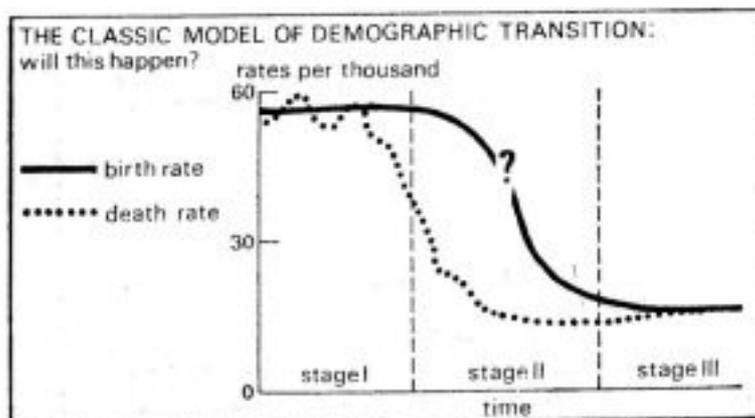
As usual, as many problems have been created as solved. Why were there such differences in preindustrial fertility decline between different groups and different areas? Why did the fertility of the British peerage fall steadily between about 1620 and 1740? Why did so many people remain unmarried? Why was marriage age so high - between 20 and 30 for both men and women - and what consequences did such a marital structure have on sexual norms? Why was birth control introduced in parts of 18th century France and what methods were used to limit families in 17th century England? Why did plague die out in England in the 17th century when mortality from other diseases was rising and when there had been no significant advances in medical techniques for

dealing with epidemics?

The impetus from French demographers is paralleled by the enormous energy of American sociologists. In the construction of "analytic frameworks for the study of variables affecting fertility," in many detailed analyses of areas of South America, the United States and the Far East, Kingsley Davis, Judith Blake, J. Mayone Stycos, Frank Lorimer and others have - like the historical demographers - suggested a mass of hypotheses which it will take the skill of all the social sciences working in collaboration to test. Much of this stimulating work was summed up some time ago by Ronald Freedman in a report in *Current Sociology* for 1961-62, and there are proliferating studies in the periodical *Demography*.

Where could the anthropologists begin to contribute?

There is now a considerable literature on the social factors which influence fertility rates. Until recently it was argued that fertility would be high in non-industrialised societies. Children were desired and cheap to raise; the extended family spread the cost of increasing population; the system of inheritance encouraged the subdivision of holdings. People wanted children both for emotional and "religious" reasons - to continue the line, pray for them when dead, or satisfy the gods - and as an insurance against sickness and old age. They realised that, with very high infant and child mortality, many heirs would be lost before adulthood and therefore "spares" were needed (see graph).



Then, according to the older hypotheses, comes the demographic and economic revolution. Prolonged education makes children more expensive, and factories mean that the labour of a new generation goes to employers rather than into the family holding. The nuclear family emerges, freed from its wider ties, and there is not such a wide group to share the cost of producing many children. Other institutions take over insurance against sickness and old age.

Increasing mobility, both geographical and social, emphasises the value of having a small family. The death rate has dropped and people see that it is no longer necessary to have many children to ensure the survival of some. There are new consumer goods to invest in - cars, houses, leisure - and children as sources of prestige, insurance and spiritual welfare seem less attractive. Contraceptive techniques improve and become easily available.

Unfortunately this automatic transition, which, if swift enough, might have saved the world from the disastrous consequences of introducing death control without corresponding birth control, is clearly not occurring. The rapid rise in American population in recent years, the fact that urbanised Africans show no sign of having smaller families than those living in rural areas, the fact that Indians who live in nuclear families have as large families as those living in extended groups: all

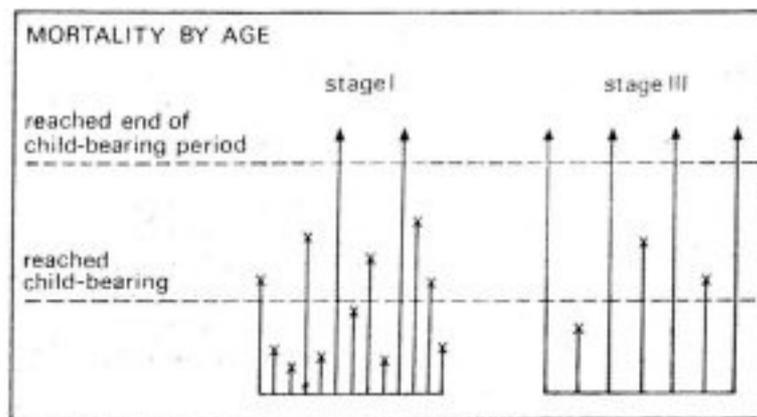
these and other evidence show that what happened in 19th century Europe was not a *necessary* result of economic and social change, bound to happen wherever industrialisation occurred. It was the result of these changes in a society which already had a particular system of kinship and marriage, and considerable capital reserves.

We urgently need further research on the effects of various factors on fertility. Why, we may ask, did fertility decline in Spain, a deeply Catholic, strongly rural society with low social mobility and late, limited industrialisation from the late 18th century onwards? The whole hypothesis of the "demographic transition" is now in question and hence all optimism based on it is suspect.

Research is also needed on the methods and effects of fertility changes. What happens to the status of women, family life and the labour market when birth control is introduced? How does information flow on family planning; along what lines of communication. by what pressures? How do reactions vary with different techniques, different social structures?

The cost of very high fertility to the individual mother in terms of time, pain and insecurity, is becoming steadily more obvious. The wider economic effects of very rapid population growth on the economy is also becoming clearer. The United Nations *Determinants and Consequences of Population Trends* some time ago made it clear that the growth rates in many parts of the underdeveloped world make capital accumulation impossible and increase unemployment. The growing school of "economic anthropology" could well explore these issues.

Less studied have been the non-demographic effects of various mortality rates. Until recently the average Society studied by anthropologists would have an expectation of life at birth of between 20 and 35 years. Roughly a quarter of the children born alive would be dead at the end of their first year of life. Approximately a quarter of the marriages would last the full child bearing period without one of the partners dying. More than half a dozen of a person's close relatives would have died by the time he was 25 (brothers and sisters, parents, uncles and aunts). That is assuming that he reached the age of 25, for there was only a small chance of doing so. (See chart.)

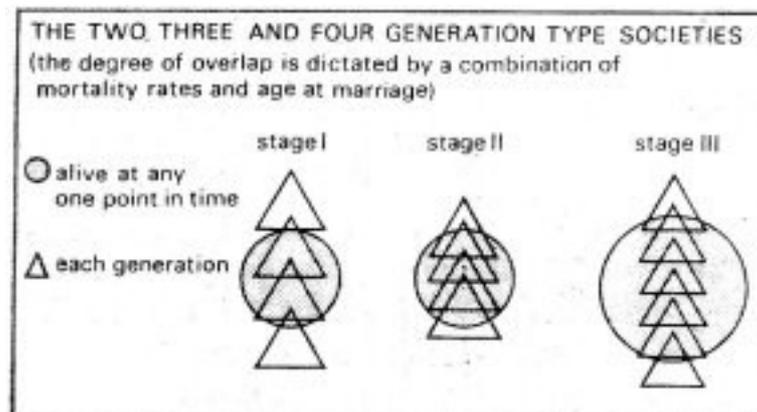


If one reads anthropological accounts of primitive societies, one seldom gains an insight into this world of continual disease and frequent death. As an article in the *Biennial Review of Anthropology* for 1963 made clear, "medical anthropology" is still at a very rudimentary stage. The difficulties of transmitting "culture" when a third of the total population dies off every ten years; the huge waste of resources (calculated to be 23.5 per cent of the national income in many underdeveloped countries by the United Nations) through the loss of children before they become producers; the effects of constantly broken homes on emotional relationships within the family; the disincentive to spend much on specialised education when people are so likely to die - and hence the training of replaceable "role-performers" rather than individualists: these are some of the possible

consequences of high mortality. The constant assertion that ties, especially with children and between husband and wife, are never deep because they are likely to be terminated at any moment by death, is only one of the hypotheses open to anthropological and comparative study.

To probe further into the traditional hunting grounds of anthropologists: it is becoming clear, as V. W. Turner has pointed out, that endless discussions of witchcraft and other beliefs about the causation of illness *must* contain discussions of medical and demographic factors. How true is it, for example, that medical improvements in modern Africa will rescue the "disease-logged" societies from what many western observers consider to be "irrational" fears? The whole realm of the interrelation between demographic features and "cosmologies" has scarcely been scratched: beliefs about ancestors, the causation of misfortune, the after-life, space and time, all are likely to be affected by the current demographic movements which are radically changing life-expectations and experiences.

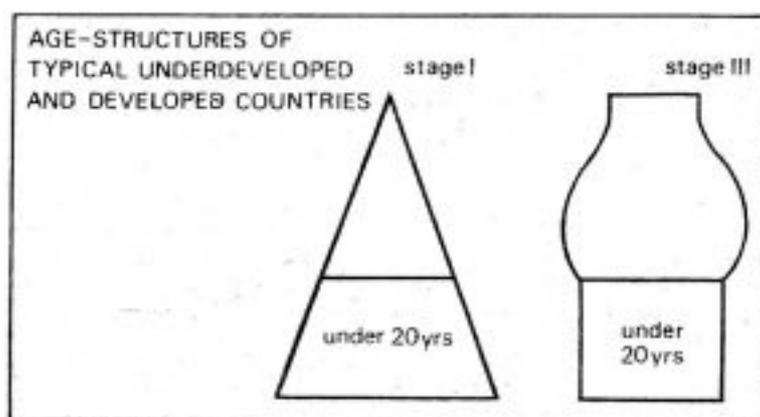
Many other aspects of demography would greatly contribute to anthropological discussions. A comparative analysis of the effects of various age-structures on attitudes and institutions would be rewarding. Pre-industrial England, with fairly high adult mortality rates, and also high age at marriage, probably had a structure which we might call two-generational. Two generations would, normally, be alive simultaneously (see diagram).



When expectation of life remains roughly the same, but age at marriage is much lower (as in many traditional "primitive" societies), there would be a three-generation overlap. But when, as in present-day America, and, to a lesser degree, parts of Europe, fairly low marriage age is combined with a tremendous increase in expectation of life, then we have the unprecedented "four-generation family."

The dramatic effects of these structures on intergenerational relationships, and the transmission of power and wealth, is obvious but unstudied.

The different shapes of the age-pyramids in the typical pre- and post- "demographic transition" situations is equally important (see diagram).



The society where over 50 per cent of the population is under 20 years of age has given way, in our own century and in England, to a structure more weighted towards middle and old age. There is growing debate about the consequences of this for the old. But the many other repercussions, and the situations where it is happening ten times faster than in Britain, have been little analysed. Anthropologists were, at one time, fond of discussing "joking relationships" between grandparents and grandchildren. They seldom seem to have stopped to consider whether the demographic situation would leave any grandparents alive to joke with.

Likewise, population density and the speed of population growth will not only affect the economic structure, they may well shape personality and perception. There have been few advances in this field since David Riesman bravely attempted to relate personality-types to curves in population trends in *The Lonely Crowd*. Here, as elsewhere in the relations between population and society, the fundamental problem is one of the most exciting in the social sciences - and one raised by, among others, Durkheim and Levi-Strauss - namely, what are the relations between statistical tendencies and social attitudes?

Anthropologists often speak of the world as their "laboratory," with various societies as their "experiments." At present the "laboratory" for the anthropologist interested in demography is in a particularly curious state.

At one extreme, there are some western societies like our own, with patterns of longevity, large numbers of old people, few marriages broken by death, death mainly caused by degenerative rather than epidemic diseases. These societies present unprecedented features which have only emerged during the last fifty years. At the other extreme, there are still societies which exhibit those classic characteristics associated with high fertility and mortality. In between there are many societies moving from "primitive" to modern European patterns. I have suggested some of the social and mental repercussions of all these different situations. What appears likely to happen, however - and to provide the final terrible dimension to the overall picture - is that some societies will start sliding downhill again.

Signs of this on an economic level are beginning to appear. In 1967, we are told, each person on earth had 2 per cent less to eat - although, obviously, the loss was unequally divided. In the 1970s this process will accelerate. Some of the consequences in the field of social administration and maintenance of order have been outlined in Professor Titmuss's recently reissued work on Mauritius. But the effects of growing ill-health, increasing epidemics, deterioration of housing, widespread malnutrition, leading into absolute starvation, have scarcely been explored by social

anthropologists. Fieldworkers are going to find their investigations increasingly impinged on by such factors. Unequipped intellectually for such a situation, they are likely either to continue to ignore the evidence of misery or to be completely baffled.

When Professor Titmuss investigated the Mauritian population he was forced to "try to break out of western specialisations and combine the insights of the economist, historian, anthropologist, demographer, political scientist and doctor." Future work to mitigate the population crisis will need to follow such cross-disciplinary teamwork. The "anthropologist," who seems to be growing increasingly interested in statistics and urban sociology and hence likely to be receptive to demography, will both benefit from and advance such research. He will provide a constant reminder of the importance of studying values and attitudes, as well as the more strictly material aspects of the problem. He will find that demographic analysis, which is, above all, an attempt to describe social process, will help him to make the long-announced transition from static analysis to a framework which can deal with social change.

Not only will he analyse new topics, but his discussions of conventional topics such as kinship, land tenure, witchcraft, will be improved considerably. Equipped with the United Nations manuals on methods and the training in basic demography, which so few university departments of anthropology now provide, he will be well placed, in his smallscale way, to collect the detailed statistics and attitude surveys which are urgently needed. It is hoped that he will also not shrink from the larger task of making heroic speculations.

"Historical Population Studies" (*Daedulus*, Spring, 1968)

Mary Douglas, "Population control in primitive groups" (*British Journal of Sociology*, XVII No. 3, 1966)

R. Freedman, "The Sociology of human fertility" (*Current Sociology* X/XI No. 2, 1961-62)

D. V. Glass and D. E. C. Eversley (eds). *Population in History* (Arnold, 1965)

P. Hauser and O. Duncan (eds), *The Study of Population* (Chicago, 1959)

David Riesman, *The Lonely Crowd* (Yale, 1961)

Richard Titmuss, *Social Policies and Population Growth in Mauritius* (reprinted. Cass, 1968)

United Nations, *The Determinants and Consequences of Population Trends* (Population Studies, 17, 1953)

In addition to the publications mentioned in the text the following provide a basic introduction to some of the problems raised:

Kingsley Davis, "Social structure and fertility" (*Economic Development and Cultural Change*, 4, No. 3, 1956)

Philip M. Hauser (ed). *The Population Dilemma* (Prentice-Hall, 1963)

L. Krzywicki, *Primitive Society and Its Vital Statistics* (Macmillan, 1934)

F. Lorimer et al. *Cultural and Human Fertility* (UNESCO), 1954)

*On Population* (three essays by Malthus, Huxley, Osborn) (Mentor, 1960)

W. and P. Paddock. *Famine-1975* (Weidenfeld & Nicholson, 1968)

The author would like to thank Professor D. V. Glass and Mr. Keith Hopkins of the London School of Economics, whose stimulating lectures clarified a number of the issues raised in this article. The International Planned Parenthood Federation provided help in a number of ways and their library at 18-20 Lower Regent Street, London, SW1, contains all the publications referred to.