

Alan Macfarlane

REFLECTIONS ON ‘THE GREAT DIVERGENCE’ : DEMOGRAPHIC AND SOCIAL STRUCTURES

Alan Macfarlane, King’s College, Cambridge, England CB2 1ST

What are the questions? Benchmarks and ideal types.

There has been a vast literature on kinship, demography and social structure in comparative perspective. One is aware of many problems concerning data and interpretation. A particular one concerns generalization. If, for example, one is trying to answer a specific, apparently simple, question such comparative mean age at first marriage of women, one is faced with huge questions of variation. Supposing one were trying to compare this as between ‘Japan’, ‘China’ and ‘Europe’, one would immediately have to qualify the answers in many ways. Let us take Europe. One would have to allow for period – the situation varied enormously from century to century. One would have to allow for class; very often the working class or peasantry marry at a different age to the gentry. One would have to allow for geographical differences, Italy is very different from Norway, and even different regions within Italy are very different. One would have to allow for occupational differences. And so on. So any statement would need immense qualification.

The only solution I know to this problem is to set up an ideal-type model, following the ideas of Max Weber and others. This is a set of simplified generalizations, against which particular deviations can be measured. This is what I shall do here, exposing my ignorance and assumptions so that they can be corrected.

Patterns of demography in four cases: eighteenth century

(the inverted commas indicate the ideal type status of the region)

<i>Feature</i>	<i>‘India’</i>	<i>‘England’</i>	<i>‘Japan’</i>	<i>‘China’</i>
Perennial mortality rates	high	low	low	low
Epidemic mortality rates	high	low	low	low
Famines	frequent	none	none	few
Fertility rates	high	low	low	middling
Abortion rates	low	low	high	low
Infanticide rates - male	low	low	high	low
Infanticide rates – female	low	low	high	high
Female age at first marriage	low	high	middling	low
Male age at first marriage	low	high	middling	high
Proportion of males ever married	universal	selective	selective	selective
Proportion of females married	universal	selective	selective	universal
Average completed family size	high	low	low	middling
Desire for children	high	low	low	middling

Of course there would have to be many qualifications and much more specification of the particular features (for example what does ‘few famines’ mean, or what are ‘middling’ ages at first marriage for women). But if, after doing this, we find that this table is roughly right, then it suggests some interesting conclusions.

If one compares China to the other cases, for example, we find overlap and difference. It is clearly very different from the ‘Indian’ case, that is what is known as the classic ‘high pressure’, ‘crisis’ pattern which is roughly what Malthus thought it must be like, and I did likewise until the recent work of Bin Wong, James Lee and others.¹ So China is not a classic ‘crisis’ case.

Yet, if we compare it to Japan, it is again different. Among the striking differences one might note the way in which fertility is restricted. In Japan it is through a mix of pressures – middling female age at marriage, abortion and infanticide of both sexes. In China it is female infanticide. In terms of mortality, although not suffering from perennial famine and epidemic disease, China seems more prone to these than Japan, which is, as I have argued elsewhere,² an extreme case of the avoidance of famine and epidemics.

Or again, if we compare China to England, it is different again. In relation to fertility, the controls in England were entirely through late and selective marriage for both sexes, rather than infanticide. In relation to mortality, even more than Japan, England had banished famine and epidemic disease.

So if we summarize the demographic situation it is possible to argue in several ways. China was different from all the other three cases and cannot be lumped with India. But nor can it be lumped with Japan, nor with England. In terms of nearest case, it is, I suppose, nearest to Japan, but there are very significant differences in both mortality and fertility. And of course the total population history is very different. Whereas Japanese population totals remained more or less stable from 1700-1850, Chinese population increased hugely during that period.

Patterns of family in four cases.

The next question I would like to ask is what lay behind the demographic differences? Again, of course, this is a vast subject. For example, age at marriage is the result of numerous forces, economic, social, religious and so on. Yet clearly one of the most important contexts which shape demography is the system of kinship and marriage or family system. Again in an attempt to set up some ideal-type features and simplified answers, one might compare our four cases, in relation to the situation in the eighteenth century, as follows.

¹ See, for example, the useful summaries of their work in James Lee and Wang Feng, ‘Malthusian Models and Chinese Realities: The Chinese Demographic System 1700-2000’, *Population and Development Review*, 25(1), March 1999, 33-65; William Lavelly and R. Bin Wong, ‘Revising the Malthusian Narrative: The Comparative Study of Population Dynamics in Late Imperial China’, *Journal of Asian Studies* 57, no.3 (August 1998), 714-748.

² Alan Macfarlane, *The Savage Wars of Peace* (Macmillan 1997; Palgrave paperback edn., 2002)

<i>Feature</i>	<i>'India'</i>	<i>'England'</i>	<i>'Japan'</i>	<i>'China'</i>
Method of tracing descent	unilineal	bilateral	bilateral	unilineal
Kin units	groups	networks	'groups'	groups
Who inherits	all males	one child	one child	all males
Birth rights of children	automatic	none	none	automatic
Adoption widespread	yes	no	mixed	yes
Size of effective household	large	small	middling	large
Type of household	joint	nuclear	stem	joint
Co-operation of brothers	considerable	none	little	considerable
Unit of farm labour	family	servants	family	family
Male children leave home	late	early	middling	late
Mistresses, junior wives	yes	no	yes	yes
Marriage residence	patrilocal	neolocal	mixed	patrilocal
How marriage set up	arranged	love	mixed	arranged
Parent-child as primary	yes	no	yes	yes
Ancestor rituals	yes	no	mixed	yes

In the table it is not always possible in one word to capture the system. This is particularly the case with Japan. 'Mixed' in relation to adoption, for instance, indicates that while adoption was very widespread in Japan, it was not necessarily blood kin who were adopted, unlike China. Or again, 'mixed' marriage residence indicates that while one son would normally marry and settle in the parents house, which creates the 'stem' family, others would move away. In relation to how marriage is set up, 'mixed' means that the Japanese system is neither based on arrangement by parents, nor on the psychological and other factors which is referred to as 'love marriage'. It is, like so many things Japanese, a hybrid. The same is true of ancestor rituals. The Japanese were concerned for their ancestors, but not in the same ritual way as the Chinese.

If we stand back from the table as a whole, one or two things stand out in the general patterns. One is that the 'Indian' and 'Chinese' systems are identical. This may be an artefact of my ignorance of Chinese kinship, but even if we allow for some distortion, it is interesting. When compared to the Japanese, the Chinese system is very different. There is only a slight overlap, in relation to the unit of farm labour (and even here the Japanese employed quite a large number of servants), and in seeing the parent-child relationship as primary, more important than that of the husband-wife. But again, the tone of the Confucian father-child relation in China seems very different from the parent-child relation in Japan. So we are really in very different worlds. As for comparison with England, again it is totally different. There is not a single case of identity.

This is all slightly puzzling. If there is so much similarity in the family system between 'India' and 'China', what makes the demographic pattern come out rather different. And if there is so much difference between the Japanese and Chinese family systems, why are there some overlaps in the demographic outcome? Here are some puzzles to solve. I would welcome suggestions. One obvious feature to pursue is in

the other areas which affect demography, that is in the realms of law, ideology, social structure, politics and religion. To survey all of these would be beyond the scope of this paper, so let me take a short cut by asking the fundamental question of what the family does in each civilization, in other words a rather functional approach which investigates the role and alternatives to kinship.

The relationship of kinship and hence demography to other spheres.

In most human societies, the basic infrastructure, the institution which organizes the way in which people behave, is provided by kinship. This is true not only of hunter-gatherer and tribal peoples, but also of most peasant societies. We now live in a world where there are large exceptions to this rule. In capitalist societies, it is the economy (and state) which dominates. In socialist societies, it is the state (and economy). In religious societies, whether Islamic or Hindu, it is the religion (and economy and state). By this I mean simply that when a person is deciding who to work with, trade with, trust, support politically, pray with or play with, in the majority of societies, this is largely determined by relations of kinship and marriage. I have lived in such a world in the Nepal Himalayas and read about it in numerous anthropological worlds.

If we ask about the embedding of kinship in our four cases, an ideal type answer in relation to the eighteenth century might be as follows.

<i>Role or function</i>	<i>'India'</i>	<i>'England'</i>	<i>'Japan'</i>	<i>'China'</i>
Providing political order	kin	state	community	kin
Providing legal order	kin	law	community	kin
Providing economic framework	kin	market	mixed	kin
Providing social framework	kin	society	mixed	kin
Providing ritual framework	kin	church	mixed	kin

Of course, this is a gross simplification. Yet, if we look at the pattern and it is roughly right, then again we see some marked differences. There are many other pressures in both 'India' and 'China', for instance in the former case, religious devotions and caste, in the latter, the Confucian social order, the penetration of the state, the importance of local markets and so on. Yet when we boil it down to the simplest level, the infrastructural base, in Marx's sense of what determines the rest, is family and kinship.

This is very different from the situation in Japan, where almost everything is mixed or blended in a different way. The family, particularly the concept of the 'ie' or stem family is very significant. And family-like sentiments are very important. But with the high degree of market and state penetration and proliferation of religious alternatives, it is impossible to argue that blood kinship is at the bottom of Japanese life. The case is even more marked in eighteenth century England, where the nuclear family is, on the whole, not the institution which determines how one acts in terms of power, law, economy, society or ritual. All of these spheres have become largely separated, with the individual, not the kin group, as the place where the institutions meet.

If this is roughly right, then the shape of the demography becomes more comprehensible. In England, to have a large and balanced set of children was pleasant, but ultimately not very important. In Japan it was very important to have an heir, but such a person could be adopted at any point in life and was just a successor. In 'India' and 'China' it was essential to build up the family and to have a reasonable number of sons, in particular, for ritual, social and political reasons. To be without one or two sons was a disaster. As for daughters, they were a liability in both situations and various strategies, such as female infanticide in China, were used to diminish their number. This may be the direction in which to go in explaining some of the odd differences we have noted. Yet behind the table above lies another puzzle. If there is such a difference between India and China on the one hand, and Japan and England on the other, how can one explain this?

Wider reasons for the difference.

That is, of course, another huge story, though it is one to which I have devoted a good deal of my life.³ Basically, and oversimplifying hugely, I would start by placing an emphasis on the fact that both Japan and England were large islands off a sophisticated continent. This shaped their ecology (diminishing famines), their medical history (diminishing epidemics), their political history (diminishing foreign invasions and the temptation to maintain large armies to attack others).

Added to this both Japan and England (as part of a general west European phenomenon) avoided being over-run by the Mongols. Long ago the historian Marc Bloch pointed to a strange similarity between the feudal systems which were maintained in western Europe and Japan, but which either did not exist or were wiped out in the central belts of Eur-Asia.

The general thesis would be that feudal societies, as they change and adapt, encourage a social structure and political system which lays great stress on the 'middling' parts of society, the layer between farm workers and rulers. The English were famous for their gentry and yeomen, the Japanese for their artisans and craftsmen. Both developed a thriving 'civil society', that is set of institutional groupings with some autonomy between the individual and the state. This is what seems to be missing in the Chinese case.

For reasons which would be interesting to explore, the Chinese model, which is very different from the Indian because of the absence of caste, is based on a radical discontinuity between illiterate peasants and a small ruling class of Confucian scholars. There is a ladder between the two via the Confucian educational system, but the middling groups and institutions, the gentry, universities, town governments, trading and productive institutions are relatively weak. There is the State and there is the Individual.

In such a situation, it is very likely that the kinship structure will take on many of the roles which make daily life possible. It will protect the individual in legal and political disputes, organize economic production, underpin ritual life and belief. And this is what happened. In contrast to Japan and England, where there were numerous alternative organizing forces and institutions, almost everything was left to the family,

³ My various attempts to explore these matters are outlined on my web-site, www.alanmacfarlane.com.

which through its extension upwards through the Confucian ideology led up to the pinnacle of the Emperor.

The speculations above relate to the difference between China and Japan. But what of the differences between China and 'India' in terms of demography, if not of family system? Here one can point to a core difference. In China and Japan, despite large cities and often crowded countryside, the mortality was relatively low. In particular, infants and children did not die at the rate one finds in many pre-industrial peasant societies. The consequence of this was that if all children were allowed to live, there would be rapid population growth and families would find that their holdings would have to be divided and sub-divided. The strategy in both cases was to practice the only form of effective post-conception birth control available, abortion and infanticide.

In the Japanese case there was no real sex preference and the pressure was lessened by the fact that the period of exposure to intercourse was limited; women married moderately late (in the early twenties) and seem to have stopped intercourse in their early thirties.⁴ In China the situation was more critical because women tended to marry very young and, as far as I know, continued to become pregnant until their late thirties. This meant that they could easily have ten livebirths, as opposed to the Japanese five or six. With a strong sex preference for boys, there was, according to Lee and his collaborators, high rates of female infanticide to deal with this problem.

But this takes us to another question. Why was mortality so relatively low in China and Japan? We would expect that disease, especially endemic water-borne diseases such as infant diarrhoea, would be very high levels. We know that this was not the case in Japan and it seems not to be the case in China. This is one of the great differences between these two cases and 'India'.

As far as I know, no-one has put forward an explanation. Iris Macfarlane and I hope to do so in a forthcoming work where we suggest that universal tea drinking in these two countries, leading to the boiling of the water and the presence of anti-bacterial substances in the tea phenolics, may be the principal reason for the surprisingly low mortality rate.⁵ Tea drinking may also reduce the incidence of a number of other diseases, including cancers, strokes, heart attacks and possibly influenza, malaria and even bubonic plague. Whatever the reason, what is certain is that it was the relatively low perennial mortality rate which Malthus missed and which makes the Chinese and Japanese situation so unusual.

All this is speculation, the attempt of someone who knows something about the other three cases, 'India', 'Japan' and 'England' to make sense of the Chinese one. It has ended up at a very abstract and general level. I would like to change now and return to another problem and another level. If, as argued above, we will only understand demographic and family patterns if we set them in their economic, political, legal and religious context, how are we to do this? What evidence have we available?

⁴ This odd pattern is described in Macfarlane, *Savage Wars*, pp. .

⁵ This will be discussed in Alan and Iris Macfarlane, *Green Gold; The Empire of Tea* (to be published in 2003)

The quality and quantity of historical evidence: the case of Earls Colne

Recent work by Akira Hayami and his students in Japan have revealed what excellent sources there are from at least the seventeenth century in Japan.⁶ I know too little about Chinese historical sources to know how they compare. But it might be useful to give a brief description of something against which future findings could be compared at a local level.

Over the last thirty years, Sarah Harrison and I, in collaboration with a number of colleagues, have been engaged in the reconstruction of the history of an English parish, Earls Colne in the county of Essex. It had a circumference of some ten miles and a total area of just under 3000 acres. Its population fluctuated between 500 and 1500 over the nearly five hundred year period, from 1380 to 1854 during which we have studied it. It is thus a tiny microcosm of England from the medieval period to the middle of the nineteenth century.

What we have done is to assemble all the records for this parish, the extensive manorial court rolls and surveys which cover landholding, the court records from the local court of the village (leet), through the county level courts up to the national courts. These include the legal records of the manor, church and state. We have gathered all the wills, in which people leave property. There are the parish registers which from the middle of the sixteenth century register baptisms, marriages and funerals. There are special records such as a very detailed late sixteenth century map, and the diary of an inhabitant (the local vicar Ralph Josselin) whose family life I have written a book about.⁷

These records constitute many thousands of pages of documentation. We have linked and organized them so that it is possible to follow the histories of individual lives or of specific pieces of land. The whole of the database and all the place and person indexes have been put on a web site and is available anywhere in the world.⁸ For those who wish to work off-line, there is a DVD version of the web-site also available. This work has only been completed in the last few weeks and it is a pleasure to announce its arrival for the first time on a public platform not in England, but in China. What it means is that any student or teacher in China can compare his own records with those of another civilization. The site also contains a detailed description of the legal and administrative framework which generated the records.

This is not the place to analyse the records in detail. All that can be said is that having worked on both the records and the record-creating institutions over many years, and compared them with thirty years of work in a Himalayan village and some serious work on Japanese historical demography, I see huge differences, as well as some striking similarities. The elaborate and complex legal system which covered Earls Colne, the highly sophisticated market economy, the high geographical mobility, the weakness of extended kinship, all are shown in the records. Furthermore,

⁶ Akira Hayami, *The Historical Demography of Pre-modern Japan* (Univ. of Tokyo Press, 1997)

⁷ Alan Macfarlane, *Family Life*; also *Brit. Acad. Diary of R.J.*

⁸ At present the site can be found off either the Department of Social Anthropology site at Cambridge University, or off that of Alan Macfarlane. It will soon have a URL off the University Library at Cambridge.

there is no dramatic and revolutionary break in the history of the parish. There is no sign of a great change from a 'peasant' medieval society to a 'capitalist' modern one.

Nor is there any evidence of political dislocation on a large scale. If one imagines having such records for a Chinese village from the year 1380 to 1880 one can see the contrast. The periodic destruction and insecurity of the Mongol, Manchu and other invasions, and of smaller rebellions and disasters is absent. Even during the two periods of Civil War, the Wars of the Roses in the fifteenth century and the English Civil War, the damage and change in Earls Colne was quite minor.

The fact that many of the houses one can see in Earls Colne (and can be seen on the web-site) in the year 2002 contain quite large parts of the houses which were there in 1400 or 1500 is an indication of the continuity. It is also an indication of the wealth of the 'middling sort' at this early date. Some of the trees in the parish were planted during the Roman occupation, more than fifteen hundred years ago. One wonders how many Chinese (or Japanese) villages there are where in a population of one thousand, there would be fifty or more substantial houses which date back both in their structure and in much of their fabric, over five hundred years. This is not just a matter of stronger building materials. The houses witness a very different political history and social structure in action.

Anyway, what I wanted to draw attention to was the presence of this unique set of materials which will allow Chinese and Japanese students, as well as those from around the world, to examine in minute detail the history of England from the inside, house by house, field by field, and person by person. They can compare this to their own experience.

Conclusion: what light does all this throw on the 'Great Divergence' thesis?

As some of you will be aware, there is currently a large debate under way as to how and when the 'west' diverged from the 'east'. The older idea of Max Weber and others that the divergence began many centuries ago has recently been fiercely challenged by a number of writers, including J.M. Blaut, Jack Goody, Andre Gunder Frank and Kenneth Pomerantz.⁹ They have basically argued that rather than the 'divergence' of civilizations being very old, it really only occurred after about 1800. This is a refreshing attack on the arrogance of some writers and a useful corrective. Yet there is a danger that in the zeal to re-establish the eminence and opulence of China right up to the end of the eighteenth century real differences of a much longer standing will be obscured.

Taking perhaps the most thorough and convincing of these works, that of Pomerantz, we can well agree that in terms of economic output and efficient land use, China was certainly on a level with most of Europe until the early nineteenth century. Yet Pomerantz is mainly concerned with economics and pays hardly any attention to social structure or politics. The brief remarks above throw some light on this area. If the comparisons above are even roughly right, then it is clear that while there are some similarities, the general pattern of Chinese demography and family system is rather different both from that of Japan and also from England. It is true that it does

⁹ J.M. Blaut, *The Colonizer's Model of the World* (1993); Jack Goody, *The East in the West* (1996); Andre Gunder Frank, *ReOrient* (1998); Kenneth Pomerantz, *The Great Divergence* (2000).

not fall into the Malthusian 'crisis' pattern, but nor is it like the English homeostatic case. It seems rather over-simple to suggest that a civilization whose marriage and kinship structure is so very different from that of much of north western Europe for so many centuries, was only 'diverging' a couple of hundred years ago.

So while it is useful to re-think these things, and it will be fascinating to expand the comparisons further, as yet I am unconvinced by the revisionist argument. I am unpersuaded not only in relation to social structure as discussed above, but in relation to many other parts of the civilization not addressed here. We just have to compare Chinese art, music, food, politics, law, language, cities, religion and ritual, and knowledge systems to that in, say, England over the period 1200-1800, to wonder how anyone could seriously see these civilizations as only diverging in 1800. A civilization based on bamboo, paper, rice and intense human labour is one thing; a civilization based on glass, wheat and intensive use of animals is another. It is very strange that anyone should think otherwise. But then, no doubt, my own views would seem strange to the new anti-Occidental school.

(4200 words)