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Atlas of World Population History

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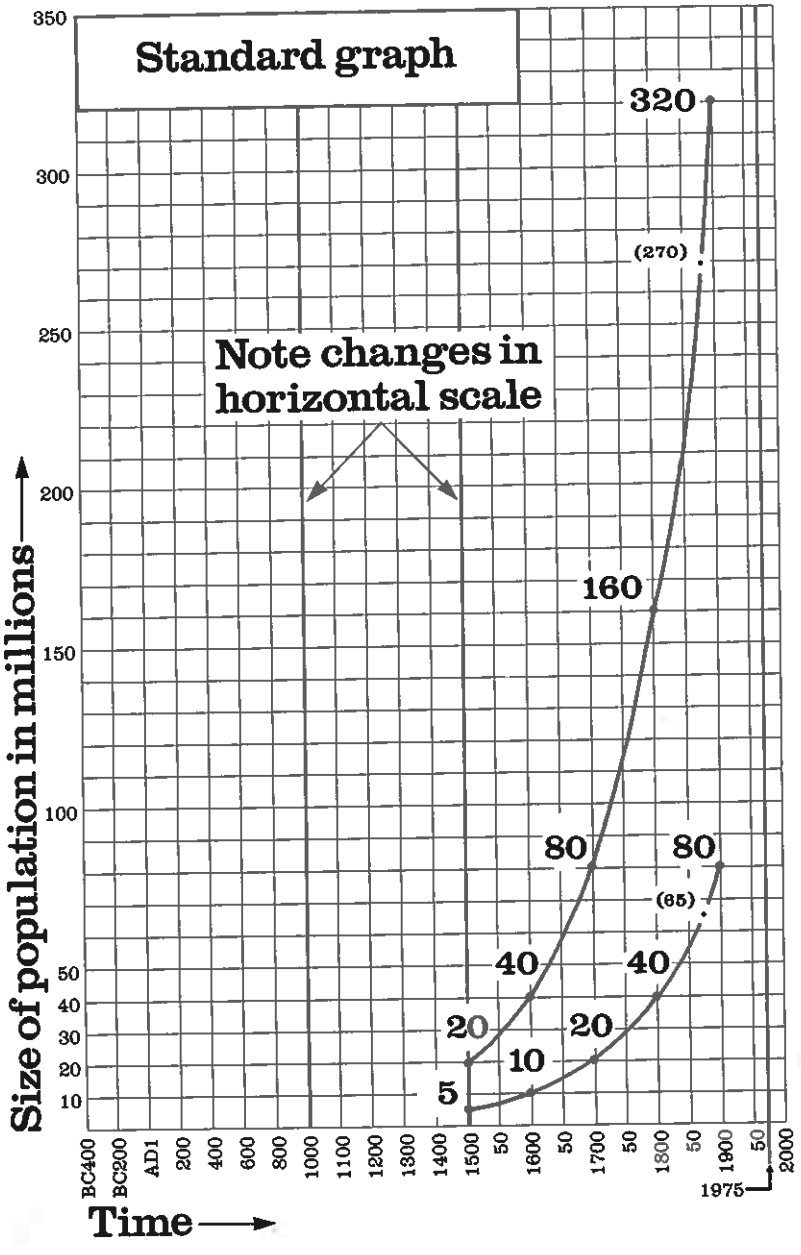


Introduction

The aim of this book is to provide figures for the population of each country in the world at regular intervals through historical time. By countries we mean the nations of the present day, their areas defined by the frontiers of 1975. Throughout the book 'now' 'at present' and 'today' mean as of 1975.

The primary method of display is by graph. Every graph has the same horizontal axis, a time base that runs from 400 BC to AD 2000. There are two changes in this scale, one at AD 1000 and one at AD 1500. The vertical scales are varied from graph to graph in order to accommodate populations of different sizes.

The qualities of this type of graph are fairly obvious: the main deficiency is that there is no reliable visual clue to changes in the rate of increase of a population. Both the populations plotted in the graph opposite increase at the same rate from 1500 to 1800 – as the figures show, they double every century – but because one starts off at four times the size it appears to be increasing faster.

The numbers labelling the population curves give the size of their population in millions, i.e. 160 means 160,000,000. Numbers standing alone correspond to the solid circles on the population curve and to dates on the horizontal scale. When figures for 1875 and 1925 are given, as they usually are, they are in brackets: the two populations in the graph, for example, are shown as having populations of 270 million and 65 million in 1875.

All figures are rounded on the following system: below one million to the nearest 0·1 million, between one and 10 millions to the nearest 0·25 million, between 10 and 20 millions to the nearest 0·5 million and between 20 and 100 millions to the nearest million. Above 100 million the rounding is to the nearest 5 million, above a billion (the word is used in the American sense of 10^9) to the nearest 25 million.

Figures below 0·1 million are not graphed at all.

Accompanying each graph is a commentary which attempts to put some flesh on these bones. Figures are again in millions, ten million being written as 10m and a hundred thousand as 0·1m. There is no discussion in the commentary of the sources for the figures quoted and – because it is

tedious to read prose that contains too many words like 'around', 'about', 'maybe', 'perhaps', 'could be', and 'might' – little indication of their reliability. At the end of each commentary is a paragraph headed 'Primary Sources' which gives a guide to the primary sources – where they exist. A second paragraph headed 'Bibliography' gives the most important secondary sources. In the case of works that are referred to only once the reference is given in full: where the book or article referred to appears in several of the bibliographical paragraphs the author's name is marked with an asterisk and the full reference is to be found in the General Bibliography at the back of the book.

In some instances the populations of past kingdoms and empires are given on supplementary graphs: a short explanatory paragraph usually accompanies these. Their location is not always obvious: the Kingdom of France and the Napoleonic Empire will be found under 'Europe Area 3 France' but the Roman Empire is discussed and illustrated in 'Europe: Overview', and the peak figure for the British Empire is on a graph which compares the Chinese Empire with other top-ranking empires. The only sure way to find these historical asides is to use the index.

It has already been made obvious that the organization of the book is geographical. The five main sections cover the continents: Europe, Asia, Africa, the Americas and Oceania. For each continent there is a general account labelled 'Overview'. Then there is an area by area survey of the continent with sub-division into countries. This means that there are huge redundancies in the text. This has to be if each commentary is to stand on its own, and it seems to us necessary that it should.

For this is essentially a reference book. It ought to be possible for an enthusiast to read through the Overviews in a few sittings, but no one is going to be able to read more than a few of the area surveys without boggling his mind. One at a time is the way to take them.

Even cautious users may well find this a boring book; academics are certain to find it irritating as well. There are many countries whose populations are not known with any certainty today. When we start giving figures for the dim and distant past, better-qualified hackles than ours are going to rise.

We obviously feel the book worthwhile or we wouldn't have written it. We have also become confident as the work has progressed that there is something more to statements about the size of classical and early medieval populations than simple speculation. The upper and lower limits imposed by common sense are often much closer together than might be thought. In fact, when all the various fuzzy approaches have been made, one is usually left with an answer that is fairly certain within an order of magnitude. History is a progressive study in that it does accumulate data. We are beginning to get a good idea of the scale of society in classical times, of the densities at which nomadic peoples lived and of the scope of neolithic agriculture or medieval industry.

So even when there are no data that can be used to calculate a population figure we are far from helpless. There are always guidelines. For example, the fact that population doubled in most European countries between AD 1000 and 1300 can be taken as strong evidence for it doing so in other European countries for which direct evidence is lacking. Indeed, the family of curves in this book constitute a sort of null hypothesis in themselves. Consistency, of course, provides comfort rather than proof and we wouldn't attempt to disguise the hypothetical nature of our treatment of the earlier periods. But we haven't just pulled figures out of the sky.

Well, not often.

NOTE TO THE AMERICAN EDITION

Population and area figures in this volume follow the European style of notation. Thus, 3·0m means 3.0 million. 6.76m km^2 means 6.76 million square kilometers, or 2.61 million square miles following the standard equivalence of 2.59 square kilometers per square mile.

The Beginning

The first hominids appeared in Africa around 5 million years ago. The main difference between them and their predecessors, the apes, lay in the fact that they walked on two legs, for though apes can stand up if they have to, they normally get about on all fours. The hominids by contrast never used their hands for weight-bearing. Being reasonably intelligent they soon found other jobs for these free hands, a process of discovery that eventually culminated in tool-making, the distinctive activity of man. (It seems to be no good having free hands unless you're as intelligent as an ape. Bipedal animals lower down the vertebrate scale, like Tyrannosaurus and the kangaroo, simply let their arms atrophy.)

The acquisition of programmes for the hominids' new repertoire of activities appears in the evolutionary record as an increase in brain size. After 2 million years the cranial capacity had increased by 50% – from the 600 cc of the first hominid, *Australopithecus*, which is little more than the 500 cc of the gorilla, to the 900 cc of the primitive man named *Homo erectus* (*Pithecanthropus*). The final increase to *Homo sapiens'* current average of 1,450 cc appears to have taken place about 100,000 years ago.

The great apes of today are not very numerous. The gorilla population has been estimated as about 70,000 on the basis of their known range and field work suggesting an average density of one per km^2. The smaller chimpanzee lives at rather higher densities than this, say three or four to the km^2. As the chimpanzee has a range near ten times that of the gorilla, the total number of chimpanzees is probably well over the million mark. These numbers can be taken as upper and lower limits for the Australopithecine population of two or three million years ago with the betting on the lower end of the range. (For ape densities see George Schaller, *The Year of the Gorilla 1965*, pp. 104, 200.)

The appearance of the first man, *Homo erectus*, coincides with a great extension of geographical range. Whereas *Australopithecus* had been confined, so far as we know, to Africa, remains of *Homo erectus* have been found from Europe to Indonesia. As it is unlikely that he had invented the clothing and other cold-weather techniques necessary for living in the Arctic (if he had, he would have discovered the Bering Straits and America) we can estimate his total range as the Old World south of

latitude 50° north, minus Australia. This is roughly 68m km². If a quarter of this range was actually habitable and we take a figure for density of 1 per 10 km², we get a population estimate for *Homo erectus* of 1·7 million.

Why the figure of 1 per 10 km² when the gorilla, an animal of roughly comparable size to *Homo erectus*, lives at densities ten times greater than this? The reason is that as the hominids evolved they moved along what ecologists call the 'food chain'. All biological energy ultimately derives from the photosynthetic processes of plants: these are consumed by herbivorous animals who are preyed on by carnivores. As each digestion and re-synthesis has an efficiency of only a few per cent, a move from herbivore to carnivore status necessarily involves a decline in population per unit area.

Gorillas are pure herbivores; their days are spent literally munching their way through the forest. Primitive man always retained some vegetable element in his diet and often the vegetable element dominated. But when opportunity offered, man was at least a 50% carnivore. He had shifted along the food chain: he could not even digest the most abundant vegetable foods such as grasses and leaves, and as a result his density must have been an order of magnitude lower than that of the gorilla.

This is a theoretical argument, but the densities it suggests – 1 per 10 km² of habitable terrain, 2 or 3 per 100 km of total area – are supported by the figures for human populations that have continued to live at a palaeolithic level in modern times, most particularly the aborigine population of Australia.

We do not need to alter either our density estimate or our figures for total population when *Homo erectus* yields to *Homo sapiens*. Perhaps we ought to bring the population figure down a bit after 75,000 BC, when the last Ice Age began and Arctic conditions clamped down on what had previously been a comfortable part of man's habitat. But *Homo sapiens* eventually learned to do what *Homo erectus* never had: to live and love in a cold climate. This had important results, for when the ice retreated bands of hunters followed the herds of mammoths right into the Arctic Circle. There they discovered the land bridge that existed in the Bering Strait region at certain periods during the Ice Age. Perhaps as early as 25,000 BC, perhaps not until 10,000 BC, these hunters penetrated into North America: certainly they spread across both Americas within a few centuries of the second date. And well before this other pioneers had completed the journey along the Indonesian archipelago to Australia.

The extension of mankind into northern latitudes and to the Americas and Australia effectively doubled his territory. What with better weather as well, the population in 10,000 BC was probably rather more than double what it had been in 100,000 BC. So, as the ice caps finally melted away, the human population must have been approaching the 4 million mark. This

was good progress, but the gain had been achieved almost entirely by extension of range and the limit of this process had now been reached. Further advance would only be achieved via higher densities.

The way in which this was done was by shifting back along the food chain: man discovered that, although there were only a few plants that he could eat, he could get enough of them together to see him through the year if he planted them out himself. This is the essential element in the change in the life styles that has been variously named the 'neolithic revolution' – because anthropologists use it to divide the palaeolithic (Old Stone Age) from the neolithic (New Stone Age) – and the 'agricultural revolution' – because with the appearance of this food-*producing* activity the food-*gathering* activities that had previously been man's only means of subsistence became obsolete. The where and how of the agricultural revolution are still hotly debated. Multicentric theories are gaining ground at the expense of the old idea of a single originating focus in the Near East. However, we can step aside from this issue at least temporarily, for now we discard our global viewpoint and begin a continent by continent and area by area survey of the planet.

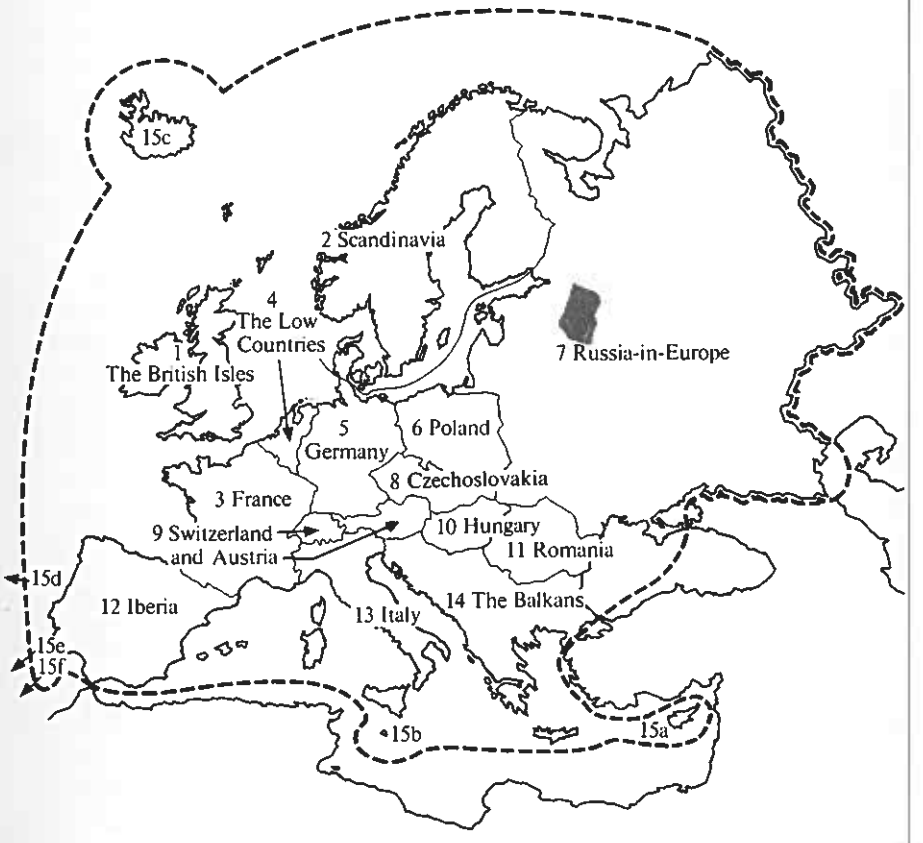
Fig. 1.1 *Europe, subdivision into areas*

1 THE BRITISH ISLES
1a England and Wales
1b Scotland
1c Ireland
2 SCANDINAVIA
2a Denmark
2b Sweden
2c Norway
2d Finland
3 FRANCE
4 THE LOW COUNTRIES
4a Belgium and Luxembourg
4b The Netherlands
5 GERMANY
6 POLAND
7 RUSSIA-IN-EUROPE
8 CZECHOSLOVAKIA
9 SWITZERLAND AND AUSTRIA
9a Switzerland
9b Austria
10 HUNGARY
11 ROMANIA
12 IBERIA
12a Spain
12b Portugal
13 ITALY
14 THE BALKANS
14a Yugoslavia
14b Albania
14c Greece
14d Bulgaria
14e Turkey-in-Europe

The following islands are grouped under the heading Area 15

15a Cyprus
15b Malta
15c Iceland
15d The Azores
15e Madeira
15f The Canaries

Part One
Europe



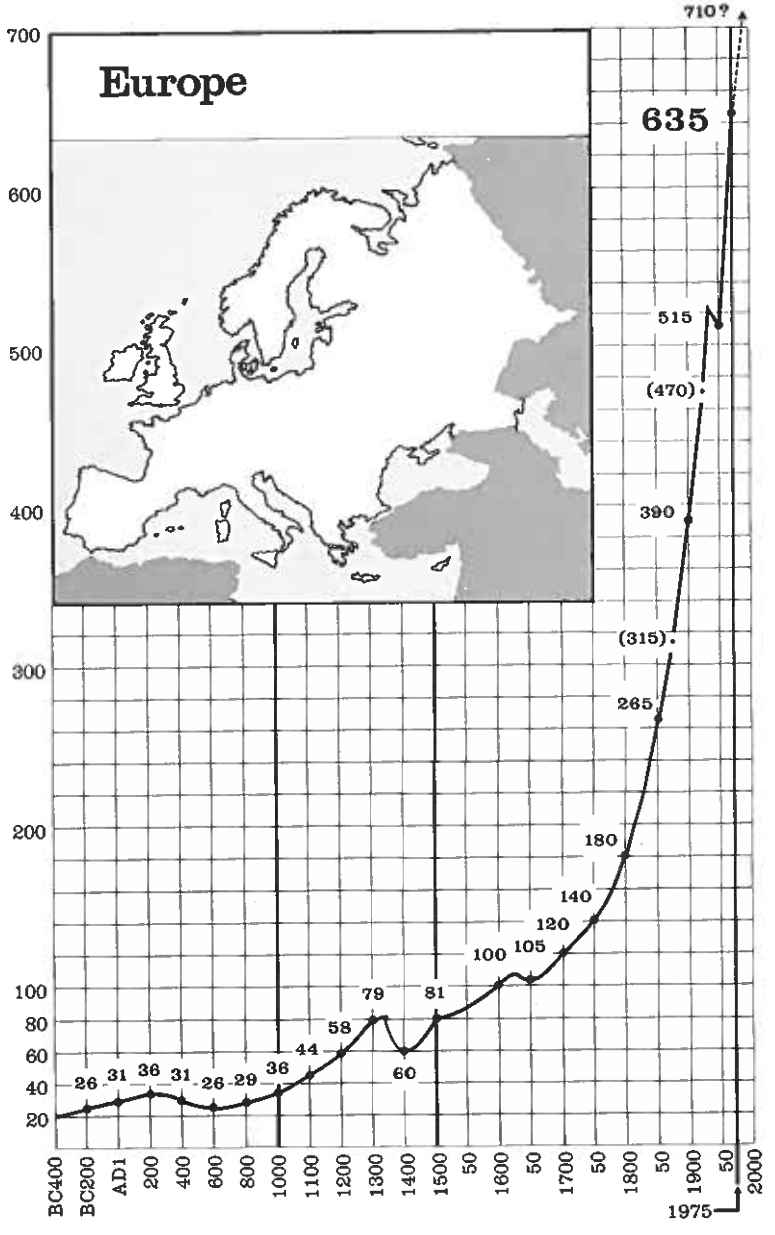


Fig 1.2 *Europe continental total*

EUROPE: OVERVIEW

9·6m km²
(excluding the islands of Area 15)

The first Europeans, the hunters of the Old Stone Age, never amounted to more than 100,000 at the best of times; at the worst – specifically during the cold phases of the last Ice Age – there were considerably fewer than that. The ending of the Ice Age offered the chance of escape from this depressing pattern: during the better weather of the following mesolithic period (10th–6th millennia BC) numbers rose past the previous best, finally inching up to the quarter million mark. Then came the great leap forward, the neolithic revolution of the 5th millennium. This carried the total over the million. It also created the first important distinction between styles of settlement, for, whereas the food-gatherers of the Old Stone Age had rarely achieved densities as high as 0·1 per km², the New Stone Age food-producers ordinarily lived at densities of 1 per km². By the time these agriculturalists had completed their colonization of southern and western Europe – say by 3000 BC – the continent's population was more than 2m.

During the next millennium the various developments which together raised society into the Bronze Age began to infiltrate Europe from the Near East. The entry point was Greece, the transmission was by sea and the end result was not only another increase in numbers but another change in the pattern of distribution. The increase in numbers was steady, if slow by modern standards: by 2000 BC the European total had reached 5m, by 1000 BC 10m. The change in distribution was due to the Mediterranean countries' disproportionately large share in the increase. Their greater prosperity was probably a reflection of the fact that the agricultural improvements of the era had been developed in the Near East and worked best where the climate was most similar, but there will also have been a reinforcing effect from the development of the Mediterranean as a natural highway. Whatever the cause, by the end of the Bronze Age in 1000 BC, the density of population was higher than the European average by a factor of 3 in Greece and more than 2 in Italy (Fig. 1.3). This is the demographic background to the emergence of classical society.

Greece set the pace. Between 1000 BC and 400 BC the population of Europe doubled, increasing from 10m to 20m: in the same period the population of Greece tripled, reaching a final total of 3m. This was an amazing figure for the era. It goes a long way towards explaining why

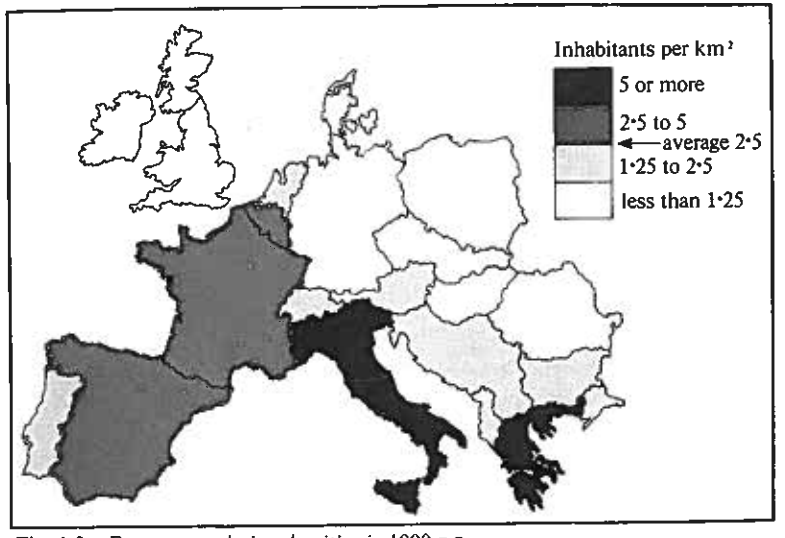


Fig. 1.3 *Europe, population densities in* 1000 BC

In the north of Europe there are vast tracts of land that have never been significantly populated. This makes density figures for Norway, Sweden, Finland and Russia-in-Europe meaningless and they are left out of this map and the other maps like it. Averages are for the area shown, which amounts to 3·7m km²

Greece – so tiny on the map – was able to rebuff, counter-attack and finally, under the leadership of Alexander the Great, conquer the far larger Persian Empire: it had the manpower. It also had the problems that go with population densities at the Malthusian limit: pointless squabbling at home punctuated by lemming-like rushes abroad. Alexander's success in conquering Asia Minor resolved the situation. The population of the homeland had already stopped growing: now, as the pull of privileged opportunity abroad was added to the push of overcrowding at home, it actually began to fall. Between 300 BC and AD 1 numbers dropped from 3m to 2m: the density of settlement fell from more than 4 times the European average to less than twice.

Even as Alexander set out for the east the focus of interest in Europe was shifting west, to Italy. This was the boom country of the years immediately before and after 300 BC and the beneficiary of the boom was the city at the centre of it, Rome. In conquering the peninsula and its 4m people Rome created a political unit that completely outclassed all others in Europe. The immediate consequence was war with the only other major power in the west Mediterranean, Carthage: the end result was the Roman Empire,

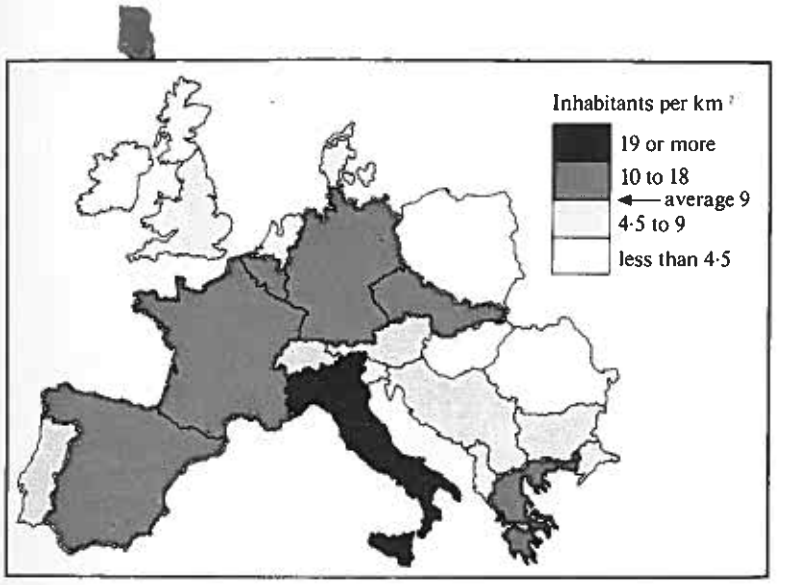


Fig. 1.4 *Europe, population densities in* AD 200

which eventually expanded to include the entire Mediterranean basin. Success fed on itself: as the tribute of four dozen provinces flowed into the metropolitan area, Italian population densities rose past the best Greek figures. By AD 1 there were 7m people in Italy and this at a time when all Europe only contained 31m.

The Roman Empire prospered until AD 200, by which time it had some 46m subjects, including 28m of the 36m people in Europe (Fig. 1.5). This was the high spot. It was followed by a slump which got steadily worse over the next four centuries. Numbers followed the economy down, with the European total dropping to 26m by AD 600 – 25% less than the AD 200 peak. The decline was general, which at first sight suggests that it could have been caused by a deterioration in the climate. This is not really a very likely explanation. It is clear that the drop in population was greater in the Mediterranean countries than in the north of Europe, which is the opposite of what one would expect to happen if the weather got colder. It looks very much as though classical society had simply over-expanded and that the retreat was a reaction to this. Whatever the cause the new trend had dramatic results. The Roman Empire declined and fell, classical civilization

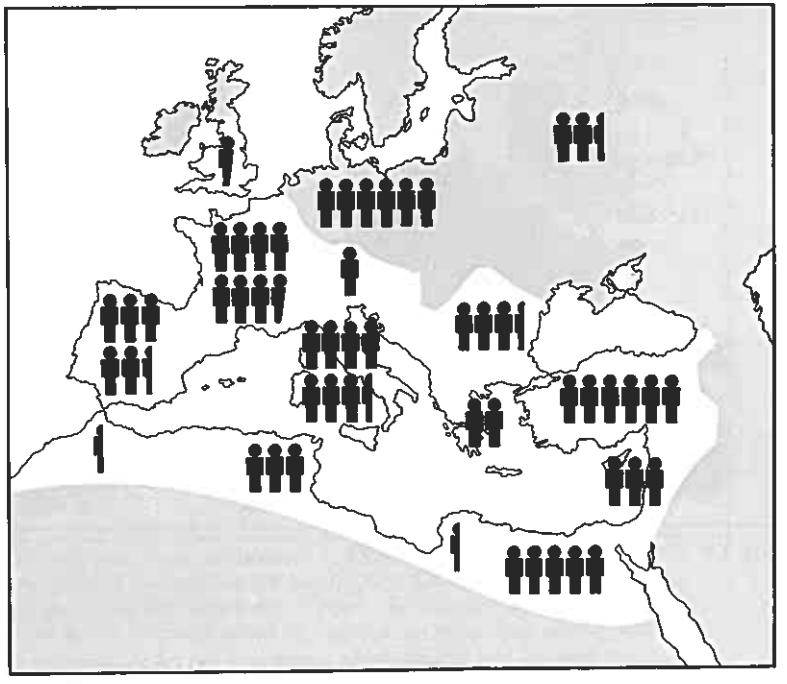


Fig. 1.5 *Population of the Roman Empire and of the parts of Europe outside the Empire in* AD 200. *Each symbol represents 1m people*

crumbled away and in its place a new society began to form, the feudal society of the medieval period.

*

Europe began to find its new style – and put on some demographic weight again – in the 8th century. From the Dark Age nadir of 26m the population rose to reach 30m by the opening years of the 9th century and 36m – equal to the best level achieved in the classical period – by the year 1000. From there it moved on up and as it did so its rate of increase accelerated. In the 11th century numbers increased by rather more than a fifth, in the 12th by more than a quarter and in the 13th – the peak century of the medieval cycle – by more than a third. The total at the beginning of the 14th century was an unprecedented 80m.

This population was very differently distributed from the population of classical times. The axis of the classical world had been Mediterranean,

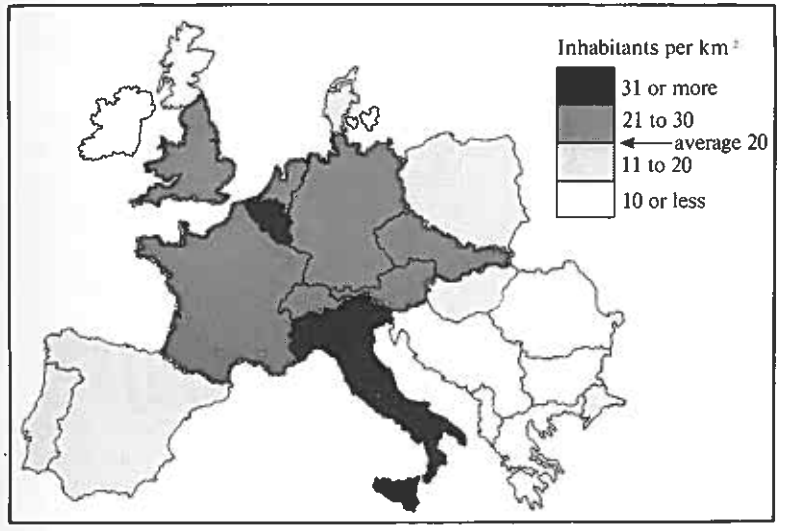


Fig. 1.6 *Europe, population densities in* AD 1300

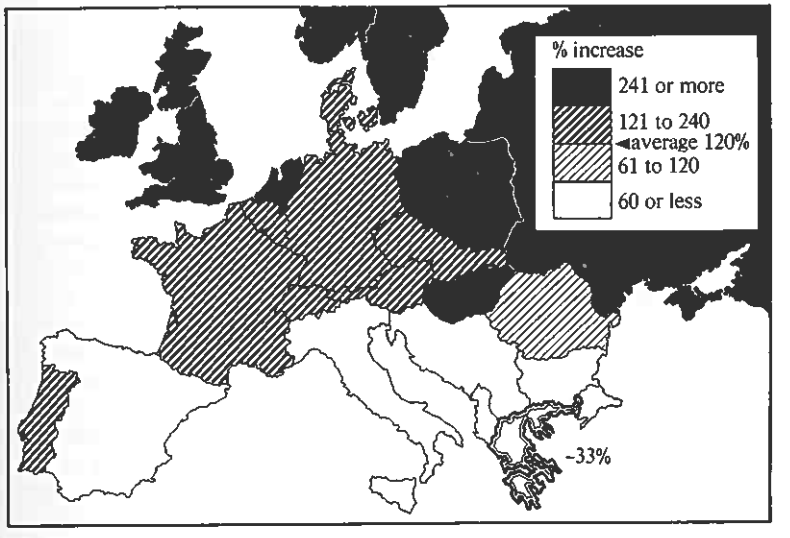


Fig. 1.7 *Europe, percentage changes in population* AD 200–1300

lying along a line joining Greece and Italy. The axis of the new Europe was continental: the major powers were grouped either side of a line joining Italy and Belgium (Fig. 1.6). The Balkans in general and Greece in particular were of little account.

It is clear that the peoples of North-West Europe had been multiplying faster than the peoples of the Mediterranean. So had the peoples of East Europe, though because densities there remained very low this is not apparent on the density map. Fig. 1.7, which shows the percentage increases since the classical period, makes it obvious. The average for the Mediterranean region (see Fig. 1.10 for the definition) works out at only 36%. For the North-West the comparative figure is 185%, for the East no less than 285%. If these differential rates of growth had been maintained for another century or two Mediterranean Europe would have paled into insignificance.

The growth rates were not maintained. A rural society can keep growing only if it brings more land into use or works the land it has better. By 1300 Europe was unable to do either. Its technology was improving too slowly to be of any help in the short run: all the land had its quota of people and more. The consequences became apparent early in the 14th century. The price of food rose, the nutritive state of the population deteriorated, mortality increased, the excess of births disappeared and the population graph, whose trend had been so strongly upward for the previous 500 years, suddenly levelled off. It was not a happy state of affairs – the halt had been imposed by sheer wretchedness – but it was happier than the next act.

In 1347 bubonic plague (causative organism *Pasteurella pestis*) broke out in the Crimea. It had been brought from Mongolia, where it was endemic, by one of the caravans that travelled the ancient silk route and it was now to strike a European population that had little resistance to any disease and almost none at all to *Pasteurella pestis*. For if Europe had suffered onslaughts of bubonic plague before, there had certainly been none for a long time, and the lack of selective pressure over the intervening centuries had left the population genetically defenceless. The result was the experience that the chroniclers of the time called 'The Great Dying' and which historians today refer to as the Black Death.

Plague is a disease that affects rodents, fleas and men. The ships of the Middle Ages which brimmed with all three were ideal agents for transmission, and the spread of plague from Kaffa, the European terminus of the silk route, to the major ports of the Mediterranean was a matter of only a few months. Overland its progress was slower, but France, with one of the worst cases of rural overpopulation in Europe, provided a bridge between the Mediterranean and the North Sea. By 1348 the disease was raging on both sides of the English Channel. From there it spread through the British Isles and Scandinavia to the east coast of the Baltic. In the end it reached

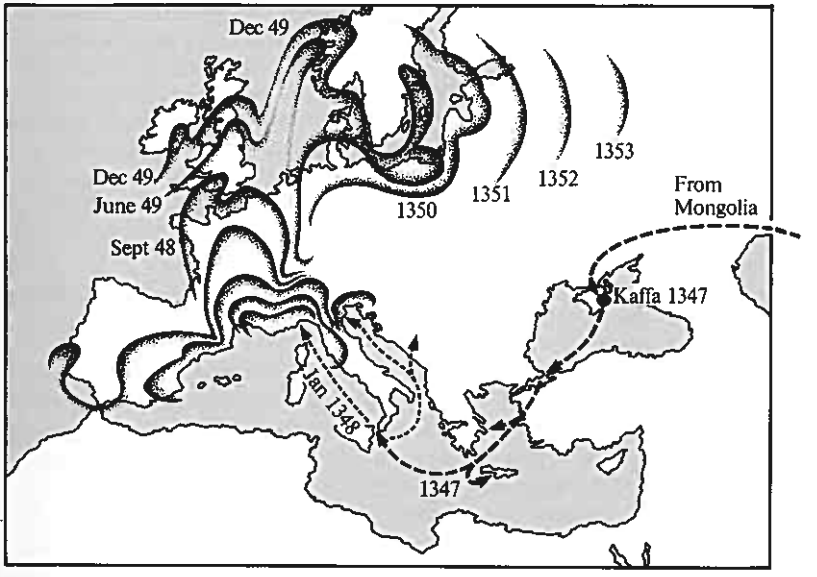


Fig. 1.8 *The spread of the Black Death in Europe* 1347–53. *On land the plague spread most readily in densely populated areas. Conversely, the low-density zone of the Balkans and southern Russia acted like a fire-break, confining the disease to the shores of the Black Sea and Aegean. Though the plague eventually got to Moscow it did so via the Mediterranean, France, the North Sea and the Baltic, not by the direct route up the Volga*

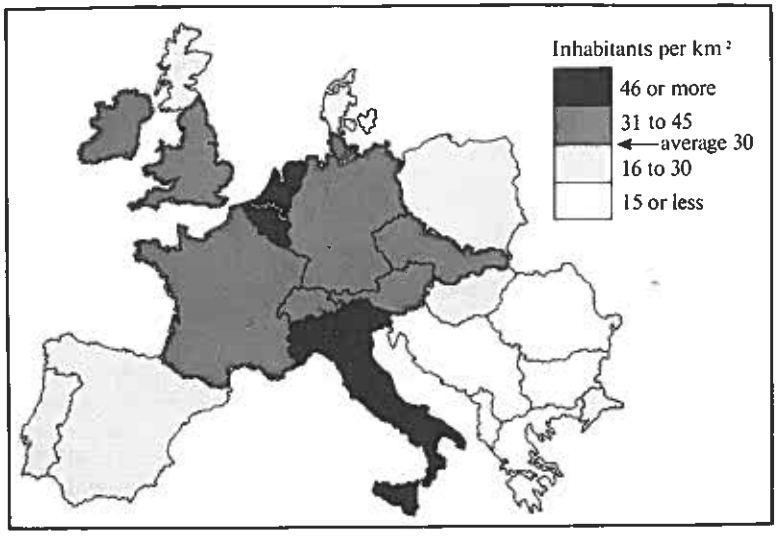
into every corner of Europe, though its progress was slower and less murderous in the thinly populated lands in the east and south-east of the continent (Fig. 1.8).

Between a quarter and a third of the population of Europe died in the epidemic of 1347–53. This relieved the population pressure and released the survivors from the Malthusian factors that had been preventing growth during the early 14th century. But though recovery was brisk, renewed epidemics – probably of other diseases as often as plague – kept scything away the increase. By 1400 the population of Europe was more than 25% below its early medieval peak – the total being nearer 60m than 80m – and it was only at this point that the graph steadied again. In many countries the fall was even more catastrophic than these figures imply, for the more densely populated areas, such as Italy, France, England and the Low Countries, had suffered a loss of nearer 33% than 25%. Correspondingly the sparsely populated lands east of the Vistula suffered only minor losses, soon recouped.

The 15th century saw recovery become general throughout Europe: by its end totals were back to the 1300 level in nearly every area. And from 80m in 1500 there was sustained growth to around 100m in 1600 and – after a hiccough in the years 1620–50, of which more later – 120m in 1700. This rise was more firmly founded than the medieval population boom. The economy, thanks to an improving technology and to the extra dimension added by the discovery of the sea routes to Asia and America, was stronger, more productive and more resilient. Moreover, at least some of the hands that were surplus to the requirements of the countryside found useful employment in the rapidly growing towns. It was a period of metamorphosis: Europe was becoming capitalist and imperialist, increasingly intent on winning more wealth and ready to search the rest of the world to find it.

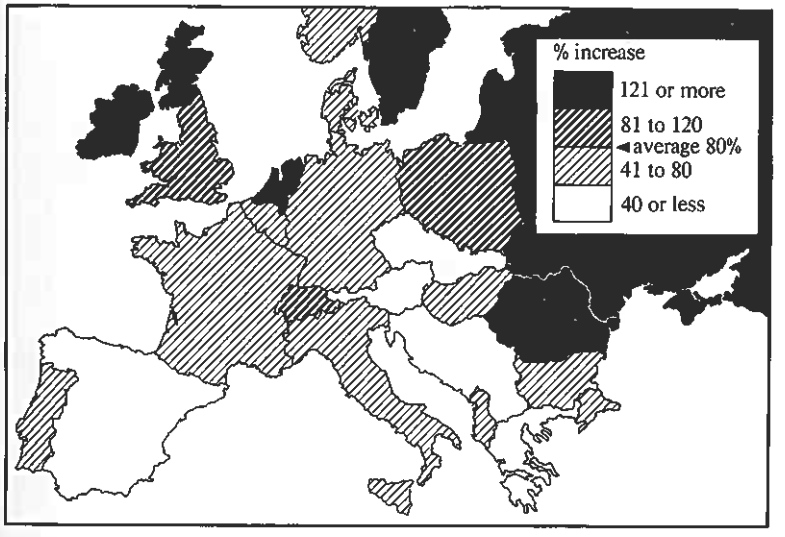
In the medieval era there was a rough balance between the Mediterranean trading community headed by Italy, and the Atlantic community headed by the Low Countries. This balance was destroyed during the crisis of the first half of the 17th century. The crisis was a general one: it included Europe's worst war for centuries, the Thirty Years War of 1618–48, some very bad outbreaks of plague and a monetary upheaval that had been working up since bullion imports from the New World reached significant levels in the 1550s. Every country in Europe suffered both economically and demographically. The result is the notch in the population graph at 1625–50 (Fig. 1.2). What sorted the winners from the losers was the recovery phase. In Italy this was so feeble that it can almost be said not to have happened at all: the country was permanently demoted from its position as a market leader. By contrast the Low Countries, the British Isles and France moved on to new levels of prosperity: their goods began to dominate sales throughout Europe.

Fig 1.9a *Europe, population densities in* 1750



The subsequent population picture is interesting. At first sight there is little difference between the early modern pattern (Fig. 1.9a) and the medieval one (Fig. 1.6). Allowing for the increase in mean density from 20 per km² in 1300 to 30 per km² in 1750 the grouping is almost identical. Holland moves up to the top rank, Ireland to the second and Scotland to the third and that is all. However these changes do add up to a consistent trend, a shift northward along the Italy-to-Belgium axis. The point is well made in the map showing the percentage increases achieved by each country between 1300 (the medieval peak) and 1750 (Fig. 1.9b). This also shows the continuing high growth in the East, which finally enabled this region to overtake the relatively slow-growing Mediterranean community (Fig. 1.10). In fact the Russian Empire was now poised to push the Kingdom of France from its traditional position as the most populous state in Europe.

Fig. 1.9b *Europe, percentage changes in population* 1300–1750



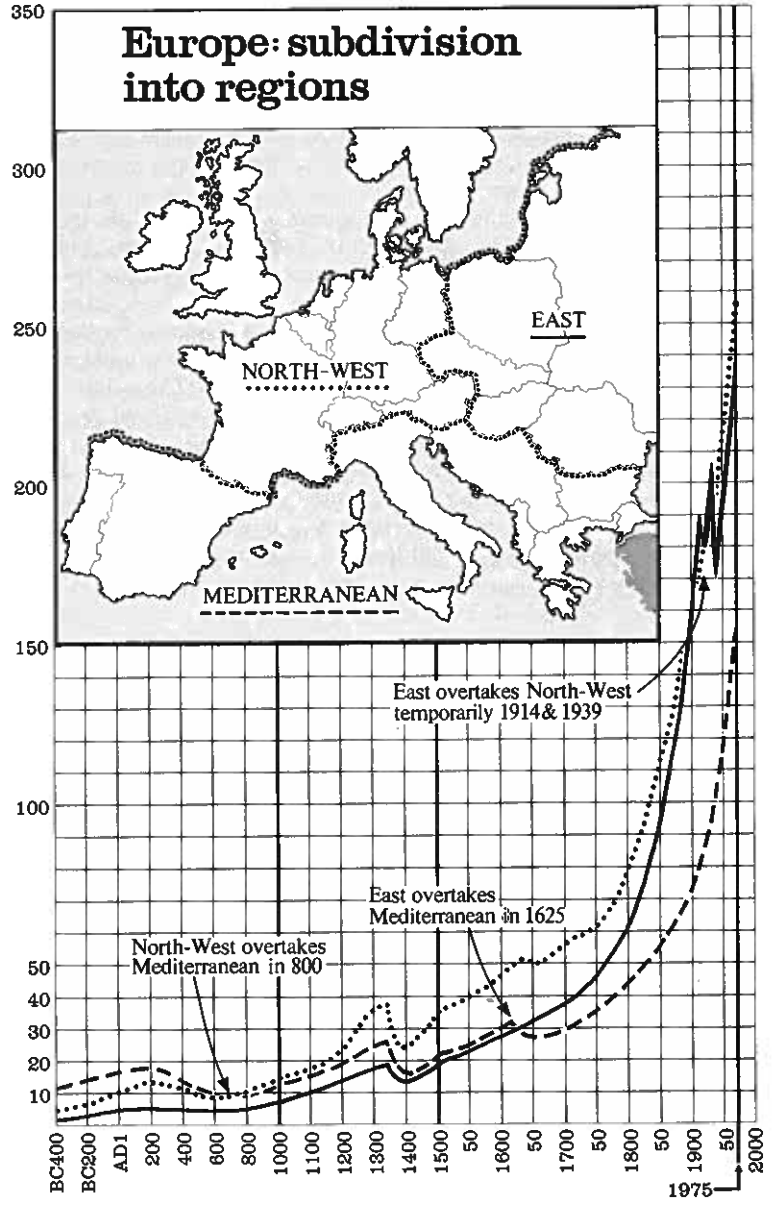


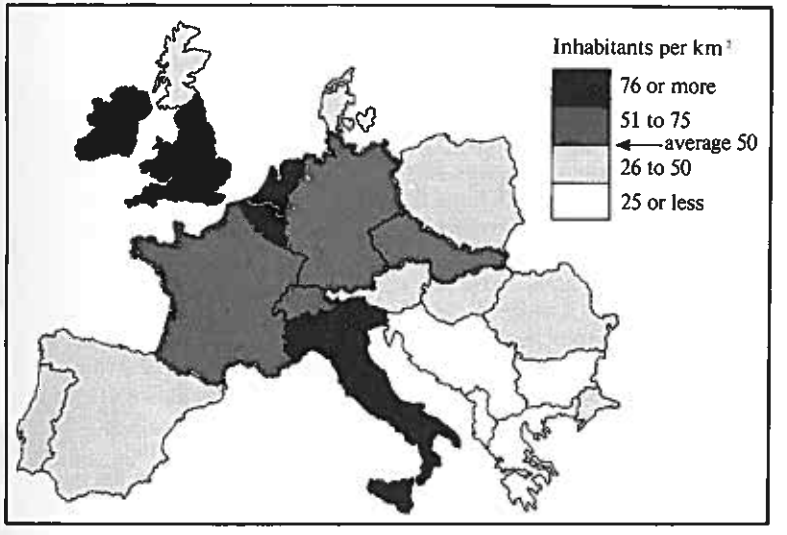
Fig. 1.10

The next period is one of very high growth, far higher than any ever experienced before. In just under 100 years numbers went up by 80% – from 140m in 1750 to 250m in 1845. This was more than twice the previous record, the 36% increase of the 12th century. Moreover by the end of the period it was clear that the rules of the game had changed: mortality rates had dropped so far that unless and until there was a corresponding drop in fertility the natural state would be one of continuing rapid growth. Man had got his old enemies, famine and plague, on the run. He was fairly launched into a new cycle, the modernization cycle, which was to bring not only an unprecedented increase in numbers but an unprecedented improvement in the length and quality of life.

Can we sort out exactly what happened? At first sight it looks easy enough. Both the demographers' and the economists' graphs turn up at the same time – the second half of the 18th century – and in the same place – the British Isles. *Ergo*, the demographic revolution and the industrial revolution go hand in hand. But in that case how come that Ireland, with no industrial revolution, had the highest multiplication rate of all? The answer is that the boom started off as just a boom like any other: the things that made it special – the advances in health and wealth – became important only after it was well established.

There could still be a link of sorts. Societies which have (1) a high density of population for their time and (2) a high rate of increase seem to be better

Fig. 1.11a *Europe, population densities in* 1845



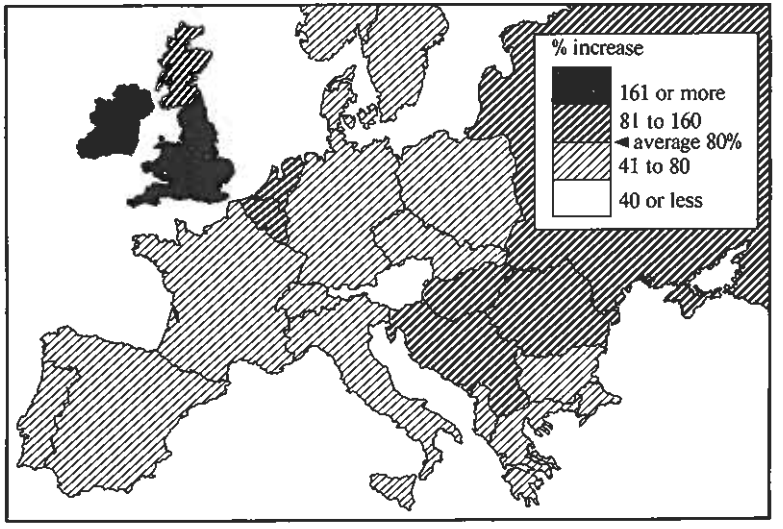


Fig. 1.11b *Europe, percentage changes in population* 1750–1845

at innovating than most. Fig. 1.12 makes the case: a succession of waves mark the major surges of population in Europe and though there is no suggestion that these represent anything but instabilities in the dynamics of colonization they correlate well with cultural achievement. So it is possible that the tendency to generate booms – for the crest of each wave to rise too high – has helped the advance of science and technology.

It certainly didn't help the Irish. In 1845 as in 1750 they were still living at subsistence level, the only difference being that in 1750 there had been 3m of them while in 1845 there were 8·5m. If allowance is made for the 0·5m who had moved to other parts of the United Kingdom and the 1m who had emigrated to the United States the Irish multiplication rate works out at more than 200%, comfortably greater than the 180% of the runners-up in the growth table, England and Wales. The potato blight that arrived from America in 1845 put a terrible end to this runaway increase. For three successive years it destroyed the crop on which the Irish peasantry had become entirely dependent. A million died, a million more fled and the island's population began to drain away almost as fast as it had built up.

Ireland's disaster had no effect on growth rates elsewhere in Europe. The continent achieved the same increase in the seventy years from 1845 to 1914 as it had in the ninety-five years of the preceding period: 80%. The actual increment was 200m, the final total 450m. And both figures would have been 50m higher if emigration had not risen to quite unheard-of

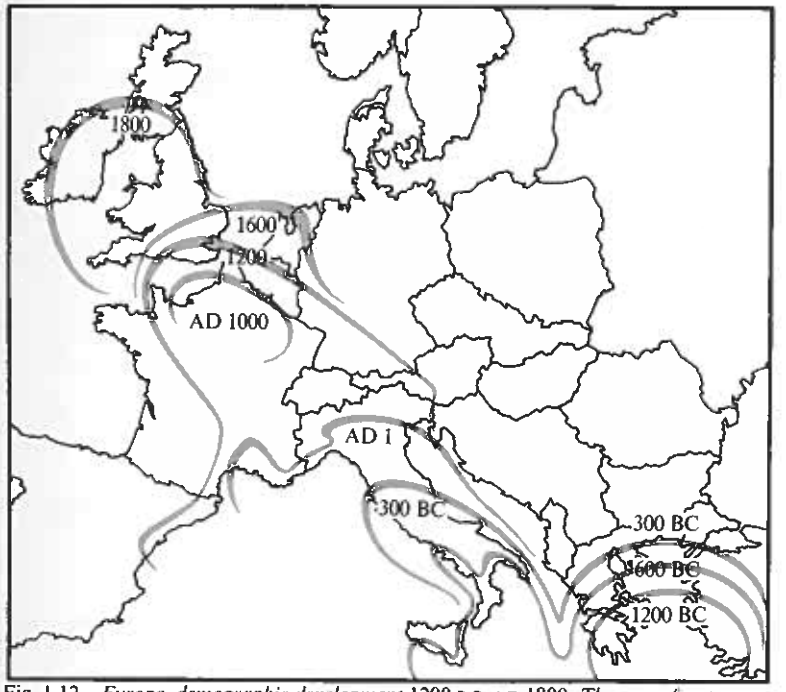


Fig. 1.12 *Europe, demographic development* 1200 BC–AD 1800. *The wave-fronts represent rapid multiplication to high levels of density – high for the date in question, that is. There is an obvious correlation between these demographic surges and social advance: the first four waves mark the development of the classical culture of Greece and its spread through Italy; the next two the establishment of the feudal order in Western Europe; the final pair the appearance of the early capitalist society of the Netherlands and the beginning of the industrial revolution in England*

levels. Perhaps 5m people had left Europe between the voyages of discovery and the year 1845: ten times that number left between then and the outbreak of the First World War. The two biggest contingents, each roughly 10m strong, came from the British Isles and Russia. Germany, Italy and Austro-Hungary added 5m each, and even Scandinavia, with its relatively small population, contributed 2·5m. The USA, which benefited to the tune of 30m new citizens, was the main attraction, but Canada, Latin America, Australia and (in the Russian case) Siberia received a flood of new settlers too. The steamship and the railway made movement on this scale possible: the promise of greater opportunity – very largely genuine – did the rest.

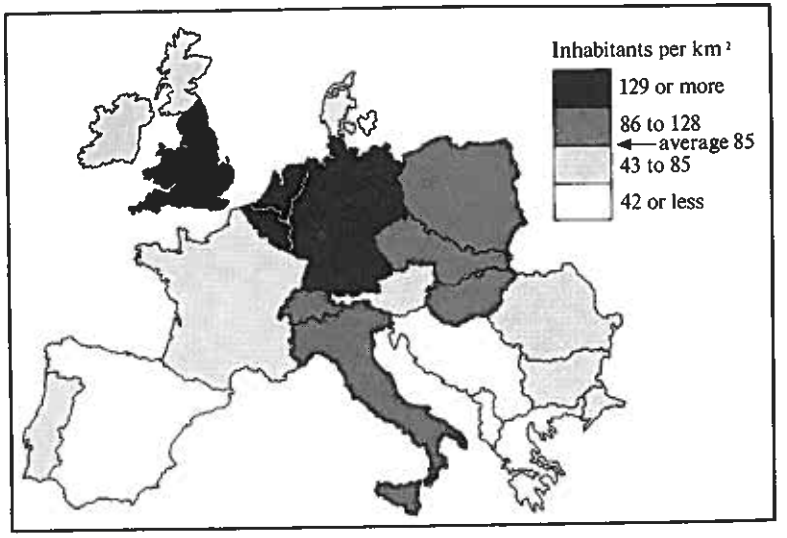


Fig. 1.13a *Europe, population densities in* 1914

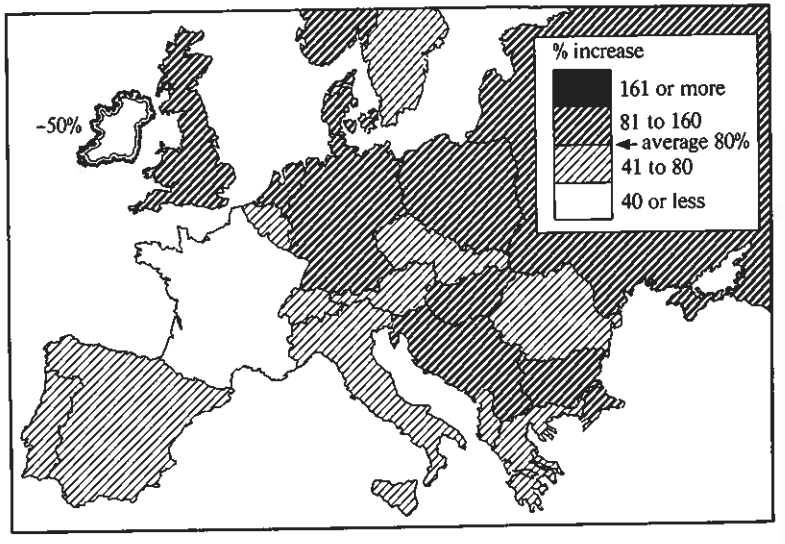


Fig. 1.13b *Europe, percentage changes in population* 1845–1914

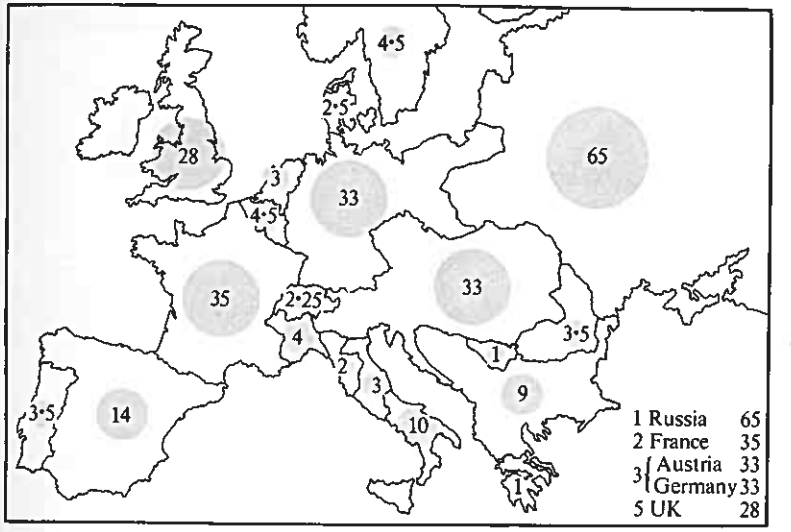


Fig. 1.14 *Europe, political divisions in* 1845

Within Europe the shifts were in favour of the Protestant north. Germany joined England and Wales and the Low Countries in the top rank of the density table; Italy dropped out (Fig. 1.13a). As for percentage increase most countries managed a respectable rate – all bar two are in the rank on either side of the mean in Fig. 1.13b – and of the two exceptions, Ireland and France, the first was clearly a very special case. Ireland's population actually fell by 50% because emigration rates persistently outpaced natural increase. France managed a rise but such a feeble one – a mere 17% – that it slipped from second to fifth position among the powers of Europe (Figs. 1.14, 1.15).

Another way of looking at these changes is in the manner of Fig. 1.12 – picking out the country that is showing rapid growth to a high level of density. This approach suggests that Germany was now going to take over from Britain as the most dynamic state in Europe. To a large extent this expectation was fulfilled: German scholars and scientists set new standards for the continent in the course of the later 19th century, while German industry and technology outclassed the competition with increasing ease. However, in terms of the division into Mediterranean, North-West and East, it was the East which was the winner. As Fig. 1.10 shows, the period ended with the East overtaking the North-West in absolute numbers and threatening to leave it right behind in the course of the next few decades.

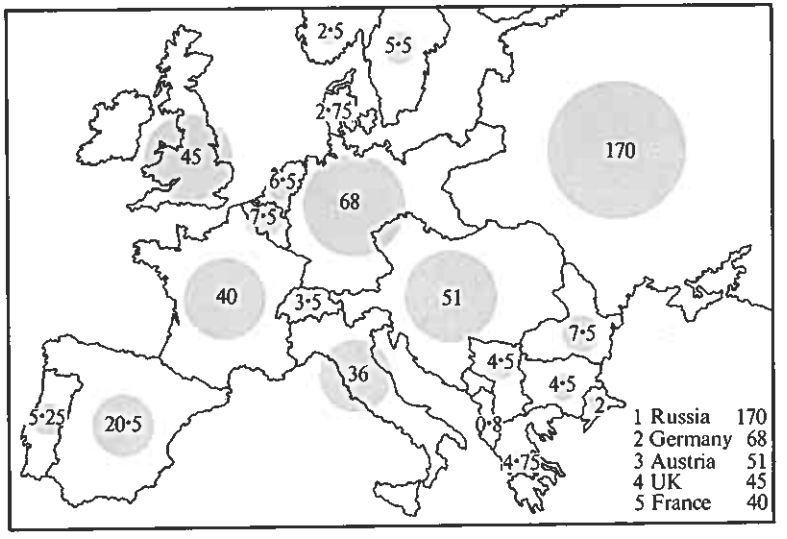


Fig. 1.15 *Europe, political divisions in* 1914

This explains the paranoid element in contemporary German attitudes. If the achievements of the Wilhelmine era were accompanied by an amount of drum-banging and trumpet-blowing that was excessive even by the jingoistic standards of the time, it was because of a lurking fear that the 20th century would turn out to be the century of the Slav not the German.

Germany's attempts to prevent this happening provide our final period – 1914 to 1975 – with its main theme. Scared by the statistics of Russian industrial growth the Germans precipitated Europe into the First World War in 1914. The four-year struggle cost the lives of 8m soldiers, with the North-West taking a slightly larger loss (Germany 1·7m, France 1·3m, United Kingdom 0·75m TOTAL 3·75m) than the East (Russia 1·7m, Austro-Hungary 1·25m, Romania 0·3m TOTAL 3·25m) and the Mediterranean emerging relatively unscathed (Italy 0·65m TOTAL 0·75m). But battle casualties are not the data of most significance to the demographer: much more important are rises in mortality due to malnutrition or disease and birth deficits due to social and economic dislocation. Here the North-West got off relatively lightly. In Russia on the other hand the economy collapsed in 1917 and this collapse was followed by a revolutionary struggle in which famines and epidemics carried off literally millions of people. What the exact mortality works out at is disputable: what is not is that there was a drop of about 10m in the East as a whole and that this was sufficient to put the North-West region back in the lead.

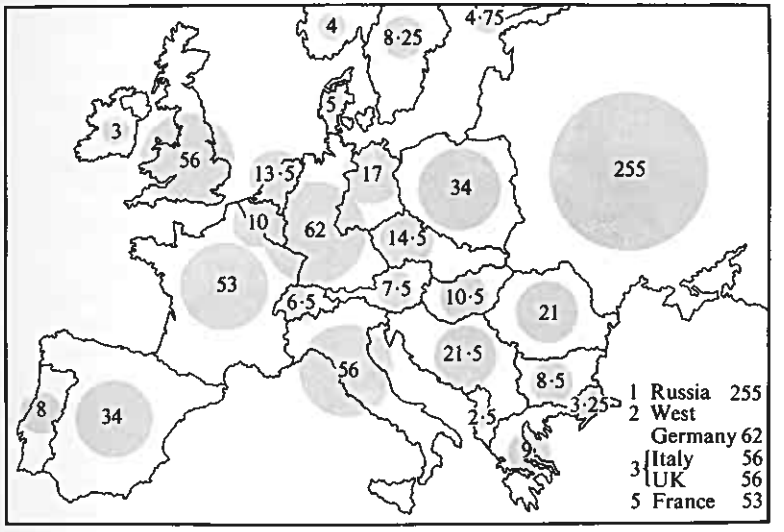


Fig. 1.16 *Europe, political divisions in* 1975

The East made up the lost ground in the inter-war period and by the opening years of the Second World War was out in front again. This time its loss was heavier than the other regions' in every category. Of the 17m soldiers who died most came from the East (Russia 10m, Germany's eastern provinces and satellites 1·5m, Poland 0·5m TOTAL 12m), relatively few from the North-West (Germany 3m, UK 0·3m, France 0·2m TOTAL 4m) and, once again, very few indeed from the Mediterranean (Italy 0·3m. Yugoslavia 0·3m TOTAL 0·8m). The civilian deaths were in even greater disproportion, something like 10m for the East (including 4·5m of the 5m Jews murdered by the Nazis) as against 1m in the North-West (including 0·5m Germans and 0·3m French) and 1·5m in the Mediterranean (1·2m of them Yugoslavs). The East also lost – and the North-West gained – the 15m people who fled or were expelled from one to the other in the closing days of the war and the immediate post-war period. Add in a birth deficit sufficient to cancel out the usual natural increases and we get a fall of 35m in the East as against no change or a small increase in the other two regions. This puts the North-West ahead of the East again in Fig. 1.10, a position it has retained, though by a diminishing margin, up to now.

Politically of course the East has moved way out in front, with Russia dominating the European scene as never before. Whereas in 1845 Russia was in population rather less than twice as big as the next biggest power (which was France – see Fig. 1.14) and in 1914 was still something under

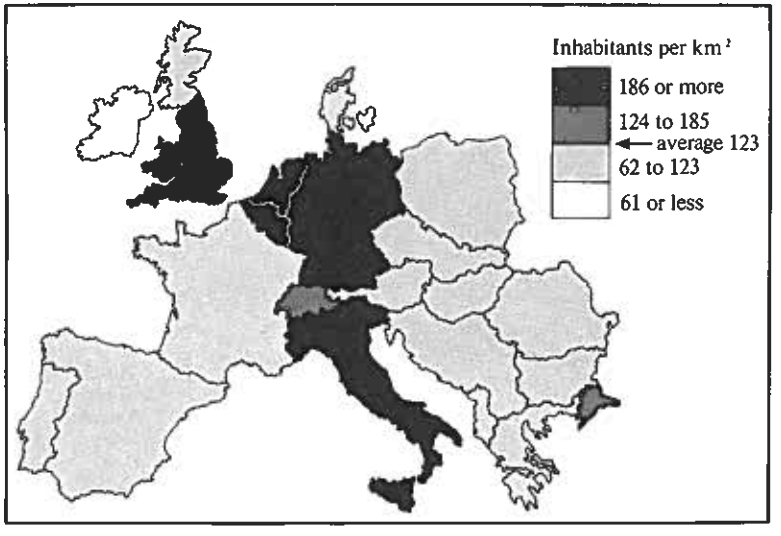


Fig. 1.17a *Europe, population densities in* 1975

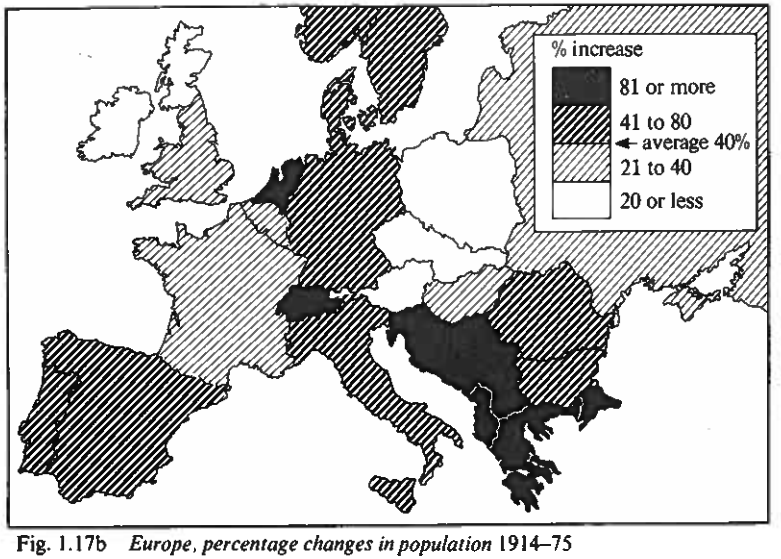


Fig. 1.17b *Europe, percentage changes in population* 1914–75

three times as big as the next (which was Germany – see Fig. 1.15), now it is more than four times the number two (West Germany) and actually bigger than numbers 2, 3, 4 and 5 added together (see Fig. 1.16). There are two main reasons for the discrepancy between the regional and political pictures, one being that Russia is an Asian as well as a European state and its Asian population has grown very rapidly indeed, the other being that the second-ranking power, Germany, has been diminished in size and divided in two.

This brings us to the last pair of maps in the density and percentage-increase series, Figs. 17a and b. The density map is nice and simple: Italy has rejoined the top rank, almost everyone else is in the third rank and only poor old Ireland is in the fourth. The result is a straightforward picture of a high-density strip running down the middle of a continent that is otherwise populated at a relatively moderate and surprisingly even density. The percentage-increase map is much more complicated. Of the three regions only the Mediterranean shows a consistent trend; the other two present a jumble of high and low rates that appear to make no sense at all. The upheavals involved in the two world wars are responsible for a lot of this patchiness: Czechoslovakia and Poland for example put themselves in the bottom rank by expelling their German minorities in 1945; conversely Switzerland climbed quietly up to the top because no one interrupted her peaceful progress. If allowance is made for this sort of thing (and a blind eye is turned to the Netherlands) the map can be made to yield a believable picture: low to moderate growth in the North-West, moderate growth in the East and relatively strong growth in the Mediterranean. This is certainly the way the growth rates of the past decade are averaging out and it fits well with a theoretical expectation: the three regions are likely to slow down in the same order they started up – North-West first, Mediterranean last.

For of course the really important thing about Fig. 1.17b is not its patchwork look but the value for Europe as a whole, a mere 40%, just as the really striking thing about European growth rates recently is not the differences among them but the fact that almost all have fallen rapidly. Compare the 1914–75 increase of 40% with the 80% of 1845–1914 and it is clear that the steam has gone out of the boom: look at the growth rates for Germany, the United Kingdom and Belgium – all now near zero – and it is clear that in some areas the modernization cycle is nearly over.

We should be thankful this is so and that it is happening so painlessly. Earlier booms were brought to an end by a fall in living standards and a rise in mortality rates. Now the mechanism is gentler: it is reproduction rates that fall as children have to take their place in the hierarchy of gratifications – cars, hi-fis, colour TV sets and holidays abroad – available to the consumer society. This isn't what Malthus had in mind, but it'll do.

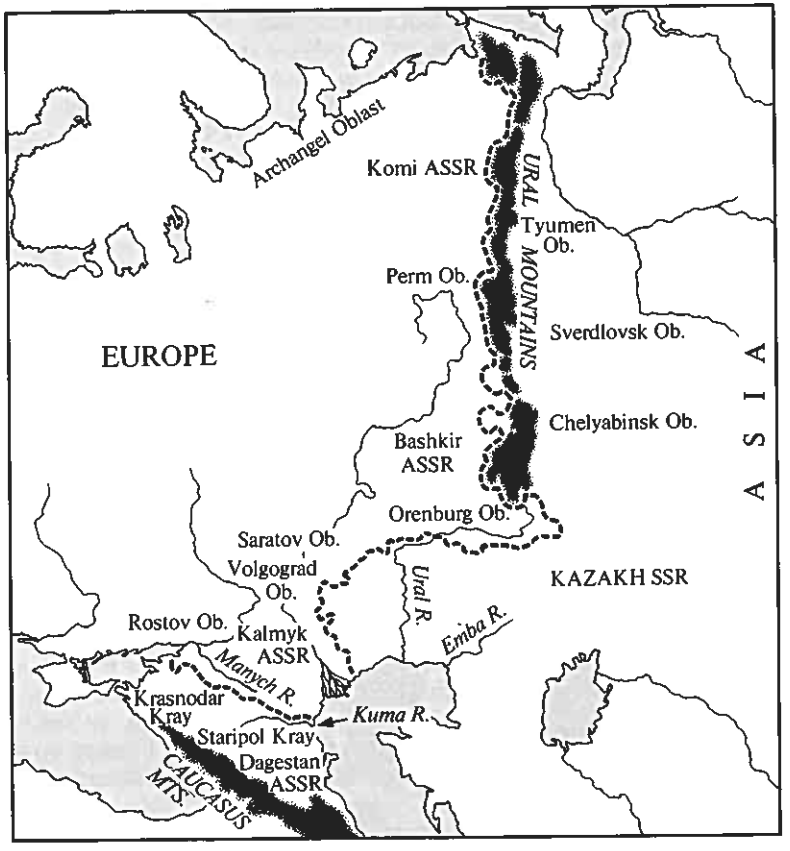


Fig. 1.18 *Geography of the junction between Europe and Asia*

Guest-Workers

One consequence of the difference in industrial maturity between North-West and Mediterranean regions has been the build-up of a population of Mediterranean 'guest-workers' in the North-West, particularly in West Germany (where there are 1·4m, a third of them Yugoslavs, nearly a third Italians), France (1m, half of them Portuguese, a quarter Spaniards and a quarter Italians) and Switzerland (0·4m, three quarters of them Italians). The idea is that all these people go home when their contracts expire and at the moment most of them seem to. The prosperity of the North-West has also attracted people from further afield, notably Turkey (0·6m guest-workers in West Germany), the Maghreb (0·6m guest-workers in France, two-thirds of them Algerians), the West Indies and the Indian subcontinent (communities in the United Kingdom numbering 0·75m and 1m respectively). Britain's immigrants differ from the rest in that they have full citizenship and are quite certainly permanent.

The recent inflow from the West Indies, North Africa and Asia has attracted a great deal of comment in Europe, which has traditionally been a continent that people emigrate from, not immigrate into. For the post-1914 period as a whole the input figures are in fact relatively puny, certainly no more than a fifth of the output total of 25m.

Europe's Frontier with Asia

The line dividing Europe from Asia has traditionally been taken to run along the Ural mountains and Ural river to the Caspian Sea and then along the Caucasus mountains to the Black Sea. In 1958 the Russians officially adopted a new dividing line: this runs along the eastern foothills of the Urals, not the crest, and along the Emba river, not the Ural: from the Caspian Sea it follows the Kuma–Manych depression to the Sea of Azov. Whatever line you pick is going to be in Soviet territory, so it seems reasonable to let Soviet geographers decide the issue: their definition is the basis of the one used in this book. We have not followed the new line exactly because census data are published by administrative departments and more often than not these lie partly in Europe and partly in Asia. Rather than engage in dubious calculations as to how many people in a particular department live on each side of the line, we have taken the inter-departmental boundaries that correspond most nearly to the inter-continental division. The republics (SSR and ASSR) and provinces (Krays and Oblasts) involved are shown on Fig. 1.18.

EUROPE AREA 1 The British Isles

0·31m km²

1a England and Wales

0·15m km²

Until the 6th millennium BC England was joined to the continent and post-Glacial man was able to come and go as he pleased. If, as seems likely, he preferred to come in the summer and go in the winter the population of the country will have been a seasonally fluctuating one, with its upper and lower limits slowly rising from zero/a few hundred in the upper palaeolithic period to a few hundred/a few thousand in the mesolithic. Around 5500 BC the rise in sea level caused by the melting of the ice caps created the English Channel and put a stop to these fluctuations. The population graph then steadied within the 2–3,000 band.

The arrival of the first farmers is dated to about 3500 BC. By the end of the neolithic (2000 BC) the population had grown to 50,000, by the Late Bronze Age (1000 BC) to 100,000, while in the Iron Age, when several waves of immigrants from the continent brought with them a better system of agriculture, there was a relatively rapid increase from 0·2m (in 500 BC) to 0·6m (in AD 1). Previously, farming had been more a matter of stock-raising than ploughing: now the plough became the farmer's most important tool and, in the south of the country at least, permanent villages became the normal pattern of occupation.

The Roman conquest brought law and order: the population increased, finally reaching a peak of 0·8m in the 4th century AD. Unfortunately, when the Romans left at the beginning of the 5th century they took their law and order with them and left behind a community that was no longer capable of organizing its own: Anglo-Saxon invaders poured in from Germany and the British were hustled westward. Between the area of immediate German success along the east and south coasts and the area that remained under the rule of the natives – now known as Welsh – lay a no-man's land that may have amounted to a quarter of the total. The population will have fallen by an equivalent amount and at its Dark Age nadir around AD 700 can hardly have exceeded 0·6m: more than half will have been descendants of the 0·1m Anglo-Saxons who had landed during the period AD 450–550.

Demographic recovery came as the Anglo-Saxons pushed the conquest to near completion, driving the Welsh into Wales. By 800 the population was passing the Roman peak, by 1000 it was around 1·5m and by the time of the Norman conquest, 1·75m, of which the Welsh accounted for rather less than 10%.

Population growth over the next six centuries went in fits and starts. The period 1100–1300 saw a big rise. This is the era of medieval expansion, with both acreage under the plough and total population reaching record levels. Indeed, the final figure of around 3·75m seems to have been well over the optimum for the agricultural technology

of the time, for, as more and more marginal land was brought into use, both productivity and standards of living fell. Since the norm was little better than subsistence, the nutritional state of the population declined dangerously. By 1300 the population was having difficulty maintaining itself and before the bubonic plague had ever been seen in England the stage was set for disaster.

As in Europe generally, the initial attack of the plague, the 1348–9 epidemic which is known (retrospectively) as the Black Death, killed something like a third of the population. Further outbreaks through the remainder of the century thwarted any recovery and by 1400 the population of England and Wales was down to 2·5m. It took the whole of the 15th century and perhaps some of the 16th for the population to regain its pre-Black Death level and, though figures then broke new ground, epidemics of one sort or another frequently placed the increase in jeopardy. The final outbreak of bubonic plague in England – the 'Great Plague' of 1665 – was, in fact, less severe than the plagues of 1603 and 1625 but was remembered as *the* Great Plague because it was the last in the series.

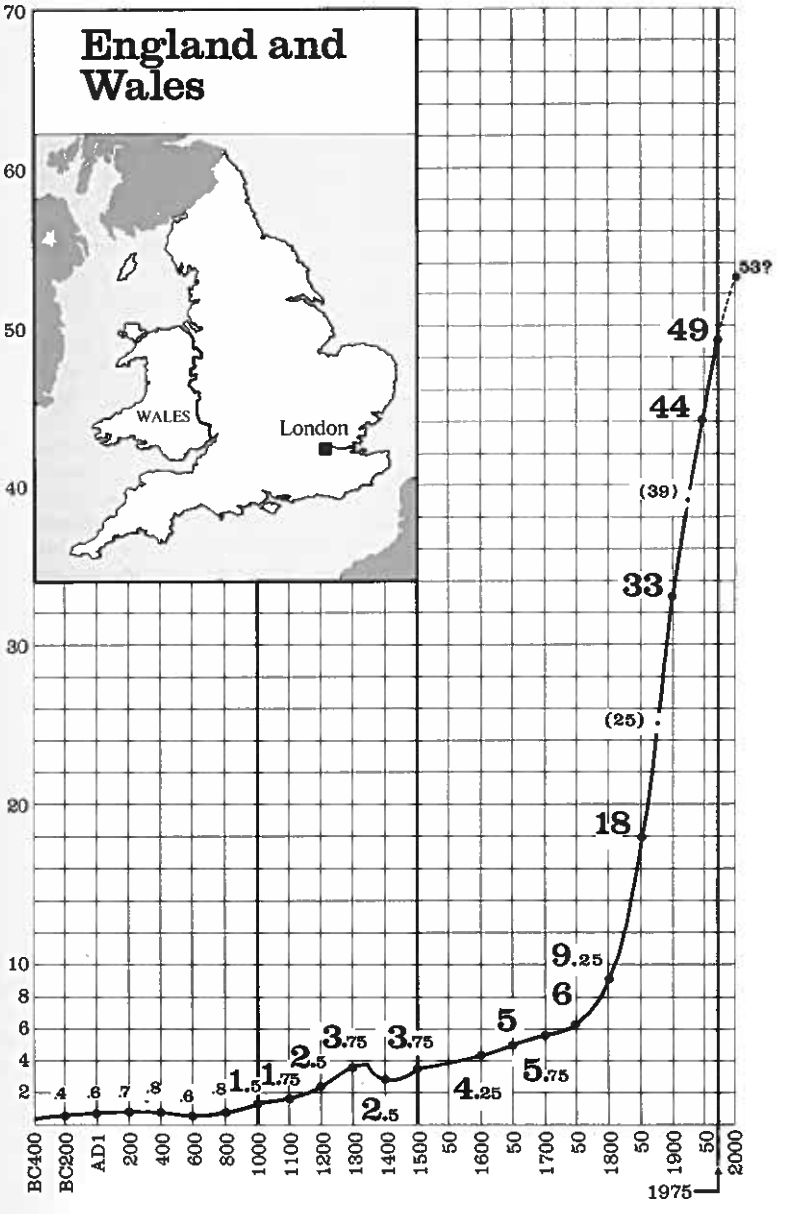
Curiously, the absence of plague brought little immediate change in the demographic situation, long-term population growth in the late 17th and early 18th centuries being almost imperceptible. Then, in the late 18th century, came the demographic revolution: the population curve turned sharply upwards as the processes of industrialization and urbanization became explosive. From 6·1m in 1750 the population grew to 9·2m in 1800 (a 50% gain) and to 18m in 1850 (a 100% gain). There was only a slight slackening in the second half of the 19th century (when the growth rate was still over 75%, yielding a 1900 population figure of 33m), but in the 20th century the fall-off in the rate of increase became more noticeable, the population rise being of the order of one third in the first half of the century; it will probably be only a quarter or less in the second half. That will still give England and Wales a density of nearly 370 per km².

Since the early 19th century there has been considerable migration into and out of England and Wales. Prior to 1950 the input was very largely Irish and Catholic. The native Catholic population had gradually dwindled under the repressive legislation that followed the Protestant Reformation, falling from about 20% of the total in 1600 to little more than 5% in 1700 and a bare 1% in the 1780s. The beginning of significant Irish immigration dates to this period of near zero native Catholic population, so the figures for Catholics after this date can be taken as a measure of Irish immigration plus, as time passed, the natural multiplication of the immigrants. By 1850 the Catholic percentage was back to 5% (0·9m), by 1900 to 6½% (2·35m), and it is currently around 10% (5m).

The Jewish community has a more recent history. Following the pogroms in Russia during the 1880s there was a large influx of East European Jews into London and, though most of them merely used the city as a port of call on their way to the New World, something like 0·3m had settled in England permanently by 1914. The present-day community numbers about 0·4m.

While the Catholic and Jewish communities grew, the Welsh were (in a linguistic sense) absorbed. At the beginning of the 18th century Wales had still been predominantly Welsh-speaking: by the early 20th century the percentage of natives who only spoke Welsh had fallen below 10%.

Up to the period immediately after the First World War, the various input



figures for England and Wales were offset by a far larger output. The actual numbers are somewhat speculative, but for the period 1850–1950 a total immigration of about 5m was outweighed by the emigration of some 8m, nearly all of whom went to North America or Australia. In the period from 1950 to 1962 (when stringent immigration controls were introduced) the situation was reversed: immigration from the 'new commonwealth countries' (the Caribbean and the Indian subcontinent) created a positive balance of about 0·5m and a present-day coloured community of approximately 1·75m – 40% Caribbean, 60% Indian.

The native English birth rate has been falling fairly steadily in recent years and projections for the year 2000 have been progressively lowered. The current estimate is around 53m: the age structure of the 'new commonwealth' population suggests that their proportion of the whole will have risen to at least 5% by then.

Primary Sources

British demographers are lucky in possessing two exceptionally early surveys: the Domesday Book, *compiled in the 1080s, and the record of the poll tax of 1377. Continuous statistics get off to a much later and shakier start in the 16th century, which produced muster rolls, fiscal assessments and Thomas Cromwell's instruction to parish priests to register baptisms, marriages and burials (1538). The first attempt to calculate the country's population dates from the end of the next century, when Gregory King came up with a figure of 5·5m: he based his calculations on the hearth-tax returns for 1662–82.*

The first official census was held in 1801. This and the next four in the decennial series were supervised by John Rickman. During his period in office he also called in and analysed a sample of the material obtainable in the parish registers for the 18th century and produced retrospective figures back to 1700.

The decennial census has been held on schedule since 1801 with a single exception, the wartime year of 1941.

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Educated guesses for the earliest periods up to Roman times are given in Chapter 6 of Grahame Clark's Archaeology and Society *(1947). For the medieval period the standard work is J. C. Russell's* British Medieval Population *(1948), though his Domesday figures are now thought to be a bit low. For a discussion of the margin of error in calculations derived from the* Domesday Book *and the 1377 poll tax records see M. M. Postan,* The Medieval Economy and Society *(1972). For the 16th century see J. Cornwall,* Economic History Review *23(1) 1970. Gregory King's estimate is discussed and revised by Glass in *Glass and Eversley. For the 18th century see Phyllis Deane and W. A. Cole,* British Economic Growth 1688–1959 *(1967), pp. 5, 6. For the Roman Catholic and Jewish communities in England see John D. Gay,* The Geography of Religion in England *(1971).*

1b Scotland

0·08m km²

It was not until the 9th millennium BC that the Scottish ice cap shrank enough for mesolithic man to move in, and even when he did his numbers were trivial – no more than a few dozen. The population rose to a few hundred in the neolithic (3rd millennium BC) and perhaps to 2,500 in the Bronze Age (2nd millennium BC), but it was only in the Iron Age that the figure finally reached the 100,000 mark. This population was almost entirely confined to the lowlands: the reason the Romans never made any attempts to occupy the Highlands was that there were not enough people there – no matter how hard they were flogged – to support a garrison.

In the medieval period the Scots became a nation. For the first time the population figures became considerable, the half million mark being reached just before the advent of the Black Death and regained by 1500. By the 17th century the country was even beginning to get overpopulated, a trend to which the newly introduced potato contributed, particularly in the Highlands. Between 1600 and 1700 numbers increased from two thirds of a million to a million, or by 50%, and this despite the fact that, during the same period, 75,000 Scots had left their homes and settled in Ulster.

The industrial revolution came to the rescue. In step with the English, the Scots industrialized and urbanized, and the country's expanding economy was able to sop up the increase in a useful way. The migration balance became positive, with 0·2m net arrivals from Ireland during the period 1800–50: agriculture became relatively so unimportant that when the potato blight arrived it caused only a local demographic collapse in the Highlands, not an overall disaster as in Ireland. Nevertheless this check did mark the end of the real boom times and after 1850 Scotland became a net exporter of people again. The population grew from just under 3m in 1850 to 4·5m in 1900, but the 5m mark was reached only in 1950, and since 1960 there has been almost no growth at all. The net outflow during this time has been of the order of 2m, representing a very high rate of emigration. Scotland's population, which was a fifth of England's in 1700, is now only a tenth its size.

Primary Sources and Bibliography

As in England the decennial census was introduced in 1801 and apart from the war year 1941 has been taken regularly ever since. The pre-census material is sparse: there are no useful tax returns and even the parish registers, being voluntary, are not really reliable. Alexander Webster's pioneer estimate of 1755 (for which see A. Youngson, Population Studies *15 (2) 1961) was based on parochial returns: the figure he came up with was 1·265m.*

For the medieval period see J. C. Russell's British Medieval Population *(1948). For guesses at the prehistoric population levels see V. G. Childe,* The Pre-history of Scotland *(1935).*

1c Ireland

0·08m km²

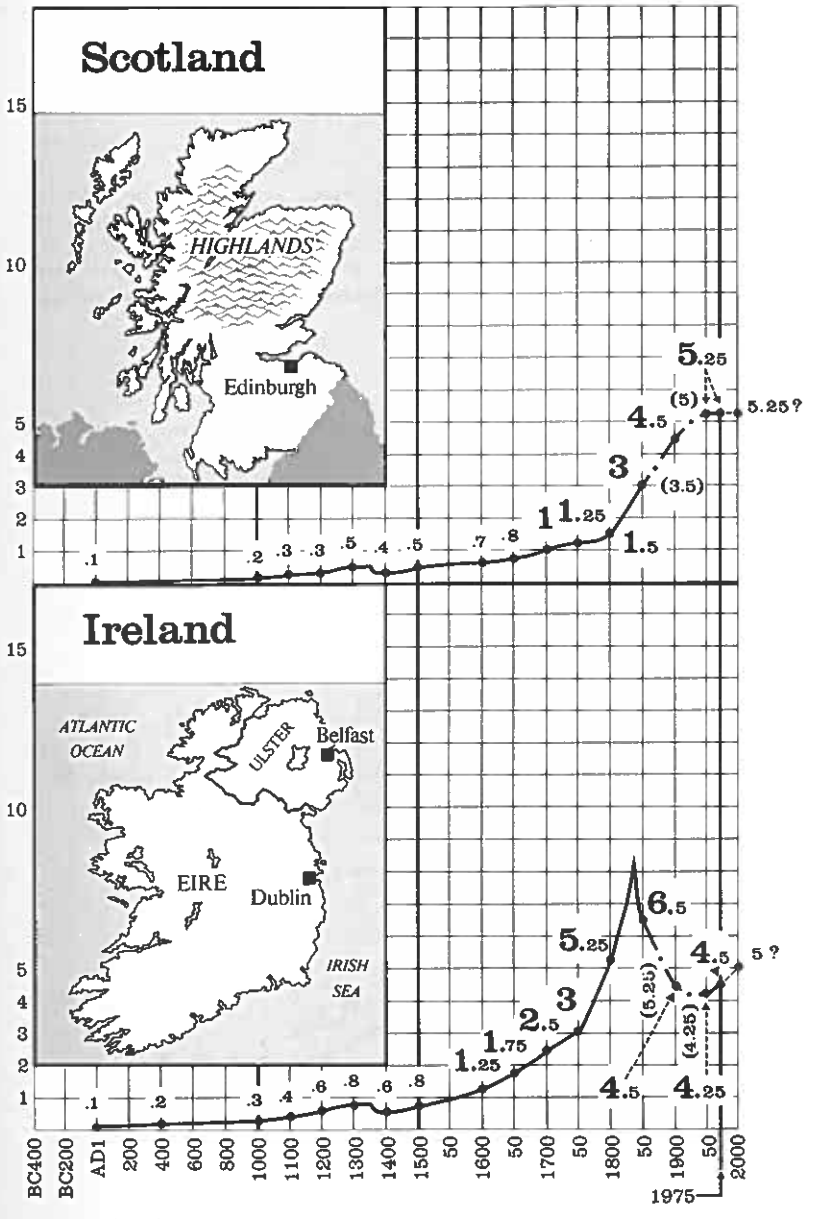
Ireland's prehistoric population build-up was proportionately slower than England's. Starting from a few hundred in the mesolithic, the number is unlikely to have risen to more than a few thousand in the neolithic and 100,000 in the Iron Age. Medieval growth was more impressive – from 0·3m at the beginning of the 11th century to 0·8m by the end of the 13th century – and in the early modern period the total finally reached the million.

At this point the English control over the island, hitherto nominal, became both actual and bloody. Ireland's refusal to follow England along the path of religious reform led to a series of ferocious wars in the course of which the north-east province of Ulster was cleared of natives and 'planted' with 100,000 Protestant settlers, mostly lowland Scots.

Despite these upheavals, the Irish rate of multiplication was now sufficiently fast to produce a doubling of the population within the 17th century. And the rate itself was rising: during the 18th century it more than doubled (to 5·25m) and at the growth rate then existing the 10m mark would have been reached by 1850. This was alarming. England, with its industrializing economy and its rapidly growing cities, might be able to absorb a comparable increase, but in Ireland neither industrialization nor urbanization had even begun: the extra population would have to find its living on the land. The potato, introduced in the late 16th century, went some way towards making it possible to sustain the increase, for a field of potatoes can feed four times as many people as the same area under wheat. Nevertheless, the history of early 19th-century Ireland was one of increasing impoverishment. By 1845 up to a quarter of the population was without work and, during the winter months, almost without food. Since 1800, 1·5m people had emigrated: roughly 1m to settle in the New World and 0·5m to work in the new factories in England and Scotland.

The emigration from Ireland in the early 19th century was a movement without precedent, but it was not enough to avert catastrophe. In 1846 and 1847 the failure of the potato crop (due to blighting by fungus) turned Ireland into a disaster area. By 1851 the sequence of famine years had caused at least 0·75m excess deaths. For millions there was but one hope – escape to happier lands – and the only positive feature in the situation was that the emigration of preceding decades had established outlets across the Irish Sea and Atlantic Ocean. What had been a stream now became a flood: during the years 1846–51 a million people left the stricken island and, although the threat of famine then receded, lack of work kept emigration figures at a level that would have been considered incredibly high by all standards except those of the immediate post-famine years. From 1851 to 1900 another 3m people left (making a total of 5m for the 19th century): the island's population fell from the 1845 peak of 8·5m to 4·5m in 1900.

In the early 20th century the fall in numbers continued, a low of 4·25m being reached in 1930. Since then there has been a slight recovery to 4·5m. Emigration, which in this century has amounted to about 1·5m, has not been the only factor in this restabilization of the population: there has also been a fall in fertility of a peculiarly Irish type, brought about by less and later marriage.



Europe Areas 1b and 1c

Since 1921 Ireland has been divided between the almost entirely Catholic Free State in the south (population in 1921–75 stable at 3m) and the Protestant-dominated (but one third Catholic) UK province of Ulster in the north (population increasing from 1·25m in 1921 to 1·5m in 1975).

Primary Sources

Data adequate for a calculation of Ireland's population begin only with the introduction of a hearth tax in 1662: they were first so used by Sir William Petty in 1672. The first proper census was carried out in 1821 and censuses have been held decennially since then with the exception of the years 1931, 1941 and 1951. During this period north and south took their censuses separately, the north in 1937 and 1951 and the south in 1926, 1936, 1946 and 1956.

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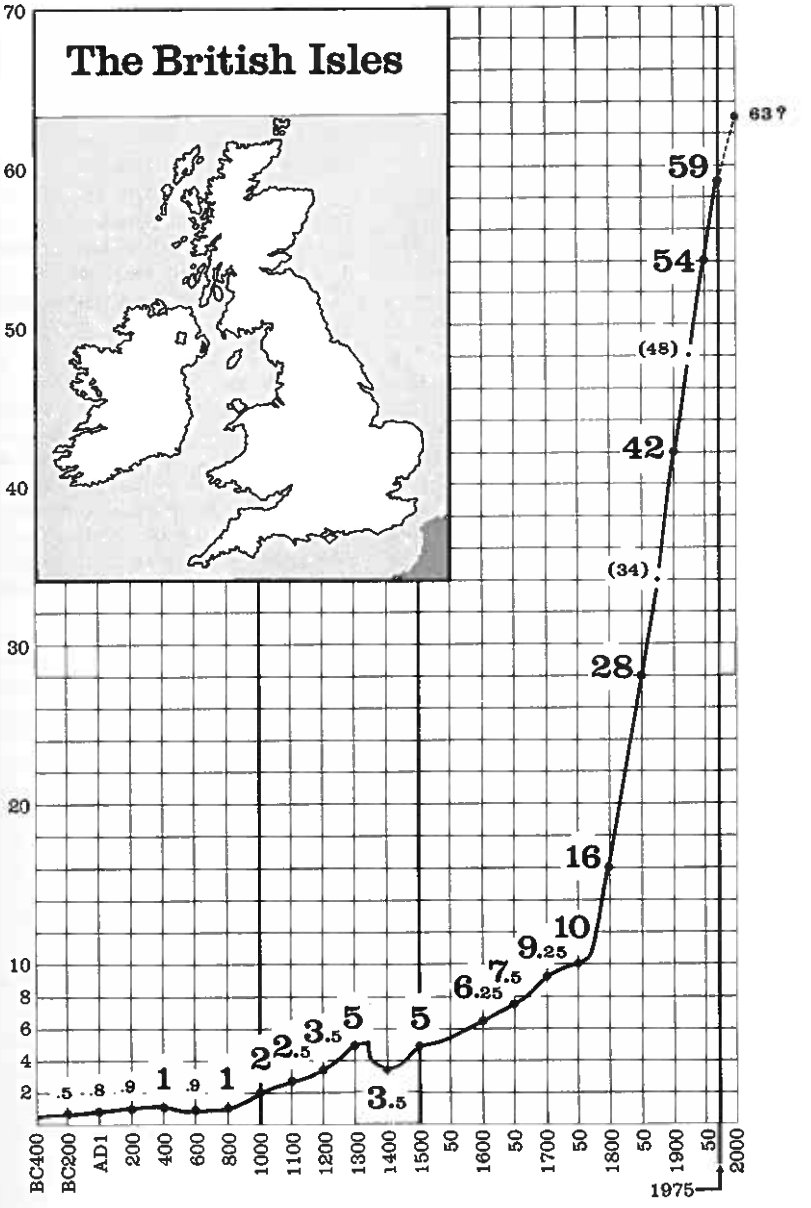
Pointers useful in estimating the medieval population of Ireland are summarized in J. C. Russell's British Medieval Population *(1948). The period from the late 17th century to the pre-famine peak is fully covered in K. H. Connell's* The Population of Ireland 1750–1845 *(1950): the table on p. 25 gives his final estimate for the period 1687–1841. For the mortality during the famine years see S. H. Cousens,* Population Studies *14(1) 1960.*



EUROPE AREA 2 Scandinavia

1·15m km²

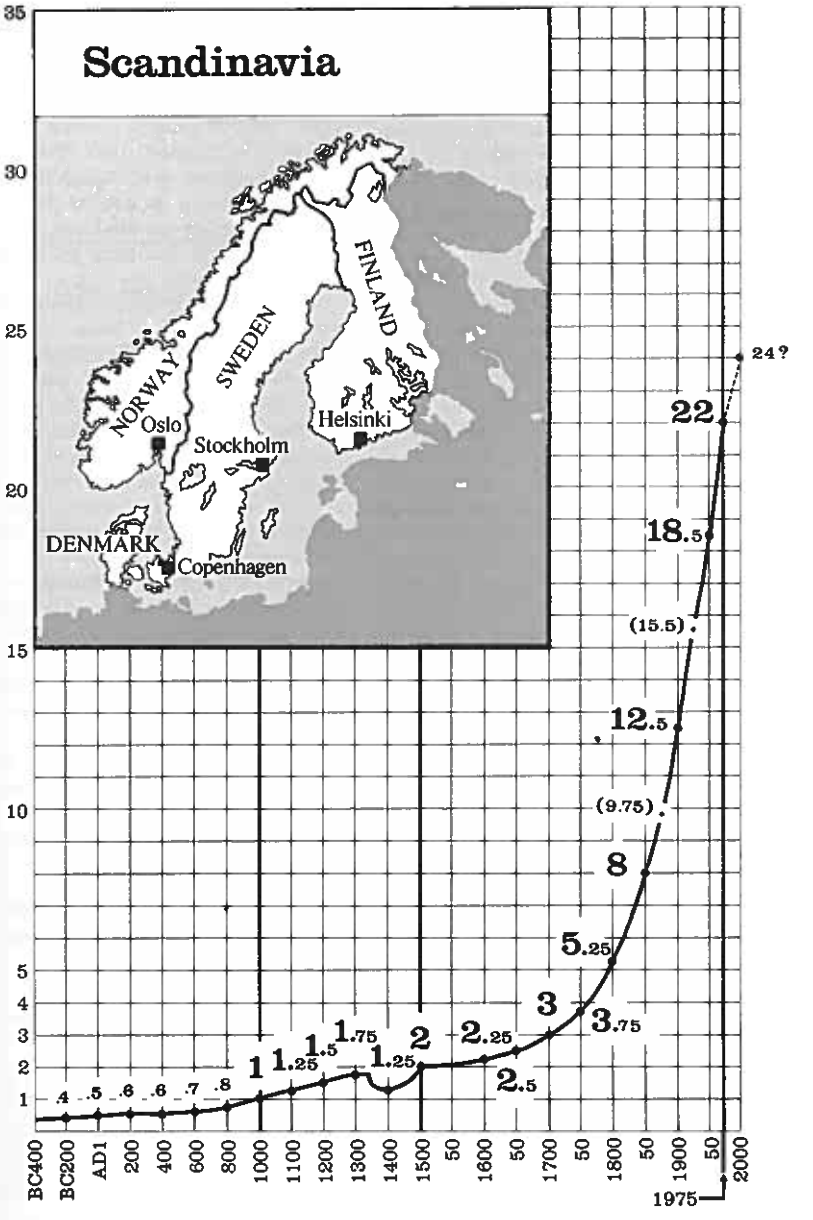
2a	**Denmark**	**0·04m km²**
2b	**Sweden**	**0·45m km²**
		(0·03m km² arable)
2c	**Norway**	**0·32m km²**
		(0·01m km² arable)
2d	**Finland**	**0·34m km²**
		(0·03m km² arable)

The Ice Age lasted longer in Scandinavia than in any other part of Europe, the peninsula emerging from the ice only in the course of the 9th millennium BC. A few thousand reindeer hunters moved in then. Behind them, in the next millennium, came a rather more numerous population of mesolithic food-gatherers, and finally, around 5000 BC, the first farmers. Denmark, the only sizable area immediately suitable for agriculture, straight away became the demographic heavyweight among the Scandinavian countries. If there were 150,000 people in the area by the time the local Iron Age began in 500 BC, two thirds of them will have lived in Denmark: comparable figures for 200 BC would be 400,000 and 50%.

Since then two themes have characterized Scandinavian population history, the colonization of the north and a tendency to overspill. The two are presumably related: in fair weather the land-hungry will have looked north, in foul overseas. Whether or not the relationship is as simple as this – or indeed whether it exists at all – should become clear as more is learnt about Europe's climate in the last 3,000 years. One bit of evidence that is to hand is that most of the emigration movements seem to have started from the northern, more temperature-sensitive half of the population zone.

The first clear case of overspill is the migration by some of the Goths of Sweden to Germany in the last century BC. Other Scandinavian clans followed during the next 200 years and the movement probably came to an end only when the fall of Rome – an event in which the continental Goths played a prominent part – relieved population pressure throughout the Teutonic world.

The next time the lid blew off in a much more spectacular way. By the end of the 8th century AD the Scandinavians had developed Europe's first really efficient sailing ship, the square-sailed Viking longship. This enabled them to export their surplus population over an amazingly wide area. The movement began with the Norse (Norwegians), who established colonies in Scotland, northern England, and the empty islands of the north Atlantic (the Faroes, Iceland and Greenland: see Area 15). The Swedish adventurers, the Varangians, travelled east; they sailed along the great rivers of Russia to set up the principalities of Novgorod and Kiev, and traded and raided as far as the Caspian and Black Seas. The Danes concentrated on the shores of the English Channel. There they founded the Duchy of Normandy (in the early 10th century) and, after many attempts, finally succeeded in conquering England



Europe Area 2

(1016). Altogether, we can reckon that some 200,000 people left Scandinavia for good between the end of the 8th century and the beginning of the 11th, of whom perhaps half lived long enough to tell their children how they sailed with Ragnar Lothbrok, Rollo or Sveyn Forkbeard.

The reflux effects of the Viking movement brought Christianity and better manners to Scandinavia which, in the years immediately before and after AD 1000, settled down into the three kingdoms of Denmark, Norway and Sweden. For a long time the Danish kingdom was the most important of the three: it was the most densely populated (it still is), so it was relatively easy to administer; it was also the biggest in absolute numbers because its traditional boundaries included the southern part of Sweden and a fifth of its inhabitants. The gradual development of the north changed this picture. By the middle of the 17th century the Swedes were strong enough to force the King of Denmark to give up his hold on the south of their country: by its end they outnumbered the Danes 2 to 1. In fact Swedes then constituted half the population of the area, more than ever before or since.

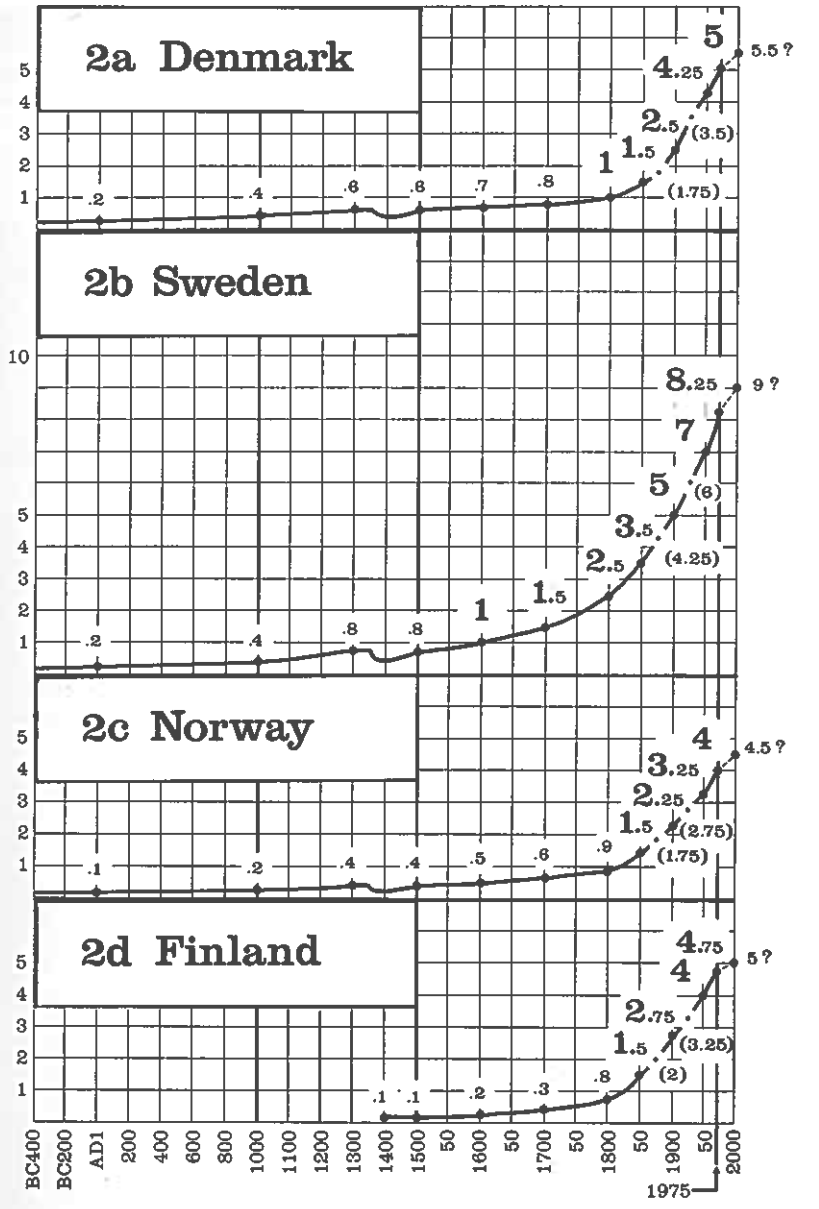
Sweden's relative decline in recent times is a consequence of Finland's rise. Nowhere has the frontier of cultivation been pushed northward so dramatically as in Finland. The result of this is that the 100,000 Finns of late medieval times have been able to multiply up to a present total of nearly 5m. There have been dreadful setbacks within the overall success, most notably in 1697 when a crop failure was followed by a famine in which 100,000 people, a third of the country's population, died. Recovery took a generation. And though this was the worst ever loss it was far from the last one: as late as 1867 8% of the population died following an exactly similar crop failure.

In modern times Scandinavia's overpopulation problems have found a peaceable solution in emigration to the New World. Between 1815 and 1939 there was a net outflow of 2·75m people, of whom 1·25m were Swedes, 0·85m Norwegians, 0·35m Danes and 0·25m Finns. Relative to size, Norway's contribution is much the largest, which is understandable given its traditionally maritime outlook.

The populations of the Scandinavian states are homogeneous. In the far north some 20,000 Lapps, descendants of the reindeer hunters of palaeolithic times, still cling to the old ways. There are about a third of a million Swedish speakers in Finland: they represent the descendants of a colonizing wave that crossed the Baltic during the period when Finland was under Swedish domination. There are a similar number of Finns in Sweden but they are very recent immigrants attracted by the greater economic opportunities of the Swedish labour market. All these minorities are tending to decline.

Primary Sources

These are almost non-existent until the 17th century, when a start was made with parish registration throughout the area. Denmark levied a poll tax (1660) and the Norwegians compiled a muster roll (1664–6). In the 18th century all is light. National collections of parish registers are available from 1730 on. A proper census was taken in Sweden and its dependency Finland in 1749 (the first ever held in continental Europe): Denmark and its dependency Norway followed suit in 1769.



Europe Areas 2a–d

The Swedish and Finnish censuses were repeated in 1760 and have been taken regularly, usually quinquennially, ever since. The Danish census was repeated in 1787, 1801 and 1834, and either quinquennially or decennially from 1840 on. The Norwegian census was repeated in 1801 and, with a few irregularities, decennially from 1850 on.

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For acceptable guesses as to the population of the Scandinavian countries in the 11th century AD *see the* Cambridge Medieval History (*Vol. 6 (1929), p. 367*), *and for Norway in the 14th century the* *Cambridge Economic History of Europe (*Vol. 4, p. 38*). * *Russell's medieval figures seem too low to us.*

For the Danish poll tax of 1660 see A. Lassen, Sc. Econ. H.R. *14 (1966), for the Norwegian muster rolls S. Dyrvik,* Sc. Econ. H.R. *20 (1972), and for the whole area in this period H. Gille, in* Population Studies *3 (1) 1949.*

EUROPE AREA 3 France

0·55m km²

France, with some 10,000 inhabitants in the upper palaeolithic (*c.*15,000 BC), can fairly be called the heartland of early prehistoric Europe. This position it lost when the climate improved: the population in the mesolithic era (*c.*7500 BC) never grew beyond 50,000 and the country entered the neolithic, food-producing stage considerably later than most of its neighbours. By the end of the first full millennium of the neolithic, in 3000 BC, numbers were up to 0·5m, by 2000 BC the total was 1m, by 1000 BC 2m and by 400 BC 3m. But there were less people in France than in Italy, and they were less sophisticated too. The result was the Roman conquest of Gaul, dramatically completed by Julius Caesar in the middle years of the last century BC.

Once accepted, Roman rule ushered in a prosperous phase during which numbers increased to a peak figure of 6·5m in AD 200. The turning point came fifty years later when the Germans broke through the Rhine frontier and roughed up the Gauls in a way they never really recovered from. This disaster, plus the measures the authorities took to repair it, triggered off a reversal of the previous trend with a fall in numbers to 5m by AD 400.

At this point the western half of the Roman Empire disintegrated and the Franks, a German people from the lower Rhine, moved in to become the area's new rulers. The Franks had neither the wish nor the capacity to revive the old Gallo-Roman economy and while they were evolving their own feudal system of government the fall in population continued. It eventually bottomed out at about 4·5m in AD 600.

What was gradually lost over the four centuries up to AD 600 was gradually recovered in the four centuries following: by AD 1000 France once again had a population of 6·5m. This time it was at the beginning, not the end, of a phase of rapid growth. Despite an outflow of adventurous sons to England, Italy and the Holy Land the second half of the 11th century produced a rise of a million. In the 12th century the gain was more than 2·5m (for a total of 10·5m) and in the 13th century more than 5m. The great cathedrals built in these years are memorials to this upsurge, which carried the country's population to 16m by the beginning of the 14th century, and perhaps a million more – though after 1300 the rate of increase certainly fell off very sharply – by the time the Black Death struck in 1348.

Whatever the exact number it was too high. The medieval cycle had reached its Malthusian limit, with the mass of the peasantry in poorer health than it had been a hundred years earlier. This explains why the toll exacted by disease in the period 1348–1400 was so terrible. And terrible it was. Not only did a third of the population die in the initial pandemic of bubonic plague but repeated attacks of this and other diseases in the second half of the century turned this

temporary reduction into a new equilibrium point. Not till the opening years of the 15th century was there any sign of sustained recovery, not till well into the 16th century did the French population reach its 1348 level again.

Surpassing the previous best was only part of the demographic achievement of the early modern era: during the period 1550–1650 there was an additional gain of 30% which took the population over the 20m mark. Then there was a pause due partly to bad luck, partly to bad management. The bad luck came in the form of epidemics and famines, the bad management was supplied by Louis XIV. Out of sheer bigotry Louis expelled 0·2m of his hardest-working subjects, the Huguenots, while by his incessant and ultimately unsuccessful wars he succeeded in temporarily ruining the country's economy. The reign that had begun in confidence and glory ended in bitterness and poverty.

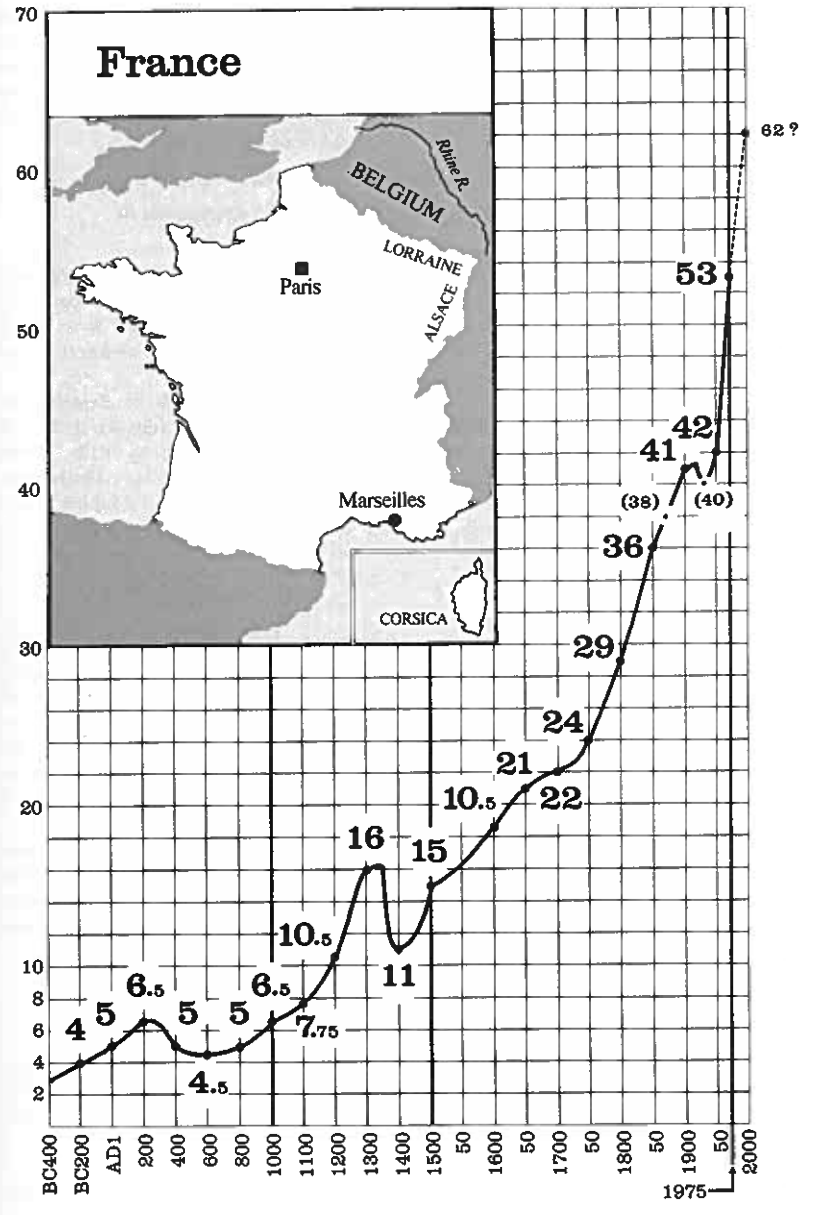
After Louis' death things soon picked up again, though the first sign that they were beginning to do so was a peculiarly alarming one, an outbreak of plague at Marseilles in 1720. This was locally devastating – it killed half the 80,000 people in the city – but it didn't spread beyond Provence, showing that the disease had lost some of its penetrating power. In fact it turned out that as far as Western Europe was concerned this was the plague bacillus's last throw: there were no more epidemics after this one. Right across the continent population figures began to rise, at first moderately then with unprecedented speed.

France's population rose along with the rest, though less rapidly. Indeed – and in this France is unique – the new cycle boosted numbers by a smaller percentage than had the medieval cycle. In isolation the figures are fairly impressive – 29m in 1800, 36m in 1850. Compared to the rest of Europe they are feeble. Moreover, in the second half of the 19th century, though the population managed to rise to 41m, this increase was entirely due to the greater individual longevity that resulted from the improvement in health and general living standards.

Emigration has never played a significant part in French population history. The reason why numbers grew so slowly was that the birth rate fell. Frenchmen were, it goes without saying, approaching their traditional business with traditional vigour, but to their customary skills they now added a final flourish. *Coitus interruptus*, it seems, became a national habit: fleeting pleasures were not allowed to undermine the good life.

One of the results of this self-control was that by 1870 there were more Germans than Frenchmen. That same year Bismarck wrested France's traditional primacy from her. In the First World War France showed that she had enough guts – and enough allies – to get it back, but the cost was so high (1·3m war dead and an equally large birth deficit) that the country was actually weakened by its victory. There was a widespread feeling, abroad as well as at home, that France could not afford to sustain another such struggle. And in the event her speedy defeat in the Second World War showed that she couldn't, or wouldn't. Defeat had its price too – 0·5m dead, a 0·25m birth deficit – but it was within the nation's means.

After the war there was a remarkable and quite unexpected upswing in the French birth rate. This, together with the arrival of 0·8m refugees from Algeria in 1962/3, pushed the population totals towards today's figure of 53m. Some 3·75m of these are foreign workers, specifically Italians, Spaniards, Portuguese and native Algerians, but as



France has had a substantial foreign community for a long time – it was 1m in 1900 and 3m in the 1930s – too much can be made of this element. Of the native minorities and most important are the 2m Alsatian speakers, the 2m Bretons and 0·3m Corsicans (of whom only half live on Corsica): the most interesting is the French share of the Basque population in the Pyrenees which amounts to 0·1m out of 0·85m (the rest being Spanish).

Population of Gaul, the Kingdom of France, the French Empire and the French Republic

Roman Gaul was about 15% larger than modern France, the Kingdom of France at its inception in the 10th century about 20% smaller. Population figures need adjusting accordingly. By 1700 the gap between France then and now had narrowed to 10%; in the 1760s it was near enough closed by the annexation of Lorraine and Corsica.

The French Revolution was followed by the incorporation of Belgium into France. Then followed the dizzying series of Napoleonic annexations which brought the population of the Empire (not including satellites) to near 50m by 1812. All these gains were soon lost again and in 1870 Alsace and Lorraine went too. The recovery of these two provinces in 1918 – by which time their population had doubled to 2m – brings the French frontiers to their present position.

Primary Sources

Though Caesar gives some indications of the size of the Celtic tribes in his Gallic War *the first overall data are found in the hearth tax returns of 1328. Exactly what they add up to is debatable for they only cover about half the present area and some of the individual figures are demonstrably wrong (e.g. the figure for Paris). The first reasonably reliable estimate was made by Vauban in 1697–1700 on the basis of data specially provided by the provincial administrators; the material has been reworked and extrapolated recently to produce figures for the contemporary Kingdom (20m) and the present area (22m). The first in the present series of censuses was held in 1801.*

Civil registration was established in France only in 1792, so for the interval between Vauban's estimate and the 1801 census demographers have to rely on parish registers. These are reasonably reliable from 1667 on and a lot of work has been done on them in recent years. Some registers also contain earlier material but here it is difficult to know how far it is reasonable to make them the basis for generalizations.

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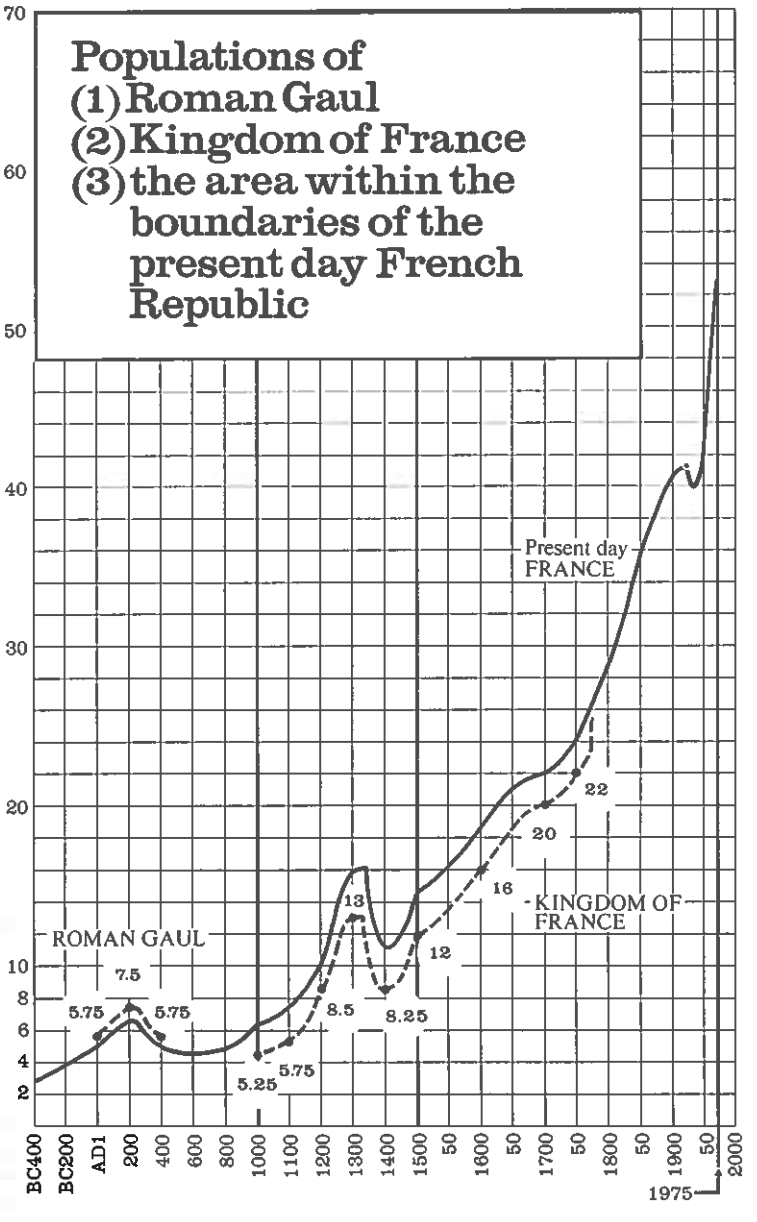
The classic work on the demographic history of France is E. Levasseur, La Population Française *(1889); it is still the best introduction to the subject, though it needs to be read in conjunction with the relevant sections of * Beloch and * Russell. There is nothing much to add to these at the prehistoric end – the site-count method used by L.-R. Nougier in* Population *9, 2 (1954) is highly suspect and the figures it produces much too large. For the 1328 hearth tax see the article by F. Lot in* Bibliothèque de l'École



des Chartes *90 (1929): the figure for Paris – 60,000 hearths at a time when the city cannot have contained many more than 60,000 people – is demolished (to most people's satisfaction) by P. Bollinger in* Revue Historique *216 (1956).*

*The best introduction in English to the population history of France since 1500 is the group of articles by Henry, Goubert, Bourgeois-Pichat and Meuvret in * Glass and Eversley. A good recent summary of the massive work being done on parish registers of the 18th century is contained in a Special Number of* Population *30 (November 1975). There is a discussion of the Huguenot outflow in W. C. Scotville,* The Persecution of the Huguenots and French Economic Development *(1970). The plague of 1720–22 is the subject of an article by J.-N. Biraben in * Glass and Revelle. The basic textbook on the period since 1800 is M. Huber, H. Bunle and F. Boverat,* La Population de la France *(4th edn 1965).*

EUROPE AREA 4 The Low Countries

0·07m km²

4a Belgium

0·03m km² (including Luxembourg; area 2,600 km², 1975 population 0·35m)

The population of Belgium in upper palaeolithic times (*c.*15,000 BC) can be estimated at a few hundred at most: even in the mesolithic, around 8000 BC, the number was still only a few thousand. Settled farming, which first appeared about 4000 BC, caused a jump to ten thousand and then continuing growth to 30,000 (by the end of the neolithic), 100,000 (by the end of the Bronze Age), and 0·3m (at the time of the Roman conquest). At its most prosperous, the Roman province (Gallia Belgica) may have held as many as 0·4m people.

In the 3rd century came the first wave of the Germanic tide that was soon to submerge Western Europe. The effect on Belgium was immediate and disastrous. Many provincials fled to safer lands and as the province emptied the Germans moved in. Half a century before Rome fell the Germans were already masters of the northern half of the country and the division between German-speakers (the present-day Flemings) and Romance-speakers (the present-day Walloons) was firmly established.

Recovery from the post-classical population nadir – which in Belgium's case was around 0·25m – began in the 9th century. By the year 1000 the population was back to the best Roman level and during the next three centuries the country notched up a rate of increase that kept it at the top of the European growth league. Geography helped: situated at the centre of the emerging north European trade network Belgium was the chief beneficiary of the medieval economic boom. Belgian weavers set the pace in the most important of contemporary industries, the clothing trade; Belgian entrepreneurs made the name of Fleming synonymous with mercantile success. By 1300 the population was 1·25m and the country the most prosperous and densely populated in Europe.

The Black Death put a stop to all this. Under the recurrent attacks of plague that characterized the second half of the 14th century the population sagged, reaching a low of about 0·8m in 1400. There was, it is true, an almost complete recovery in the course of the 15th century. But the country never regained its old trading position. It was a faltering economy that the Spanish took over during the reign of the Emperor Charles.

Spanish rule was not a success. A policy of religious persecution drove the Protestants to the Netherlands and taxation killed trade and initiative; the result was that between 1550 and 1650 there was no growth in numbers at all. Towards the end of the 17th century the population total seemed to have stuck at not much more than 1·5m.

From these doldrums the country was rescued by the industrial revolution. Coal, iron and proximity to England all conspired to make Belgium the first continental country to undergo the industrial transformation and the first to feel

the demographic effects of this change. Between 1700 and 1800 the population of the area nearly doubled and by 1900 it was close on 7m. Since then growth has been steady, except in war years. The 1975 population is just over 10m.

The diversity of the Belgian population – already divided (almost equally) between Flemings and Walloons – has been intensified in recent years by an influx of foreign workers. There are currently about 0·25m of these, a third of them Italians. The growth rate is no longer high: it is unlikely that the population will significantly exceed 11m in the year 2000.

4b The Netherlands

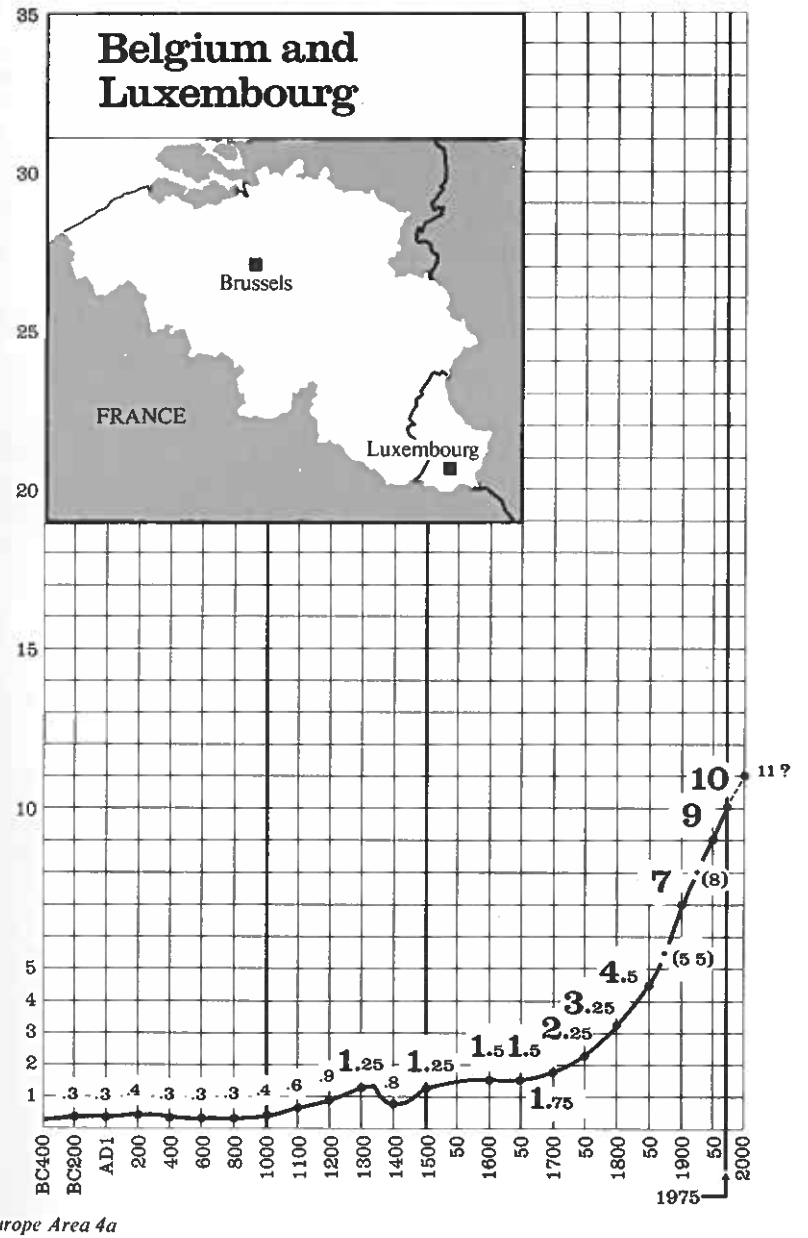
0·03m km²

The population of the Netherlands – a few hundred in the palaeolithic era – rose to perhaps 2,000 in the mesolithic (7000 BC), 10,000 by the late neolithic (3000 BC) and 50,000 by the end of the Bronze Age (1000 BC). By the early years of the Christian era the total was 0·2m, a figure that is unlikely to have altered significantly during the next half dozen centuries. The Frisians – the German people who occupied the area of the modern Netherlands at this time – established an amicable relationship with the Romans, whose direct control was limited to the southern quarter of the country: they played no part in the violent movements that led to the downfall of the Roman Empire and remained outside the various kingdoms that the barbarians erected in its place. In fact, these political events were of less significance to the Netherlanders than the behaviour of the sea. Massive flooding appears to have taken place during the 5th century and the consequent loss of land will have offset any gains made over the previous centuries.

The next period of growth occurred in the 10th century as part of the general upsurge that carried Europe out of the Dark Ages: the population of the Netherlands passed the quarter of a million mark in AD 1000 and it continued to increase at a steady rate throughout the early medieval centuries. By AD 1300 the Netherlands contained more than 0·8m people, a respectable total if somewhat overshadowed by the 1·25m in Belgium. But then the Netherlands never held the same commanding position in the medieval European economy as did its neighbour to the south.

The inferiority of north to south was to some extent changed by the 14th-century plague, from which the Netherlands made a quicker recovery than Belgium. It was completely reversed in the 16th century, when the revolt against Spanish rule severed the two halves of the Low Countries for good – much to the advantage of the north. The new-born Dutch republic became the economic wonder of the world: its flotillas grew into armadas which monopolized the carrying trade of Europe and gathered into Amsterdam the wealth of the Indies and Americas. The Dutch standard of living became the world's highest: this and a policy of toleration far in advance of the times attracted considerable immigration from the southern Netherlands and northern Germany. The result was a population leap from 1·2m in 1550 to 1·9m in 1650.

The Dutch economic miracle was



Europe Area 4a

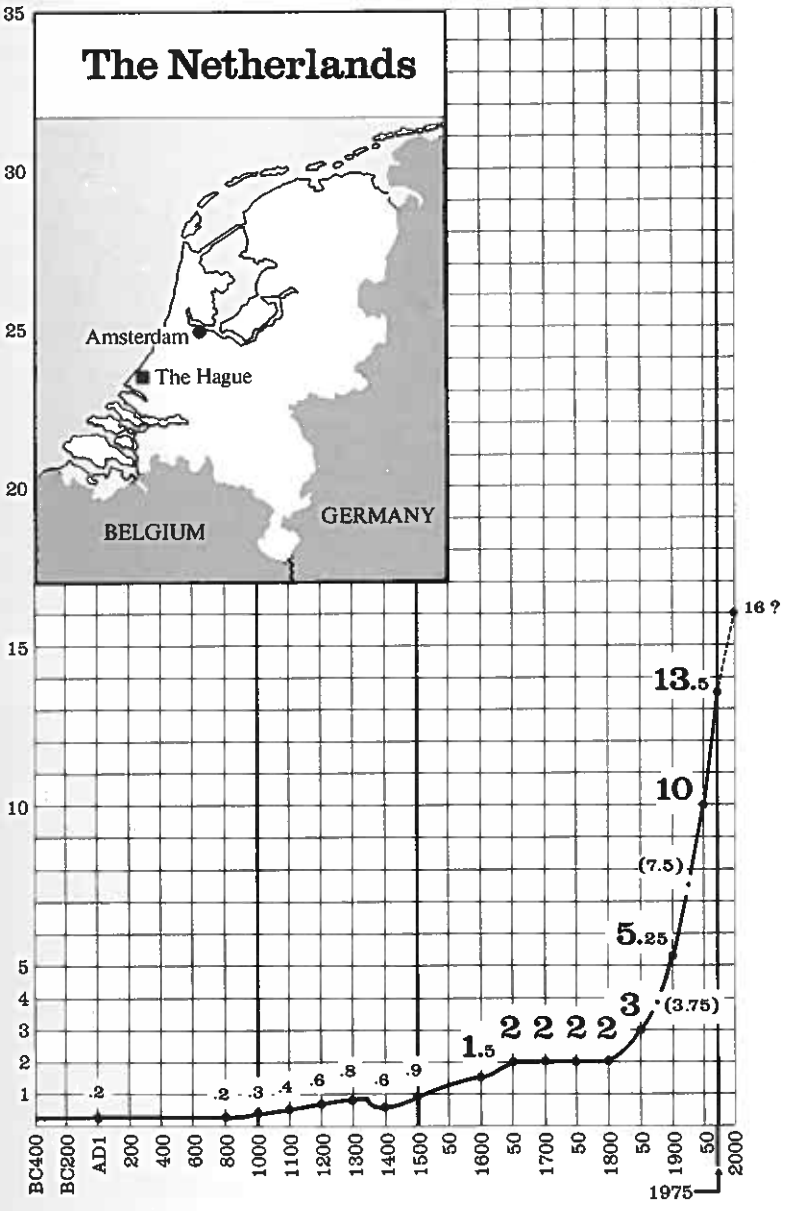
matched by increasing political commitments which eventually put a stop to further expansion. Something under 2m was a tiny population base from which to wage war against the great powers of Europe. By the late 17th century Dutch prosperity was declining under a load of taxation such as was inflicted on no other people, and population growth had ceased. The figure of 1·9m Dutchmen remained unaltered until 1750 and was only marginally exceeded in 1800.

This was the period when a rapidly industrializing Belgium recaptured the demographic lead. In 1800 Belgium and Luxembourg had 3·2m people (against the Netherlands, 2·1m): in 1900 6·9m (against 5·2m). In the 20th century, however, the Netherlanders have overtaken their rivals again, the 1975 figure of 13·5m being comfortably ahead of the southerners' 10m. The growth rate continues relatively high: the prediction for the year 2000 is of the order 16m.

One plausible reason for the relativ high birth rate – it is currently the hig est in Western Europe – is rivalry b tween the Protestant and Catholic co munities. Although Protestants ha dominated Dutch history there is n that much difference in size, especia now, for in this century the Protestar have been losing ground to t Catholics. From 3 : 2 at the beginning the century the Protestant lead has fa len to a current ratio of 5 : 4. The role migration has been complex. Neat 0·25m Dutch nationals returned fro Indonesia after this erstwhile colo gained its independence; they were fo lowed by a similar number of Eurasiat Other post-war immigrants total neat 0·5m, but as over the same period mo than 1m Dutch have emigrated the sult has not been a change in overall nu bers but merely an increase in diversit

Primary Sources

Caesar's account of Belgium yields a figure of 0·3m for the area within the present-d frontiers. There are no useful data for the Netherlands north of the Rhine during t period nor for either Belgium or the Netherlands during the Dark Ages. The positi begins to improve in the 13th century, by the 15th century the fiscal data are copio and with the introduction of parish registers in the 16th century the material at t disposal of the historical demographer becomes as good as any in Europe. Thereafte the story is straightforward: a population count was carried out by the Austrian authe ities in Belgium in 1784 and several counts were made in both Belgium and t Netherlands during the French occupation (1795–1813). The union between the t halves of the Low Countries established after the Napoleonic wars lasted just lo enough to allow the taking of the first proper census in 1829. The Dutch have continu the series every ten years as planned (switching to years ending in nought in 1920); t Belgians started a new series of their own in 1846 (switching to years ending in nou in 1880).



Europe Area 4b

Bibliography

** Russell puts the Low Countries in 1200 at 'about a million'. No one has directly estimated the population at the medieval peak, though it is generally accepted that this was at least equal to the population in 1500. All the data for the Netherlands from 1500 to the present day have been fully worked up by Slicher van Bath, whose figures for the area of the modern Netherlands are presented in his article in * Glass and Revelle and – at greater length but still in English – in* A. A. G. Bijdragen *12 (1965). No one has as yet done the same for the equally good Belgian material, though a quantitative view of Belgium's demographic history is contained in the overall figures for the Low Countries given by R. Mols in his contribution to the* * Fontana Economic History of Europe *(Vol. 2, Chapter 1): subtracting van Bath's figure from Mols' yields a series for the southern half of the Low Countries very similar to that used by us.*

*The recent material on migration to and from the Netherlands is well summarized in * Kosinski.*

EUROPE AREA 5 Germany

0·36m km²

West Germany 0·25m km²
East Germany 0·11m km²

When the last Ice Age came to an end the few thousand hunters who were roaming the North German plain followed the reindeer to Scandinavia, leaving the country to various food-gathering groups of only marginally more sedentary habits. This mesolithic population gradually increased in size until by the 6th millennium BC it numbered some 25,000. At this point the first farmers appeared. They came from the south-east, bringing with them the simple techniques which mark the beginning of the neolithic: they soon made Germany an important centre for the further diffusion of the Indo-European ethnic group to which they belonged. Numbers rose to 0·3m by 3000 BC (the end of the neolithic) and to 1m by 700 BC (end of the Bronze Age).

As the Indo-Europeans multiplied they differentiated. In Germany there was a polarization between the Teutons of the north (and Scandinavia) and the Celts of the south (and Gaul). Either because they were fiercer, or multiplying faster, or both, the Teutons had the Celts on the run from the start. By 58 BC when Julius Caesar arrived on the Rhine there were few Celts left on the German side of the river and a Teutonic invasion of Gaul was imminent. Luckily for Caesar the 3m Germans of his day were split into so many quarrelling tribes that he was able to defeat the few who crossed over without too much difficulty: Celtic Gaul survived as a province of the Roman Empire.

For the next four centuries the Romans prevented the Germans from expanding westwards and surplus Germans – whole tribes of them sometimes – had to seek their fortunes in the east. Then in AD 406 Rome's Rhine frontier collapsed. With the empire at their mercy (and the Huns at their heels) the Germans poured across the river, the most adventurous to found kingdoms as far away as Spain and North Africa, the more prudent to carve out fiefs from the nearer parts of Gaul. The dramatic success of this out-migration, the famous *Völkerwanderung*, did more than relieve population pressure in Germany, it turned the east of the country into a demographic vacuum. Slavs from Poland soon lapped over this area.

West Germany became part of Christian Europe when it was incorporated in Charlemagne's empire (AD 800). Less than two centuries later it formed the core of the major political unit of the time, the 'Holy Roman Empire of the German Nation'. The Empire was, to put it mildly, a disappointment, but the coincident demographic and economic upsurge was real enough. Between 1000 and 1300 the population of Germany more than doubled, rising from under 4m to 9m: everywhere old villages grew larger while new villages were founded where previously there had been only virgin woodland and heath. The development proceeded from west to east, borne on a

tide of migrating German peasantry which was eventually to overwhelm the Slavs of the eastern part of the country and restore the ethnic unity of the whole.

This chapter of Germany's demographic history was closed by the bubonic plague. By 1400 the population was down to 6·5m. Growth was resumed, at first with some hesitation, in the 15th century. By its end the population was not far short of the previous peak of 9m and by the end of the 16th century the total was 12m. By the outbreak of the Thirty Years War in 1618 it was 13m.

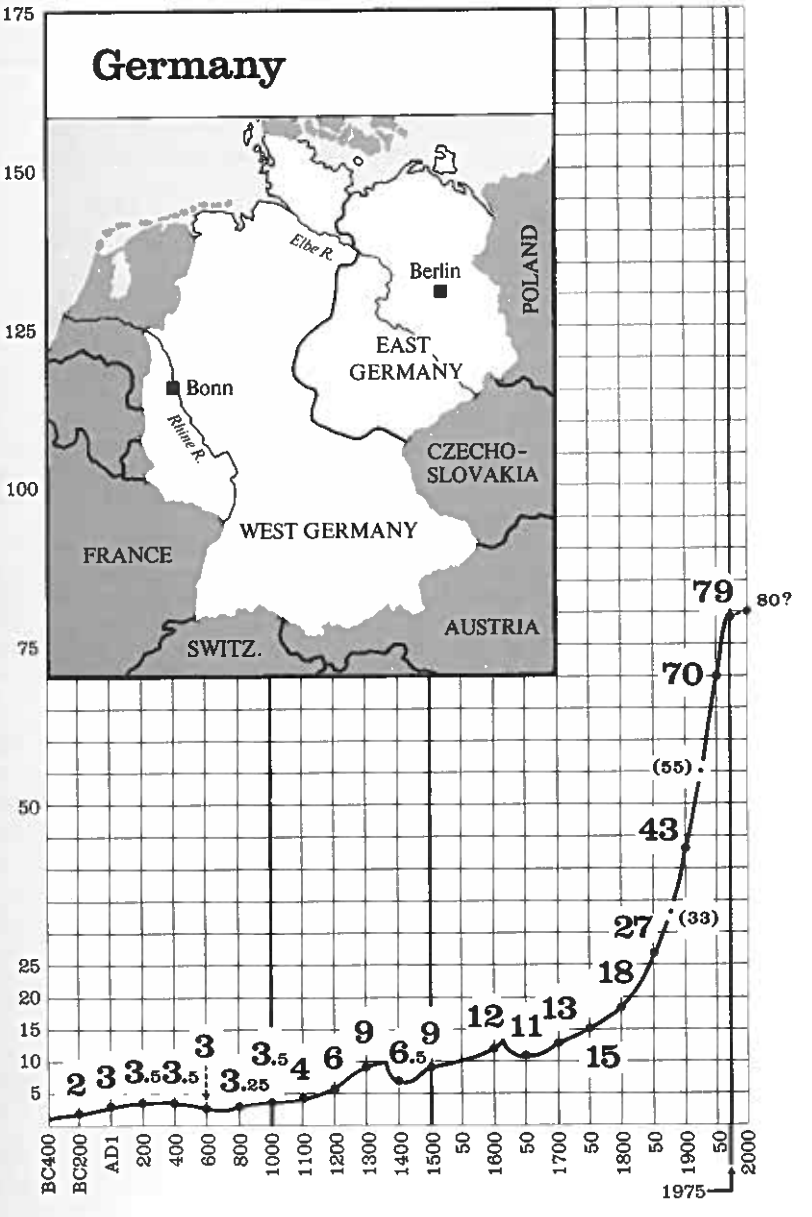
The demographic effects of the Thirty Years War have been the subject of much academic dispute. In some instances the apparently catastrophic losses have been shown to be due to short-term flight by people who returned to their homes when the armies moved on. And clearly it is dangerous to generalize from the places where severe loss has been substantiated because the war left parts of the country relatively unscathed. However it is generally accepted now that there was a significant drop in population in most areas. The war did enormous damage to the economy and as a result the nutritional standard and health of the community were undermined. Plague and other diseases struck repeatedly and harshly. By the time hostilities ended Germany was a sad place: its people were certainly much poorer and probably about 2m fewer.

By 1700 the losses of the war had been repaired, by 1800 Germany was a country of 18m people, and in the early 19th century, as the effects of the demographic revolution became apparent, the authorities began to talk of the problems of overpopulation. In some of the more despotic principalities there was an attempt to force the birth rate down by legislating against the marriages of juveniles or paupers: more enlightened states did what they could to encourage emigration.The outflow increased as the century progressed. By 1900 nearly 5m Germans had left for the New World – a figure that has been increased in this century by a further 1·5m.

Even so, the growth in population was very fast. By 1914 the area within the present-day frontiers contained 53m people. Urbanization and industrialization enabled these millions to support themselves at a better level than anyone could have expected but nevertheless so huge an increase was bound to strain any society. That it had done so was apparent in the political demand for *Lebensraum*, one of the features that made Germany such a worry for her neighbours. The course was set for the first of the two world wars.

Germany paid heavily in these conflicts. The first cost 1·6m German lives, the second 3·5m (0·5m of them civilians). Curiously, the greater loss does not kink the population graph, for it was offset by the arrival at the war's end of 4m refugees from the East and the Sudetenland.

The two states into which Germany has been divided since its defeat in the Second World War have very different demographic courses. East Germany has suffered a steady loss of population to its more prosperous neighbour: this, in a nation with a near-zero natural growth rate, has caused a fall in total numbers from 18·5m in 1946 to 17m today. The West German story is the opposite. As the 'economic miracle' has unfolded, so people have been sucked into the country from progressively further away. At first the strength of the pull was concealed by a continuing flow of refugees (another 6m since the immediate end-of-the-war influx): then it seemed that it could be satisfied by movement – mainly of Italians – within the EEC. But since the 1960s special arrangements have had to be made



Europe Area 5

to bring in 'guest-workers' from Yugoslavia and Turkey. Altogether there are more than 2·5m of these 'guest-workers' in West Germany today. The increase in total population has been in line with the expansion of the economy – a rise from 46m in 1946 to a present day figure of 62m. However, though the economy is still expanding, population growth appears to have ceased and it may well be that in the year 2000 neither West nor East Germany will contain significantly more people than they do today.

Empires and Republics

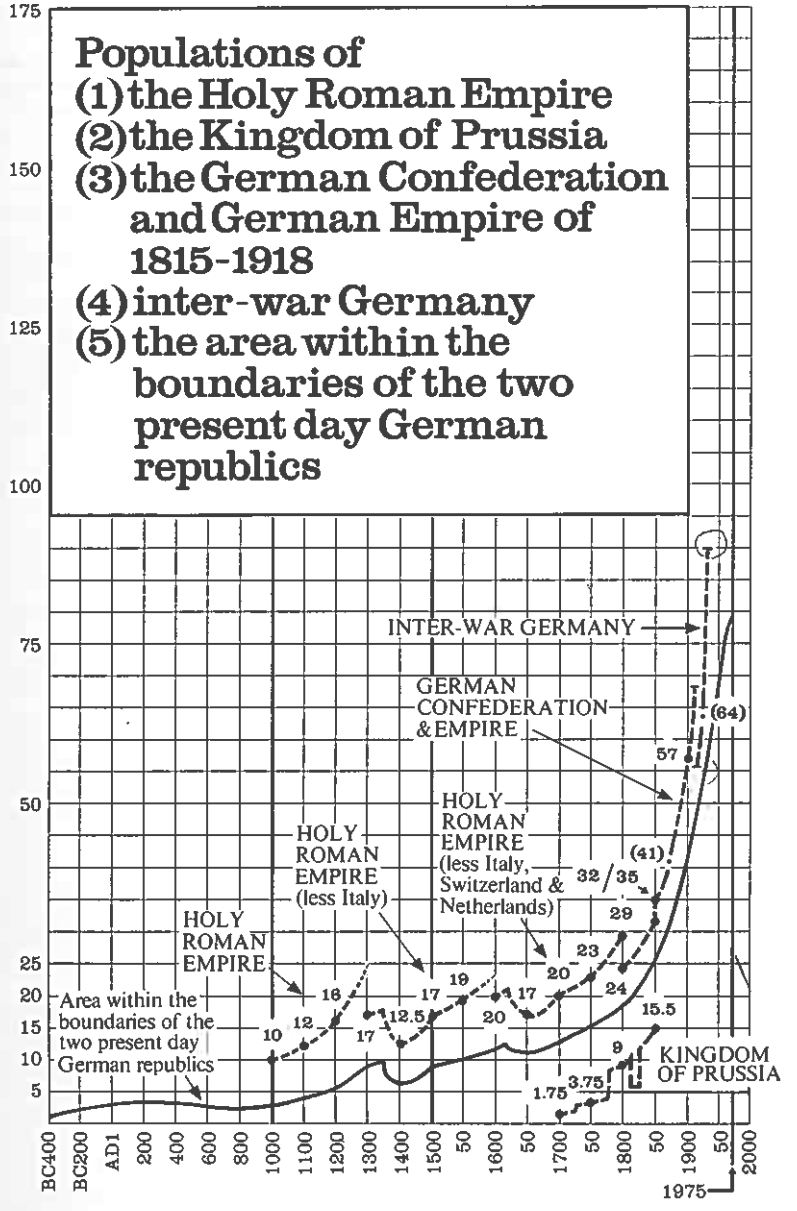
The First German Reich was created in the 10th century AD by the Saxon emperors. They brought under their rule an area corresponding to the modern states of Germany, Switzerland, Austria and the Netherlands plus the eastern borderlands of France, two thirds of Czechoslovakia and the northern two thirds of Italy. This conglomerate, the famous 'Holy Roman Empire', originally had a population of about 10m. It ceased to be an effective unit around 1200, by which time its population had increased to 16m. However, it continued to have some political meaning north of the Alps, so we have included a line on our graph giving the population of this area over the period 1300–1800.

During the 18th century a new power emerged within the Empire, the Kingdom of Prussia. During the 19th century Prussia entirely dominated the other states which she assembled first into a Customs Union (1834), then into an Empire (1871). The increment in the German population shown for 1850 is due to a purely administrative act, the decision to count the eastern provinces of Prussia in with the rest: previously they had been considered to lie outside Germany. The frontier was soon advanced again, in 1866 at the expense of Denmark, in 1871 at the expense of France. By 1914 the Empire had a population of 68m.

After the First World War Germany had to return Alsace-Lorraine to France and donate a considerable amount of territory to the new state of Poland: the initial population of the Weimar Republic was reduced to 60m. Hitler annexed Austria in 1938 and nearly all Czechoslovakia in 1939: by the time he went to war he was master of a nation of 90 millions.

Primary Sources

There are almost no data on which to base a population estimate for Germany until we reach the late Middle Ages. Then there are some tax records supplemented in the 16th century by parish registers. The first enumerations were carried out in the 18th century but of course relate only to individual states. This unsatisfactory fragmentation was brought to an end by the first pan-German census, held in 1853. There were repeat censuses in 1861, 1867, 1871, 1875 and every five years from then until the end of the empire. Inter-war censuses were taken in 1919, 1925, 1933 and 1939 and there were two post-war censuses covering the whole of Germany, the censuses of 1946 and 1950. Since then West Germany has held censuses in 1961 and 1970, and East Germany in 1964 and 1971.



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* *Russell gives a series of figures for the late classical and medieval periods which seem very reasonable to us. His first figure is compatible with the range proposed for the late Iron Age by G. Mildenberger in* Sozial- und Kulturgeschichte der Germanen *(1972); his pre-Black Death figure is in agreement with that suggested by Beloch in 'Die Bevölkerung Europas im Mittelalter'*, Zeitschrift für Socialwissenschaft *3: 405–423 (1900). Another series of figures, this time covering the period 1200–1800, is given in the* Jahrbuch für Nationalökonomie und Statistik 1935 *(quoted by * Clark, p. 95). For the early censuses in the individual German states see E. Keyser,* Bevölkerungsgeschichte Deutschlands *(1938), pp. 202–21 and 291–3. For the 19th century see the syntheses in * Sundbärg and the *** Handwörterbuch.

There is a bibliography of the controversy over the demographic effects of the Thirty Years War in D. V. Glass, Numbering the People *(1973), p. 35, n. 72. No one has done a really satisfactory job on the 18th-century material. For early Prussia see Otto Behre in* Geschichte der Statistik im Brandenburg-Prussia *(1905) and in* Allgemeines Statistisches Archiv, *Vol. vii (Tübingen, 1914). Also the * Handwörterbuch, *pp. 672–3.*

EUROPE AREA 6 Poland

0·31m km²

Prehistoric Poland was a sparsely populated land with no more than 5,000 inhabitants in the mesolithic, 25,000 in the neolithic and 100,000 in the Bronze Age. By the beginning of the Christian era the population had risen to 0·5m, and by the 10th century, when the first Polish state appeared on the political map of Europe, to 1·25m. Translated into densities per km² these are very low figures – a fact which explains not only the late appearance of the Polish principality but much about its subsequent history.

Medieval Poland was overshadowed by its much bigger and socially more advanced neighbour, the German Empire. From the 12th century on, German immigrants were moving into the western provinces of Poland in significant numbers and they soon set an economic pace that the natives could not match. During the early 14th century this process reached its inevitable conclusion: Germans of one sort or another annexed Poland's northern and western provinces – Prussia, Pomerania, the New Mark of Brandenburg and Silesia. Poland lost control of something over one third of her population: say 1·25m out of 3·5m.

The Black Death brought Poland a respite from German aggression. At a stroke it abolished the population pressure that had been the main force behind the Teutonic *Drang nach Osten* and as the thinly populated provinces remaining to the Polish state suffered relatively mildly from the epidemic there was actually a shift of military power in favour of Poland. By the late 15th century the verdict of the medieval centuries had been partially reversed. Germany's share of Polish territory and population was reduced to less than a quarter – say 0·8m out of a total that had recovered to the pre-plague figure of 3·5m. Nevertheless, the loss was considerable and looked like being permanent, for the process of Germanization was accelerating in the provinces over which the Germans retained political control. There had been a significant shift in the ethno-linguistic frontier.

In the 16th and 17th centuries German–Polish relations were relatively tranquil. Behind the scenes, however, the old forces were building up again and though Poland retained her position in the population league (between 1500 and 1750 her population grew 75% to a total of 7m) she failed to develop the economic and diplomatic skills necessary for survival. Indeed, the Poles seemed to have a natural ineptitude for power politics. By the third quarter of the 18th century this ineptitude had become almost an art form: all three of Poland's neighbours, Prussia, Russia and Austria, were so thoroughly antagonized that they agreed to sink their differences and partition Poland between them. In 1795 the job was done and, though a Duchy of Poland made a brief appearance during one of Napoleon's recastings of the political

map of Europe, at the Congress of Vienna in 1815 there was no place for the Poles. Of the 10m people living within the present-day Polish frontiers 4·5m found themselves in Prussia, 4m in Russia and 1·5m in Austria.

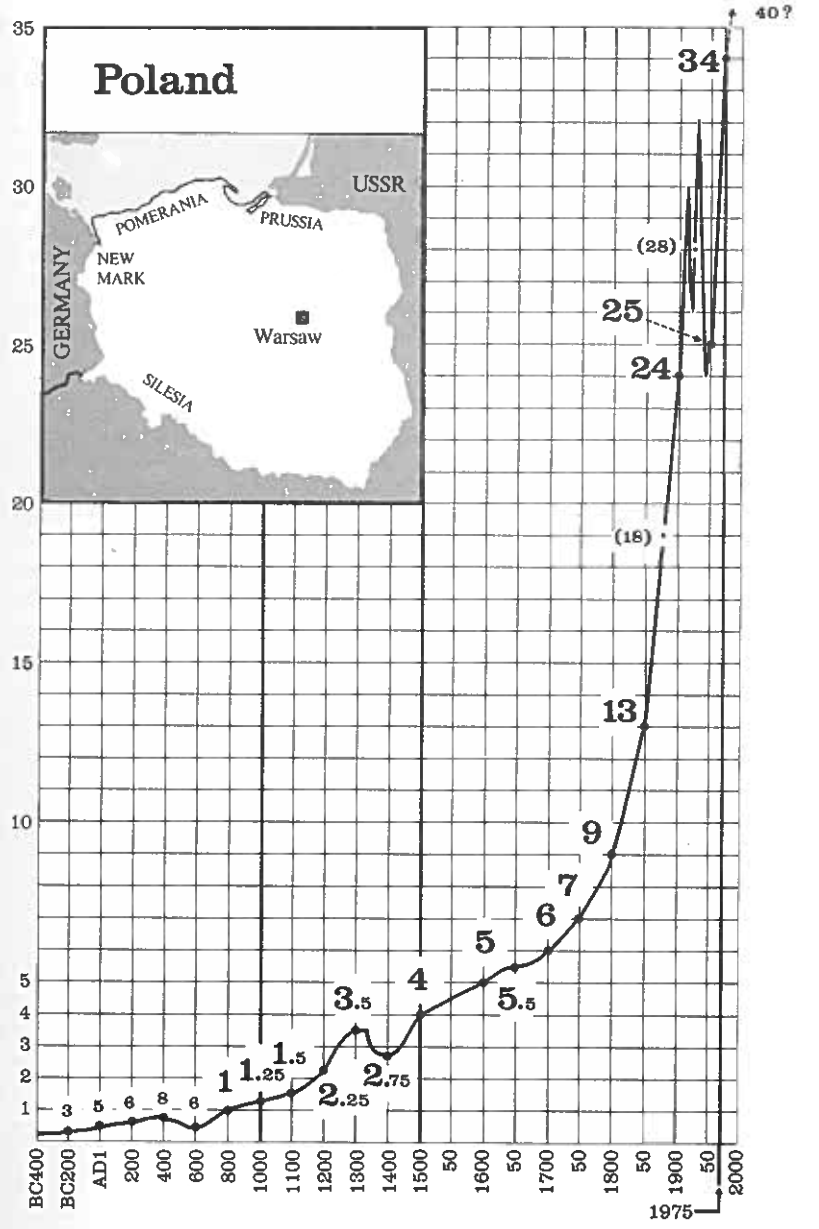
Depressing though the situation was, the Poles did not lose heart; the reproductive work they did in the 19th and early 20th centuries ensured the survival of the Polish nation. Between 1815 and 1914 total numbers expanded by a staggering 300% to reach a final figure of 30m. The actual increase was even higher, for in the second half of this period no less than 3·6m Poles emigrated: 2·6m to the USA, 0·2m to other parts of the New World, 0·4m to Germany, 0·3m to Russia and 0·1m to other parts of Europe.

Whether or not this reproductive achievement had to have a Malthusian ending, the First World War found Poles fighting on both sides and using their homeland as a battle ground. By the time it was all over the Poles had recovered their independence but the area within the present-day frontiers had suffered a population drop of 4m. The Second World War was an even greater disaster, not so much because of the fighting (which claimed 0·5m dead) as because of the Germans' meticulously planned extermination of the 3m-strong Jewish community in Poland and the Poles' understandably ruthless expulsion of Germans from the western provinces, now finally reclaimed for the Polish state. Having been German-ruled since the 14th century, 7·75m of the 9m people in these provinces were now German-speakers: between 1944 and 1948 all of them fled or were expelled. This outpouring was only partially offset by the transfer of 1·5m Poles from the eastern provinces simultaneously reannexed by Russia and the slow return of most of the 3m Poles who had fled or been deported during the war years: at 24m the population of the new Poland was no greater than it had been in 1914.

Poland has made a rapid recovery from the Second World War: the population is at an all-time high of 34m and though growth is now slackening the total is likely to be at least 40m by the end of the century. Also flourishing are the Polish communities abroad. There are 6m people of Polish descent in the USA, 0·4m in Brazil and 0·25m in Canada. Despite repatriations there are still about 1·5m in the USSR. Two other Old World communities are of more recent origin, the 0·5m Poles in France being mainly inter-war migrants who worked in the coalfields and the 0·15m in England mostly Second World War ex-servicemen.

The Kingdom of Poland–Lithuania (1385–1772), Post-Partition Poland (1773–93), Congress Poland (1815–1914) and Versailles Poland (1920–39)

One of medieval Poland's reactions to German aggression was to unite with Lithuania, at that period master of much of European Russia. In its initial form this Polish–Lithuanian state covered about 1m km² and contained some 7m people: in the early 16th century it lost 0·2m km² and a corresponding amount of its population. The lost area was recovered at the beginning of the 17th century only to be lost again in mid-century and more with it. The final version of Poland–Lithuania covered 0·75m km² and contained 7·5m people in 1650, rising to 12m in 1772, the year of the first partition. This reduced the area of Poland to little more than



0·5m km² and its population to 8m. Two more partitions (1793 and 1795) and the Polish state vanished completely.

Russia's share was greatly increased at the Congress of Vienna in 1815, when the central block of provinces, which later became known as 'Congress Poland', was handed over to her. 'Congress Poland' covered 127,000 km²: its initial population of 4m increased to 14m over the next century. 'Versailles Poland', the sovereign state that was created in 1920, was much bigger than this. Though the Germans yielded little, the collapse of Russia allowed the Poles to gain a very favourable frontier in the east. As compared to present-day Poland, 'Versailles Poland' was considerably larger in size (390,000 km²) and had a slightly larger population (27m in 1920 and 35m in 1939). However, it was less Polish – it included 6m Russians in the east and left out 2m Poles in the west. It was only after the Second World War that Poland recovered its original, medieval geography and a truly homogeneous population.

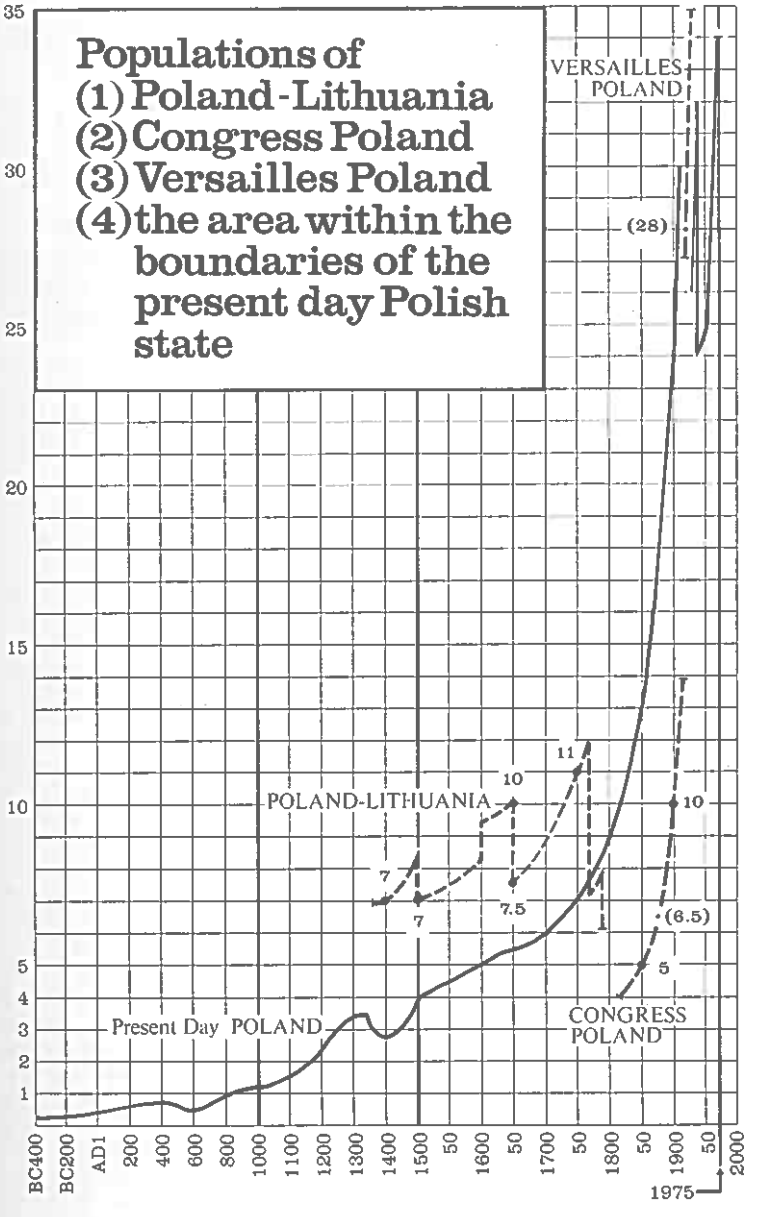
Primary Sources

*Estimates of Poland's population before the 14th century are based on nothing more than general ideas about likely densities. For the 14th century there are some tax rolls, though whether they provide an adequate basis for even the crudest estimate is debatable (see * Russell, pp. 146–9). The first really definite figures – definite not necessarily being the same thing as accurate – are those produced at the time of the 18th-century partitions. For this period, for the whole of the 19th century and the first decades of the 20th there are statistics collected and issued by the partitioning powers – Prussia, Austria and Russia.*

The reappearance of the Polish state at the end of the First World War was followed by the holding of the first national census (1921). Since then there have been censuses in 1931, 1946 and decennially since 1950.

Bibliography

The Poles are in the process of producing a multi-volume history of the population of their country which, when complete, should contain more than anyone would want to know on the subject. The only volume available so far is K. Dziewonski and L. Kosinski, Rozwoj i Rozmieszczenie Ludnosci Polski w XX Wieku (Growth and Distribution of Poland's Population in the 20th Century)*, Warsaw, 1967. Table 26 on p. 130 gives figures for the area within the present-day frontiers during the period 1900–1950. Until the appearance of the remaining volumes in the series the best overall account – and one that has the advantage of being available in English translation – is contained in the* History of Poland *by Aleksander Gieysztor* et al. *(1968), a volume which pays particular attention to demography.*



EUROPE AREA 7 Russia-in-Europe

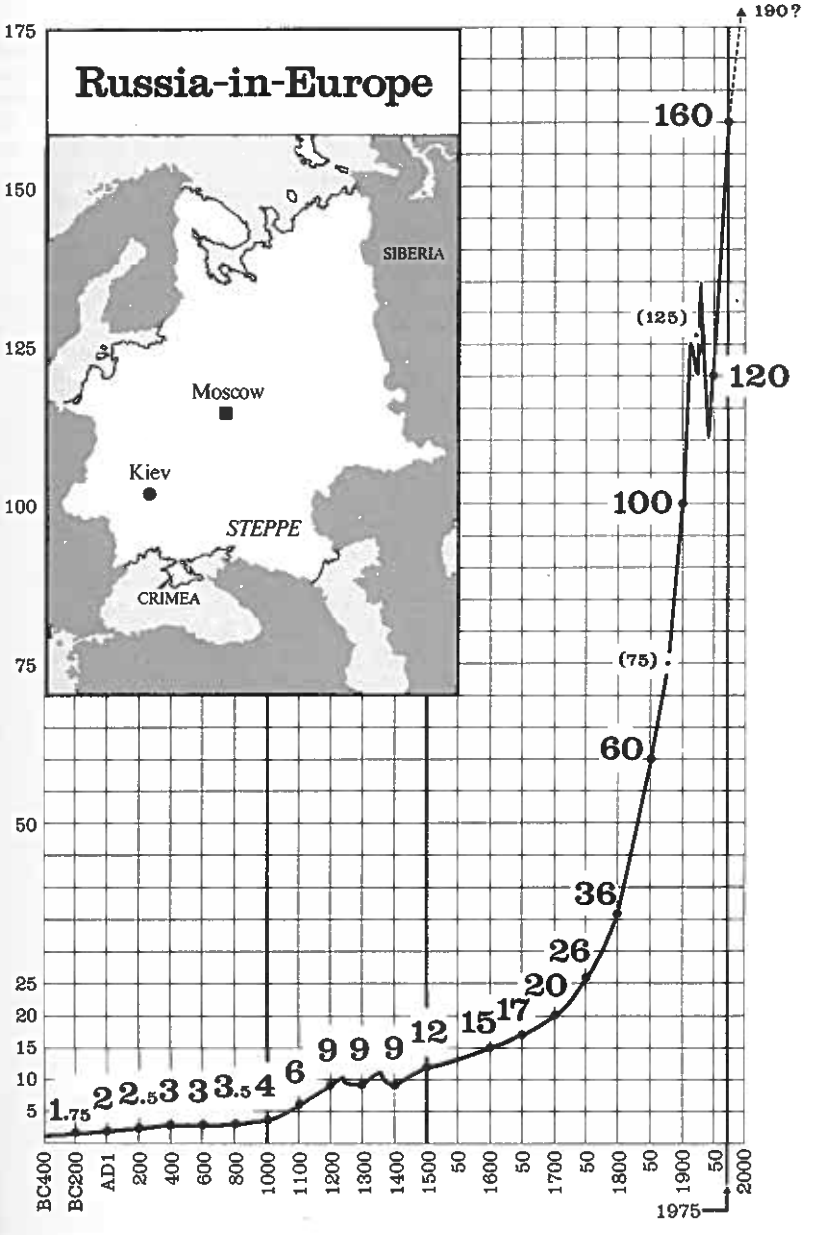
4·77m km²

Russia is proverbially vast. European Russia alone is as big as all the other countries in Europe put together and though it has never contained anything like half Europe's population the scale is such that even very low population densities add up to imposing totals. The mesolithic population can hardly have been less than 50,000, the overall population in the 3rd millennium (the middle of the neolithic period) less than 0·5m, while the figure for the close of the Bronze Age (when perhaps half the country had become acquainted with the idea if not the practice of agriculture) will have been over the 1m mark.

Not much above this point growth slowed down. Development continued much as before in the middle third of the country, but the arrival of the Scyths and their flocks in the south (in the 8th century BC) meant that this area – the steppe zone – now became fixed in the low-density pattern associated with pastoralism. The result was the threefold division that was to characterize Russia for the next 2,000 years: nomads on the steppe (first the Scyths, then the Huns, then the Turks and Mongols), peasants in the central third (the cradle of the Russian race), nothing up in the north (bar a few Finns). Inevitably the Russians who tilled the soil came to outnumber the steppe peoples who merely used it for grazing their animals. By AD 900, when the Varangians created the first Rus state, the Russians (at 2·5m) constituted two thirds of the population of the whole area, while the nomads (who did not have exclusive possession of the south) amounted to less than a sixth.

Numerical advantages are not in themselves conclusive. In the medieval era, when cavalrymen were worth many times their number of foot soldiers, the nomads always gave at least as good as they got. The Mongols, who in the early 13th century became the overlords of the whole Eurasian steppe, did much, much better than this. In 1237–40 their armies swept across central and southern Russia massacring everyone who did not immediately surrender, and many of those who did. Kiev, the traditional capital of the Rus state, was erased from the political map and the whole tract of land associated with it went out of cultivation. As a result the peasant population of Russia which had multiplied up to about 7·5m just before the storm broke dropped back below 7m.

The 14th century brought another setback in the shape of the Black Death. Because of the low population density the plague did not have the same impact as elsewhere in Europe, but the pest and the Mongols together added up to much the same final effect: they kept the population below the 13th-century maximum – 10m for the whole country – until the late 15th century. But with the 16th century the whole picture changed. The first musket shots announced the end of the nomad's military advantage, the peasants moved back on to the



Europe Area 7

steppe and the resurgent Rus state, now synonymous with Moscow, started to advance its southern frontier in methodical fashion. By 1600 only the Tartars of the Crimea lay outside Moscow's control and though they lasted as a political entity until 1783 the south had become a predominantly agricultural area well before the end of the 18th century. The population figure of 36m in 1800 – 80% greater than the 20m of a century earlier – reflects the first results of this. The main effect came in the next century, when the south made the major contribution to an overall population growth that was truly explosive.

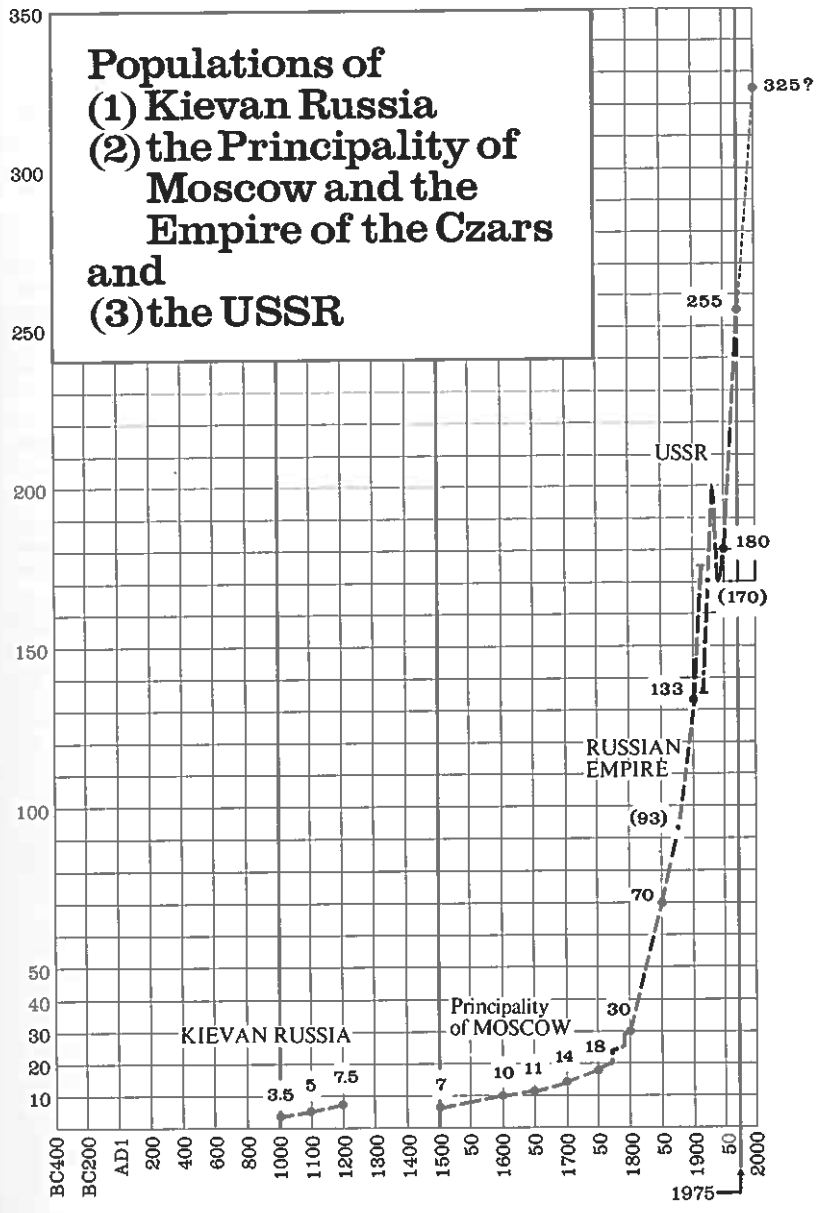
Russia's population increase in the 19th century was so big – near enough 200% – that it transformed the Russian countryside from a condition of underpopulation to one of overpopulation. Emigration to Siberia (5m in the period 1870–1914) and the New World (3m in the same period) siphoned off some of the surplus peasantry but it was the towns that had to take most of the overflow. As a result Russia finally acquired (mostly in the decades on either side of 1900 when the annual increment reached 2m) the demographic component needed to make a modern state, an urban proletariat. This was the sector from which the Soviets emerged and from which V. I. Lenin, against all expectations, was able to create the Bolshevik Revolution of October 1917.

The Bolshevik Revolution occurred in the middle of a period of war and disaster that temporarily brought the Russian population juggernaut to a halt. Even so the total effect of 2m war dead, 14m other 'excess deaths' (mostly due to malnutrition and disease in the later stages of the Civil War), 2m emigrants and a 10m birth deficit was only to put the 1925 population back to the 1910 level. Stalin and the Second World War between them were to do about double this amount of damage. The military death roll reached a staggering 10m (many of them must have been originally prisoners of war who did not survive their captivity or, at least, did not return from it), other 'excess deaths' totalled 15m and the birth deficit has been calculated at 20m. This time the population of European Russia was cut back to its 1905 figure.

The post-war recovery has been more than complete. The present population of 160m is the largest ever, and though the rate of increase is now slackening it should reach 190m by the end of the century. The great majority are Russians by race but there are some considerable minorities: notably 10m Turks of one sort or another (mostly Tartars), 5m Lithuanians and Latvians, 3m Estonians and Finns, 2m Jews, 1m Poles and 1m Germans. Among the Russians themselves one should perhaps distinguish between Great Russians (more than 60%), Ukrainians (30%) and Belorussians (less than 10%)

Russian and Soviet Empires

The first Russian state, the principality of Kiev, contained about three quarters of the population of the area. It soon split into several separate principalities which at their high point, just before the Mongol conquest of the mid 13th century, had a total population of some 7·5m. In the late 15th century the Princes of Moscow managed to create a new political grouping. The population of the area they controlled – roughly speaking the northern half of the country – grew from 7m in 1500



to 14m in 1700. The rise was almost entirely due to natural increase, the only new territories added to the realm being sparsely inhabited lands in the south-east.

The decline of Poland in the 17th and 18th centuries gave the Tsars the opportunity to advance westward and add some better-populated provinces to their empire. By 1800 they controlled an area equivalent in population to the present-day territory of the USSR in Europe. By 1815 they controlled an even larger area and a population in European Russia alone of 44m. This number tripled over the next 100 years, reaching 65m in 1850, 107m in 1900 and 133m on the eve of the First World War. The Asian part of the Empire grew even faster: from 3m in 1815 to 5m in 1850, 26m in 1900 and 37m in 1914.

The USSR in its inter-war form started off with a population of 135m (95m in Europe). This had increased to 171m (111m in Europe) by 1939, when the annexation of the Baltic States and half Poland boosted the total to 194m. On the eve of the German invasion in 1941 the figure was near enough 200m.

Primary Sources

The first tax records sufficient to provide an indication of the population of the Russian state date from 1678/9: firm figures begin with Peter the Great's enumeration of taxable male subjects in 1722. Repeat enumerations – hence the term 'revisions' – were carried out in 1762, 1796, 1815, 1835 and 1859. The first and only full census of the old Russian Empire was carried out in 1897: the Soviet authorities have taken censuses in 1926, 1939, 1959 and 1970.

Calculating population figures for present-day European Russia from the 'revisions' and the pre-Second World War censuses involves – besides subtracting the population of the Asian parts of Russia from the global figures – adding and subtracting populations on the western frontier so as to bring this line into the post-1945 position. The adjustments needed are large, but so is the Russian population, and the errors inherent in the process are not such as to affect the overall picture significantly.

Bibliography

The population of Kievan Russia is discussed in * *Russell* (*p. 100*) *and that of 16th-century Muscovy in Carsten Goehrk's* Die Wüstungen in der Moskauer Rus (*1968; see particularly p. 258*). *For the 17th century see Borish Pushkarev's calculations as quoted in Volume 5 of George Vernadsky's* History of Russia (*1969*), *p. 745; for the period from Peter the Great to the first Soviet census Frank Lorimer's* The Population of the Soviet Union (*1946*). *The results of the two most recent censuses are well set out in Paul E. Lydolph,* Geography of the USSR (*2nd edn, 1970*).

EUROPE AREA 8 Czechoslovakia

0·13m km²

Upper palaeolithic man in Czechoslovakia probably numbered less than 1,000, mesolithic man no more than about 5,000 and it was not until long after the introduction of farming that the total population reached 50,000. During the Bronze Age (2500–1000 BC), numbers rose to 200,000, while the last millennium BC saw a relatively rapid increase to a figure not far short of a million.

At this point the historical record begins. The country lay just beyond the boundary of the Roman Empire and did not directly experience the *pax romana* but it certainly benefited from the prosperity the Romans brought to central Europe and shared in the general increase in population that took place in 'Free Germany' in the 1st century AD. The Marcomanni of Bohemia (western Czechoslovakia) and the Quadi of Moravia (central Czechoslovakia) were reckoned among the strongest of the German tribes: the population of the country as a whole will have reached a peak of 1·25m by AD 250.

For the era this was substantial overpopulation and represented a significant component in the demographic pressure that was to be one factor in the fall of Rome. In the early 5th century, when this event finally occurred, the pent-up energies of the Germans were discharged in an out-migration that emptied the Czechoslovak area and allowed its repeopling with the Slav immigrants who have given the country its present name. From now on the Czechs (in Bohemia and Moravia, which together form the western two thirds of the country) and Slovaks (in Slovakia, the eastern third) form the overwhelming majority of the population.

At the best of times the departure of the Germans and the arrival of the Czechs and Slovaks would have caused a dip in the population graph. Coming as they did in the Dark Ages the movements caused a sharp drop to a low of 0·7m in AD 600. But by the year 1000 the loss had been recovered and for the three centuries following, the boom period of the medieval population cycle, there was rapid growth to a new peak of 3m.

The process of clearing and colonizing new land, which went on all over Europe at this time, was spearheaded in the Czech area by German immigrants: they brought their superior skills to both countryside and town and all along the perimeter of Bohemia established themselves as a substantial minority – the *Sudeten Deutsch*. Their arrival emphasized the political incorporation of Bohemia and Moravia in the German Empire just as the relative absence of Germans from the eastern, Slovak, third of the country reflected the fact that this area lay beyond the imperial frontier.

Czechoslovakia seems to have suffered less from the Black Death than the rest of Western Europe. Though growth was halted, reversed and resumed in a pattern not so dissimilar from that of

the continent as a whole, the fall in numbers was relatively slight and the medieval peak comfortably exceeded by the year 1600. By that date the Czech and Slovak populations totalled about 4·5m. This figure proved to be another isolated peak, however, for it was in Bohemia that the notorious Thirty Years War broke out (in 1618) and here that it did its worst damage. By the time the peace of 1648 was signed the population had shrunk by a fifth – by a quarter in Bohemia – and it was not till the end of the century that the antebellum levels of population were regained.

The 18th and 19th centuries were a period of accelerating growth. The population rose from 4·5m in 1700 to 6·75m in 1800 and 12·25m in 1900. And natural increase was even higher than these figures indicate. Because of the limited economic opportunities in their homelands, Czechs migrated in great numbers to other parts of 'Greater Austria' (by 1910, 8% of all Czechs lived in the Austrian capital, Vienna) and Slovaks to other parts of 'Greater Hungary' (by 1910, 5% of all Slovaks lived in the Hungarian capital, Budapest). Both Czechs and Slovaks also left for the New World in droves, something like 2m between 1850 and 1914.

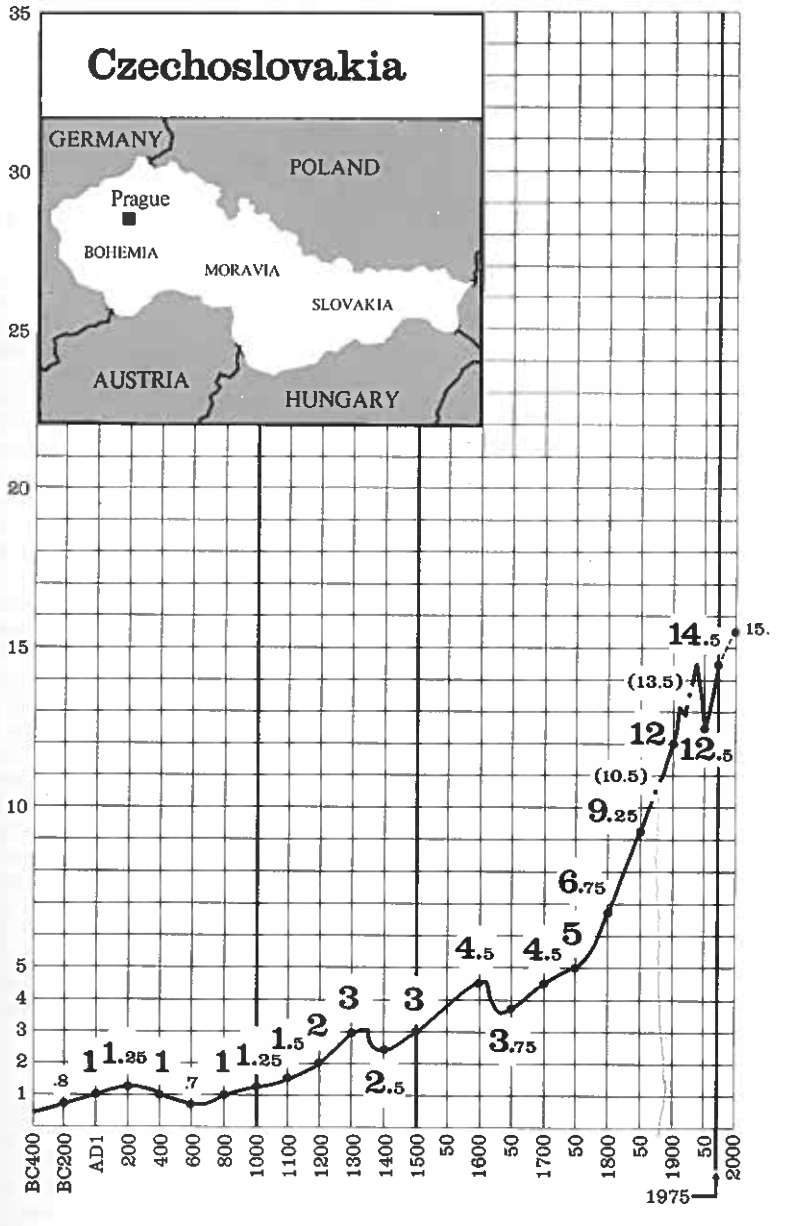
The Czechoslovak state established after the First World War experienced far less emigration. However, the rate of natural increase fell off so sharply during this period that the population had only risen to 14·4m by 1939. The Second World War drastically lowered even this figure. Those of the Sudeten Germans who did not flee when the Russians liberated the country were soon expelled by the new Czech government: altogether 2·4m people moved out, reducing the 1945 population to a figure of 12·2m – no greater than the population of 1900. Since then the loss has been made up but little more than that: at 14·6m the present population total is only marginally greater than the pre-war figure.

Primary Sources

A considerable amount of primary material exists for Czechoslovakia for the pre-census period, but it is difficult to obtain an adequate idea of it in the West. Bohemia shares in the general European pattern of taxation counts existing from the late Middle Ages, and parish registers from the late 16th century. Summaries survive of a 1702 count of all people over the age of ten. The picture for Moravia is less satisfactory, the earliest taxation data being 17th century. Both Bohemia and Moravia were covered by the Austrian military census of 1754 and the subsequent revisions, and by the series of true censuses starting in 1857 (see Austria). In Slovakia there is almost nothing to go on prior to the military census which, because of Hungarian objections to the procedure, was not taken in this area till 1784. Since the creation of the Czechoslovak state, censuses have been held in 1921, 1930, 1947 (Bohemia and Moravia only), 1948 (Slovakia only), 1961 and 1970.

Bibliography

There is a useful summary of the demographic history of Czechoslovakia in Demek and Steide, Geography of Czechoslovakia *(1971). The earlier sources are surveyed by V. Husa in* *Colloque *(p. 237). The material for the Czech lands from 1754 on is usefully summarized in two articles in* *Annales de démographie historique, *1966 and 1967.*



EUROPE AREA 9 Switzerland and Austria

0·12m km²

9a Switzerland

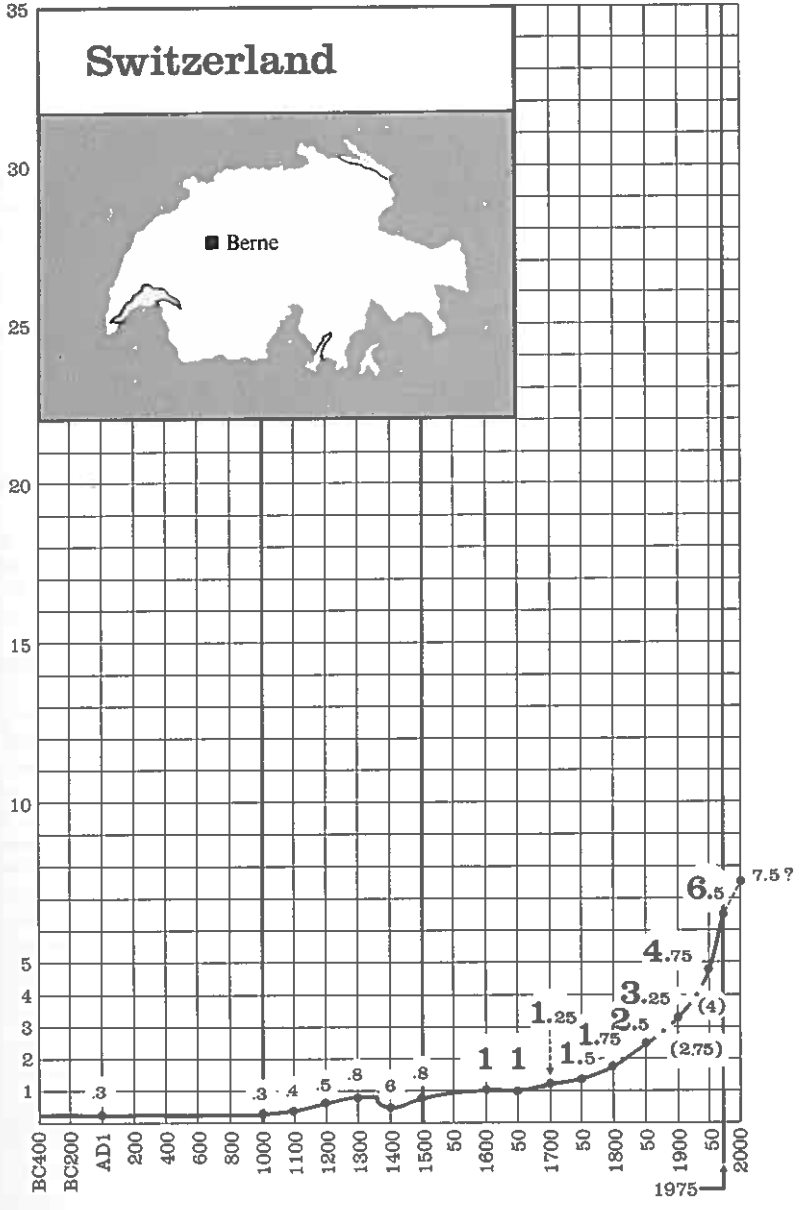
0·04m km²

Switzerland, which vanished entirely under the Alpine ice cap during the last Ice Age, remained an unpromising environment even when the glaciers retreated to the mountain tops. A few family-sized bands will have penetrated the country at the end of the upper palaeolithic and a few hundred people found a living by the lakes in the mesolithic, but significant population of the country began only with the introduction of agriculture in the 5th millennium BC. By the year 4000 we can think in terms of a population of 15,000 and a growth rate sufficient to double the population every millennium. When Caesar entered the country the Celtic Swiss, the Helvetii, numbered 250,000.

All over the Roman Empire there was a progressive drop in population in the 3rd and 4th centuries AD. Switzerland (Raetia), a much-raided frontier province, suffered a very severe drop and when the Empire finally fell in the early 5th century the land was nearly empty. At this point the Alemani moved in, making the eastern two thirds of the country German-speaking. As the inhabitants of the western fifth and of the southern slopes of the Alps continued to speak the late Latin languages which were to evolve into French and Italian respectively, Switzerland has been a multi-lingual area ever since. The ratio between German, French and Italian speakers, roughly 70 : 20 : 5 (plus another 5 for the rest), has proved remarkably stable.

Population in medieval times followed the general European trend. There was a period of increase, cut back in the 14th century by the Black Death, the loss being recovered in the course of the 15th century. The 16th century was marked by the introduction of another social division, this time in the sphere of religion. Roughly 60% of the Swiss were to end up on the side of the Reformed faith, another proportion that has stayed much the same through the centuries.

In the late medieval and early modern periods, Switzerland was, by the standards of the era, overpopulated. The cantonal governments tackled the resultant unemployment – and balance of payment – problems by arranging to provide mercenary armies for anyone willing to pay for them. The solution was certainly Malthusian, for it has been calculated that between 1400 and 1815 a million young Swiss died in other people's wars, a loss that was ten times greater than the loss by orthodox emigration. Fortunately, from the mid 18th century on, the country was industrializing sufficiently rapidly to render the export of live Swiss by either method unnecessary: indeed by the late 19th century immigrants were as numerous as emigrants. As a result, the proportion of aliens resident in Switzerland reached 15% in 1914, and though the figure dropped to 5% during the inter-war slump it has since risen again to 15% and more. The present-day prosperity of



Europe Area 9a

Switzerland has been at least partly won by an underprivileged immigrant labour force (mostly Italian) sandwiched between the Swiss and their machines.

Primary Sources and Bibliography

Apart from Julius Caesar's exaggerated account of the Helvetii (368,000 before he defeated them, 110,000 afterwards), data useful for the estimation of Switzerland's population begin to appear only in the 14th century. The first official estimate, a survey of parish registers, was made in 1798, the first actual enumeration in 1836–8 and the first in the present series of decennial censuses in 1850.

All the data bearing on the size of the medieval population have been worked up by Wilhelm Bickel, whose figures from 1300 on are quoted in Kurt B. Mayer's The Population of Switzerland *(1952), a book which also covers the rest of the demographic history of the country.*

9b Austria

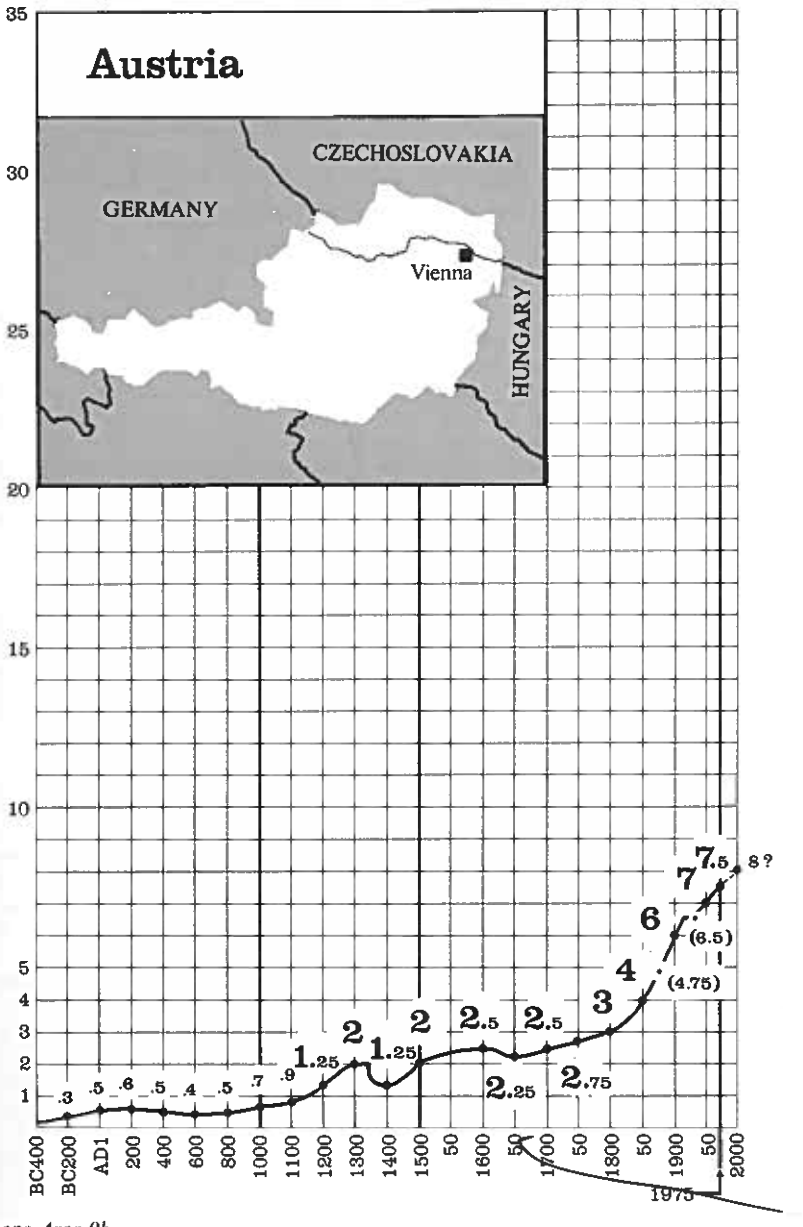
0·08m km²

Austria is a mountainous country and its population density has never been high: total numbers amounted to only 20,000 in 3000 BC, when farming communities had already been established in the lowlands for more than a thousand years, and the Bronze Age was nearly over before the population reached 100,000. Even when respectable figures were attained – 0·5m in the late Iron Age, on the eve of the Roman conquest of 15 BC; 0·6m during the 2nd century AD when the Roman province had its best years – they were not sustained. As the Empire declined numbers fell back to 0·5m and after its fall they went as low as 0·4m.

The immediate post-Roman centuries – the Dark Ages – saw Slavs, Germans and Hungarians fighting each other for possession of Austria. In the end the Germans came out on top, a result that is marked by the formal establishment of the Austrian state in the 10th century. The subsequent upturn in the country's fortunes was dramatic. New villages appeared everywhere, indicating significant expansion in both the intensity and extent of cultivation: population tripled, reaching 2m by the early 14th century. Austria had justified its place on the map of Europe.

The 14th-century crisis reduced Austria's population by a third, a loss which was not recovered until the early 16th century. Growth then resumed, the 2·5m mark being reached by the end of the 16th century and marginally exceeded by 1618, when the Thirty Years War began. Austria escaped direct devastation in this conflict but it could not escape the economic dislocation and outbreaks of plague that accompanied it: once again numbers fell back and the 17th century ended with the population no greater than it had been 100 years earlier.

This slow-quick-slow pattern was repeated in the modern period. The rise from 1750 to 1850 was 45%, which sounds reasonable but was a lack-lustre performance compared to the overall European increment of 90%. From 1850 to 1900 things went much better, the



Europe Area 9b

increase of 50% matching the European average. Here immigration from the outlying provinces of the Hapsburg Empire to Vienna, its capital, was an important factor. Conversely, when the Hapsburg conglomerate was dismantled after the First World War, Austria lost impetus. The population gain since then has been barely a million and Vienna has actually shrunk – from 2m in 1918 to 1·5m today. The city's cosmopolitan and polyglot image has also gone. The Nazis eliminated the country's last sizable minority, its 0·5m Jews, leaving Austria with a population that is remarkably homogeneous: it is now 90% Catholic and 99% German-speaking.

The Austro-Hungarian Empire

In 1526 the Hapsburgs of Austria inherited Silesia, Bohemia, Moravia and as much of Hungary as they could keep the Turks out of. The population of this bloc was not far short of 7m, a total which rose to 11m with the liberation of all Hungary at the end of the 17th century. A further boost, to about 18m, came from the acquisition of a motley collection of new territories – Belgium, Milan, Sardinia and the southern third of Italy – during the war of Spanish succession (1701–13). Over the next few years the Italian provinces underwent a confusing series of changes, most of them unfavourable, and in 1742 Prussia annexed Silesia: however, Austria's share in the partitions of Poland (1772–95) brought in sufficient new people to raise the population of the Empire to a new peak of 24m.

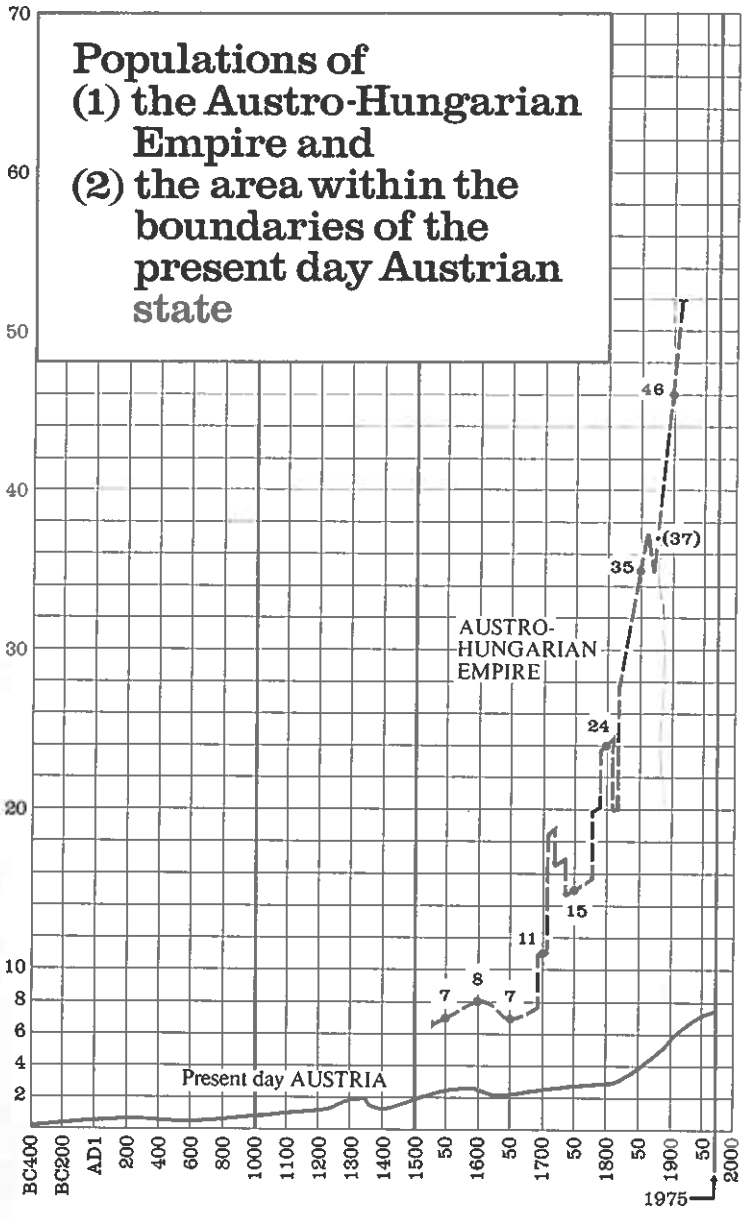
Napoleon had it in for Austria and in his heyday the Hapsburgs were forced to renounce their Belgian and Italian provinces. The loss of Belgium proved permanent, but large parts of Italy were awarded to Austria at the Congress of Vienna (1815), and this territorial recovery plus an accelerating rate of natural increase carried the imperial population to a new high of 35m by 1850. The rate of increase now became so fast that the loss of the Italian provinces to the forces of the *risorgimento* caused only a small kink in the population graph. By 1914, on the eve of the war that was to prove its death knell, the Empire's population was 52m.

Primary Sources and Bibliography

From 1754 on the course of Austria's population history is sure for sufficient data are available to bridge the gap between the official population estimate made in that year and 1857, the year of the first proper census. The imperial authorities took a second census in 1869 and a decennial series in the years 1880–1910. The Republic has taken censuses in 1923, 1934 and decennially since 1951.

Before 1754 there is almost nothing; we can only assume that the demographic patterns followed our general rules and make estimates on that basis.

Figures for the years 1754–1973 for the area of modern Austria are given in Statistisches Handbuch für die Republik Österreich, 1973. *For the Austro-Hungarian Empire in the 18th century see R. Gurtler* Die Volkszählungen Maria Theresas und Joseph IIs *(1909), and in the 19th-century* **Sundbärg and the* *Handwörterbuch.



EUROPE AREA 10 Hungary

0·09m km²

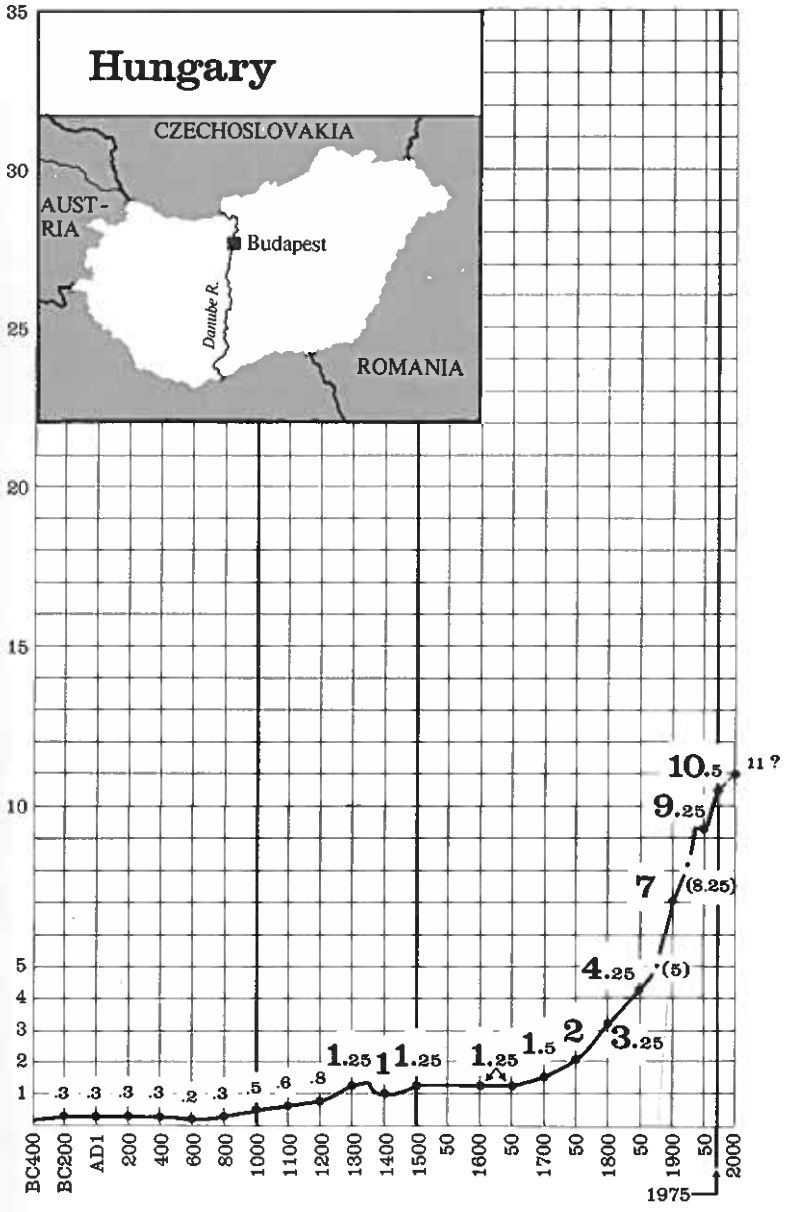
In the prehistoric period Hungary's population grew from the few thousand who lived there in the mesolithic to 100,000 in the neolithic and some 300,000 in the Iron Age. Recorded history begins with the Roman conquest of the western half of the country in 9 BC. This half, which contained two thirds of the population, became the province of Pannonia and the River Danube, which divided it from the relatively empty eastern half, the frontier of the Empire.

The frontier held till the 3rd century AD. Then barbarian invasions brought successive waves of depopulation and repopulation as the original inhabitants fled and were replaced by wandering tribes of Germans, Huns or Slavs. The demographic nadir was probably reached during the Avar supremacy in the 7th century AD. The Avars, like the Huns, were full-blown nomads from Central Asia and as such liked to keep their grazing land free of peasants. In their day Hungary probably contained no more than 200,000 people, half of them Avars and their dependants, half of them frightened peasants of debatable ancestry.

Hungary received its definitive repopulation at the end of the 9th century when the Magyars, a people of Finnish stock but Turkish habits, arrived from the Russian steppe. A hundred years later the Magyars had abandoned paganism and pastoralism in favour of Christianity and settled cultivation, Hungary had joined the medieval European community and the population of the area had begun to increase.

Medieval Hungary, though increasing in prosperity with each generation, remained by European standards a relatively underpopulated country. As such it suffered less severe and less lasting damage than the rest of Europe during the 14th-century pandemic of bubonic plague known as the Black Death. By 1500 the population had reached a record level of 1·25m. On the horizon however was a new threat, the Ottoman army, which was to prove a harsher brake on population growth than the plague bacillus. The Ottomans followed their easy victory at Mohacs (1526) by occupying half Hungary: by failing to occupy the other half they condemned it to the even worse fate of a no-man's land in what now became an unending struggle between Cross (as represented by the Hapsburgs of Austria) and Crescent for the Balkans. While in the rest of Europe there was steady growth, the population of Hungary barely held steady at the pre-Mohacs figure.

These dark days ended with the Turkish failure before Vienna in 1683 and the subsequent liberation of Hungary by the Austrians. The 18th century was one of rapid growth, a sort of catching-up performance that more than doubled the population. There was a slight slowing-down in the rate of increase in the early 19th century, then,



Europe Area 10

after 1850, the growth rate picked up again as Hungary became involved in the pan-European processes of urbanization and industrialization. Taken as a whole the 19th-century growth rate matches that of the 18th.

Hungary has not done so well in this century. Though the dismemberment of the Kingdom of Hungary at the end of the First World War was carried out according to virtuous principles it is difficult not to feel that people who had picked the winning side, like the Romanians, did better than people who had sided with the Central Powers. Hungary's ethnic purity (it is now homogeneously Magyar) was created by allotting to the new state only impeccably Magyar areas. As a result although there are no Romanians in Hungary there are 1·5m Magyars in Romania. An attempt to reverse the verdict of the First World War during the Second proved abortive, and after a temporary expansion at the expense of its neighbours Hungary resumed its Versailles frontiers. It had lost 0·5m dead in the process, a heavy blow for a country of 9m people. Moreover growth in the post-war period has been very slow: the 1975 population is only 10·5m and the projection for the end of the century no more than 11m.

Primary Sources and Bibliography

See under Romania.

EUROPE AREA 11 Romania

0·24m km²

With the introduction of agriculture in the 6th millennium BC Romania's population rose sharply from its mesolithic level of some 10,000 to more than 100,000. By the Iron Age the total number of inhabitants must have been around 0·75m, of whom three quarters will have lived in Dacia, as Transylvania was known at this time. The other half of Romania, Transcarpathia, was part of the Scythian realm, an empty world of occasional herdsmen and even more occasional family camps: its only agricultural settlements were a couple of Greek colonies on the coast and a scattering of villages along the southern and eastern fringes of the Carpathians.

The distinction between settled and pastoral lands remained much the same during the Roman period (AD 106–270), during the German occupation of the Carpathian area (270–370) and the Hun supremacy (370–470). Following this the Slavs moved in and for the first time the Transcarpathian steppe received a sprinkling of peasants. Despite razzias by whichever nomadic tribe was temporarily dominating the Russian steppe, this Transcarpathian peasantry survived until the second half of the 11th century, when the Patzinak Turks, driven westward by the Cumans, moved into the area. In the presence of the Central Asian Turk no settled life was possible. From then until the end of the 13th century Transcarpathia was desolate again, the preserve of the nomad and his flocks. As a result its population in the year 1200 was probably little greater than it had been in 200. However, for Romania as a whole the figure was up a bit: Transylvania was beginning to share in the rising prosperity of the Hungarian Kingdom of which it was politically a part.

In the late 13th century the nomad tide finally ebbed, peasants returned to the steppe and the history of modern Romania begins. The Romanians say that the colonists on this occasion were descendants of the original Romanized inhabitants of Dacia still speaking a language of Latin type (which Romanian undoubtedly is) and now emerging from their Carpathian refuges after a thousand years of total obscurity. Most historians, on the other hand, incline to the view that the Romanian speakers (Vlachs) came from south of the Danube where there is no doubt that Latin-derived languages had continued in use throughout the Dark Ages. Whatever their origins, the Vlachs made a success of their colonization; the population of Transcarpathia began to increase rapidly and, despite a dip in the curve following the Black Death, the figure for Romania as a whole was over 2m by the first quarter of the 16th century.

The Turks of the steppe may have withdrawn from Romania for good but by the 15th century the Ottoman Turks were advancing from the south. The Romanian principalities, Transylvania, Wallachia and Moldavia, became Ottoman protectorates, a condition

which exposed them to both Turkish exploitation and Christian assaults. Economic and demographic growth was stunted and remained so until the 18th century. Then came comparative peace and a quickening national pulse. Both in Transylvania (liberated by the Austrians at the beginning of the century) and Transcarpathia (increasingly protected from Ottoman exploitation by the Russians) the population more than doubled between 1700 and 1800. It was to double again in the 19th century. By the time of the creation of the modern state of Romania at the end of the First World War the population had reached 13m. Not all of them were Romanians: the population included 0·75m descendants of the German colonists who had settled in Transylvania as far back as the 13th century, 0·75m Jews and no less than 1·75m Magyars.

Romania is one of the few European countries that have retained a high rate of increase in the 20th century: the 1975 figure is nearly twice that for 1900 and the projection for the year 2000 is 25m. The population is more uniform than it was at the beginning of the century: the Jewish community was all but annihilated during the Second World War; there are less than half a million Germans left and though there are still 1·5m Magyars they now amount to less than 7% of the population instead of over 10%.

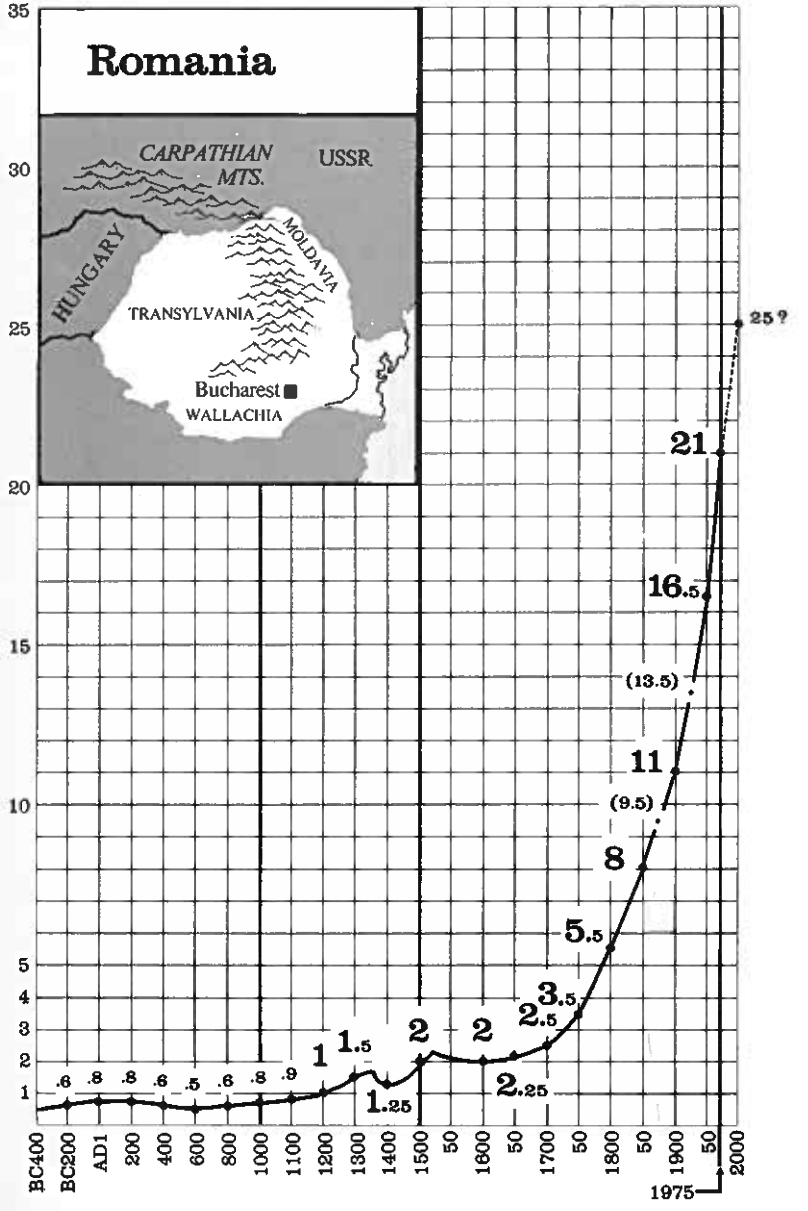
Primary Sources and Bibliography

Since the end of the First World War the Romanians have held censuses in 1930, 1941, 1948, 1956 and 1966, the Hungarians in 1920, 1930, 1941, 1960 and 1970. During the inter-war period Hungary had the same frontiers as today but Romania was considerably larger: a figure for the 1930 population of the present Romanian area is given in * *Frumkin.*

For the period prior to the First World War the data are best considered under the headings not of Hungary and Romania but of Ciscarpathia (Hungary and Transylvania) and Transcarpathia (Wallachia and Moldavia).

Ciscarpathia * *Beloch's guess at the population in Pannonia – 4·7 per km² – needs reducing to 3 or so for Ciscarpathia as a whole. This is actually the density proposed by Kovacsics* (*Colloque, *pp. 249 ff.*) *for* AD *900. Kovacsics' survey covers the medieval and early modern periods; he quotes what figures are available, though these do not really amount to much before the expulsion of the Turks. The earliest Austrian enumeration (a gross underestimate) was carried out in 1715: the first accurate returns are those of 1787. In 1857 there was a proper census, another followed in 1869 and a decennial series covers the years 1880 to 1910. Figures for the area of modern Hungary are not too difficult to extract from these Austrian censuses: a series starting in 1840 is given in M. Pecsi and B. Sarfalvi,* The Geography of Hungary *(1964).*

Transcarpathia *The evidence prior to the first Romanian enumeration, that of 1859, is reviewed by Stefan Pascu in* *Colloque, *pp. 283 ff. It amounts to no more than a few incomplete tax rolls for the period from the late 16th century on and though these give an idea of rates of growth they yield figures for total population that are far too low. Even the count of 1859 underestimated the population by about 10%. Reliable figures*



*begin with the quinquennial censuses held between 1884 and 1899. The best figures for the 19th century as a whole are those calculated by * Sundbärg: the gap between them and the beginning of the First World War is covered by the census of 1912.*

Approximate figures for the area of modern Romania can be obtained by adding one third of the figure for Ciscarpathia to the figure for Transcarpathia.

EUROPE AREA 12 Iberia

0·59m km²

0·50m km²
(including the Balearic Isles but excluding the Canaries)

12a Spain

The palaeolithic artists who produced the later Spanish cave paintings came from a population that is unlikely to have exceeded 5,000. Numbers grew to 50,000 with the improvement in climate during the mesolithic period (8th millennium BC) and then to some 0·5m with the introduction of farming (4th millennium BC). By the beginning of the Bronze Age (2000 BC) the total was 1m, by its end (1000 BC) 2m, and by the time the Romans established control over the area in the last century BC it was 4m.

The Roman Empire had a couple of good centuries during which Spain's population multiplied up to 5m, then, in the 3rd century AD, it got into a bad economic scene. As a result population figures began to slip back everywhere, Spain included. In the early 5th century, when Rome was sacked and the Empire fell apart, the downward trend accelerated. The Barbarian invasions were not directly responsible – the number of Germans who settled in Spain for example was probably greater than the number of natives they despatched – but the classical Mediterranean economy was now on its last legs and could no longer support anything like the numbers it had in the past. Conversely if there is any significance to the fact that the arrival of the Arabs on Spain's doorstep at the beginning of the 8th century coincides with the first signs of recovery in the peninsula, it lies not in the number of Arabs, which must have been tiny (30,000 at most), but in the vigour of their culture. They revitalized both the agriculture and the urban life of the south.

Though the Arabs did not conquer all Spain they had things pretty much their way till the early 11th century: two thirds of the country was under Moslem rule by then and Moslems numbered 0·8m, or a fifth of the total population. In the later 11th century the Christians of the north recovered, in the 12th – as the country's population rose past the 5m mark – they re-established themselves as the dominant element politically. This local change in the balance of power is an aspect of an important European event, the shift in the demographic centre of gravity from the Mediterranean littoral to the Atlantic (see Fig. 1.10, p. 28). As far as Spain is concerned the 13th century was the one that clinched it. The last important battle of the *reconquista*, the Christian victory at Los Navos de Tolosa, was fought in 1212 and in the population boom that followed (and which increased total numbers from 5·5m to 7·5m) the Moslem component was excluded. By 1300 Spain was definitely part of Christendom again.

The medieval boom came to a sticky end in the Black Death, which cut the number of Spaniards back to 5·5m. In the early modern period this loss was recovered, while accidents of inheritance in Europe and of discovery on the high seas turned Spain into a world power. By the middle of the 16th century

the 7·5m inhabitants of the Spanish kingdoms were the mainstay of the Hapsburg Empire, which controlled more than 20 of Europe's 90 millions and 9m of the 12m natives in the New World.

The Hapsburgs were proud of the fact that they used their power in the cause of Catholic uniformity. In doing so they were certainly in accord with Spanish sentiment which had applauded the expulsion of the country's 150,000 Jews in 1492 and was to be equally approving when the last 250,000 Moslems received the same treatment in 1609–14. But the policy was wrong. The Protestants of the north of Europe had cut loose from the old ways of doing things and were getting richer all the time: if Spain couldn't beat them (which she couldn't) she ought to have joined them. But the choice was made for Catholicism and a Mediterranean orientation. Consequently the country was so badly hit by the economic crisis of the early 17th century – during which the population dropped back to 7·5m again – that by the time it had recovered it was hopelessly behind. At the beginning of the 18th century, without so much as a by-your-leave, Spain's allies and enemies took over her empire and divided it up among themselves.

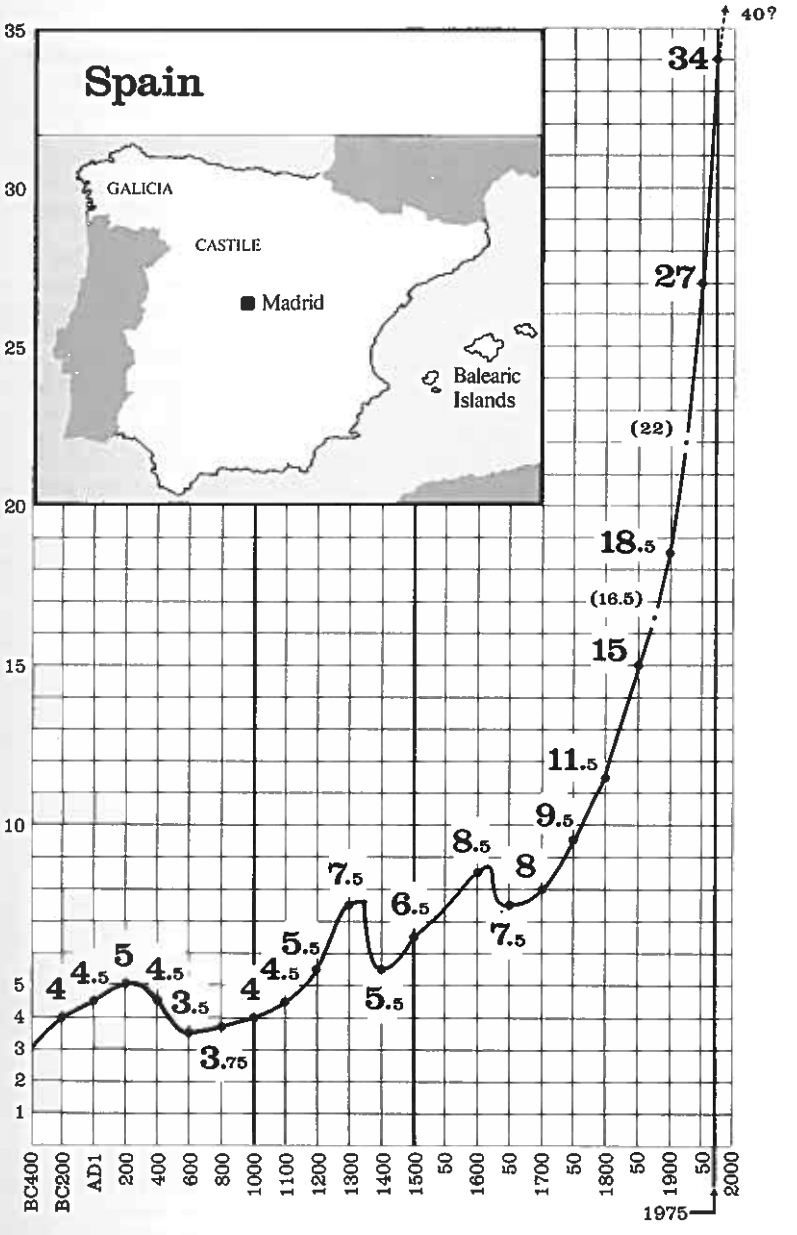
Spain's population increased during the 18th and 19th centuries but did so relatively slowly: numbers were only 11·5m in 1800 and 18·5m in 1900. The increments, which are equivalent to 44% and 61% respectively, compare unfavourably with the 50% and 116% achieved by Europe as a whole. In the 20th century the Spanish rate of growth has accelerated: the gain of 84% in the first three quarters comfortably exceeds the European average of 63%. In political terms this could be seen as a success for Spain's leaders, who kept the country out of both world wars: however the Civil War of 1936–9 cost over 0·5m lives, proportionately as big a loss as that suffered by the United Kingdom in the First and Second World Wars put together. Probably the best way of looking at the increase is as a catching-up operation by a community that, in terms of social evolution, had fallen unnecessarily far behind its neighbours.

Emigration from Spain has a long history but its net effect is difficult to quantify. Probably only 100,000 people left the country to settle in the New World (mostly Mexico) in the 16th century. However, what with shipwreck, disease and death in battle we can guess that the net loss must have been at least twice this. By the end of the 18th century the cumulative total must be reckoned at more than 1m and we know that a further 2m left in the 19th century (most of them for Argentina, Cuba or Brazil). In this century the outflow to the New World has been about 1m while a further 1m have gone to Europe and North Africa. How many of this last group will return home in the long run remains to be seen.

12b Portugal

0·09m km²
(excluding Madeira and the Azores)

A pattern of prehistoric development similar to Spain's took Portugal from a population of a few hundred in the late palaeolithic to a few thousand in the mesolithic and to a few tens of thousands after the establishment of farming (3000 BC). By the time of the Roman conquest there were 0·4m people in the



Europe Area 12a

area, a number that rose to nearly half a million by the end of the 2nd century AD. From there to a third of a million at the Dark Age low point, 0·6m by AD 1000 and 1·25m by 1300 is a relatively better performance than average; in fact it puts the country – as is only right – in the Atlantic rather than the Mediterranean category.

The Atlantic was to be Portugal's highway to success. In a sustained programme of exploration through the 15th century, Portuguese seamen mapped out the Cape route round Africa to India: in the 16th century the rewards flowed in. The new-found wealth supported a 60% rise in the country's population (to 2m), an increase achieved despite the very considerable manpower drain – a net loss of 125,000 – imposed by the new overseas commitments.

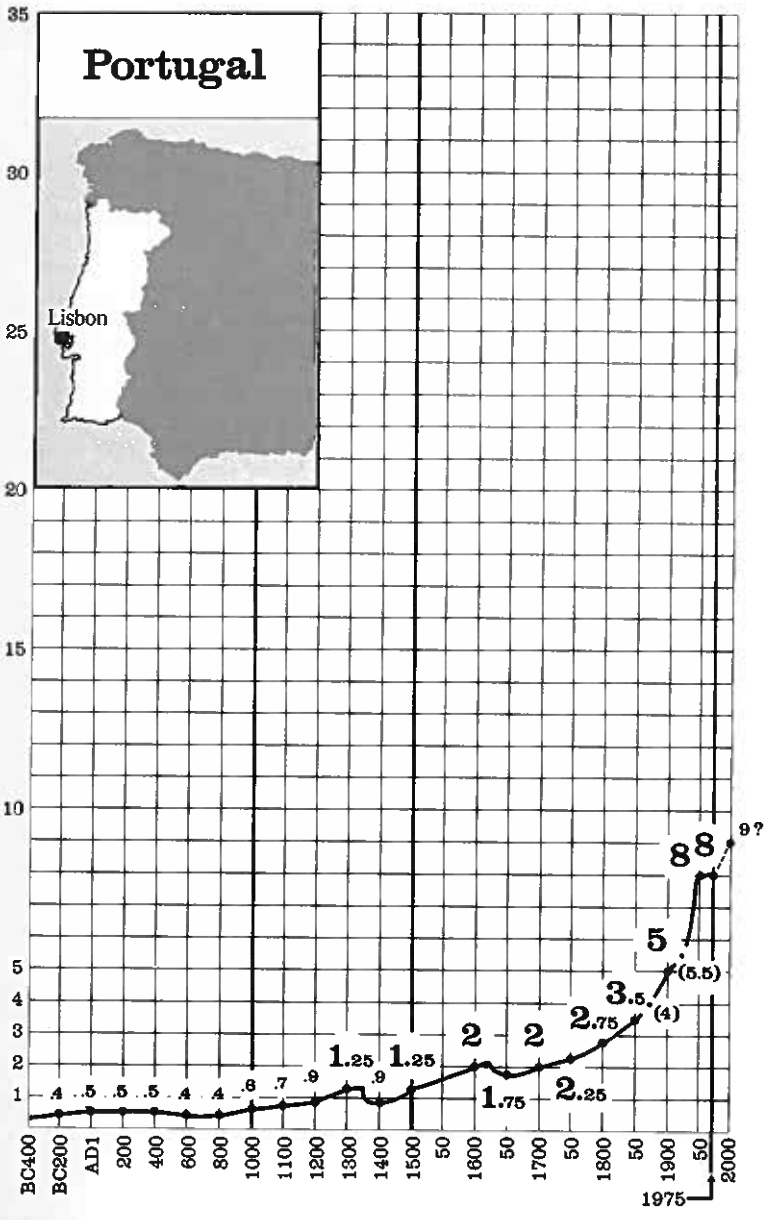
After 1600 most of the fizz went out of this situation. The Dutch elbowed their way into all the best routes, leaving Portugal with only Brazil and a ramshackle collection of outposts that had little rhyme, reason or profit to them. In the homeland numbers slumped (to 1·75m in 1650), recovered (to 2m in 1700) and though they then started to grow again there was little economic justification for this. To escape the life of rural drudgery that otherwise faced them some 2m Portuguese emigrated to Brazil in the period 1700–1950: this outflow held the increase in the homeland down to a factor of 4 over this period as against a European average of 5.

Following the Second World War emigration rose to new heights. Another 0·3m people left for Brazil, government settlement schemes in Africa built up the white populations of Angola and Mozambique from less than 0·2m to more than 0·6m, while the spontaneous movement of workers to France created a resident Portuguese population there of 0·5m. The subtractions were sufficient to prevent much increase in the numbers at home: between 1950 and 1975 the population only managed to increase from just under to just over 8m. Now that the African settlers are all hurrying home and job opportunities for foreigners in France are contracting, Portugal's population must start to go up again faster than this. It is likely to be nearer 9m than 8m by the end of the century.

Primary Sources

Population estimates for Roman Iberia are better founded than most, for Pliny (Natural History III, *23–28*) *has preserved the results of a census taken in Galicia (the north-west corner) at the beginning of the Christian era: his figures are equivalent to a density of 10 per km². For the medieval period there are records of various hearth taxes – the earliest a Catalonian one of 1281–5 – but these pose a lot of problems: how many people lived in a house, how many houses were excluded, how does one area compare with another? The first documents that even pretend to be complete are much later – a Portuguese tax roll of 1527–8, two Castilian ones of 1541 and 1591–4, and one for Navarre of 1553 – and even they are full of difficulties. Not till 1717 were all the Spanish kingdoms assessed in the same way at the same time.*

The first direct counts in Spain date from the late 18th century – specifically 1768, 1787 and 1797: it is generally considered that they left out about 10% of the population. The first absolutely reliable figures were not obtained till the census of 1857. Since then there have been censuses in 1860, 1877, 1887, 1897 and every ten years from 1900



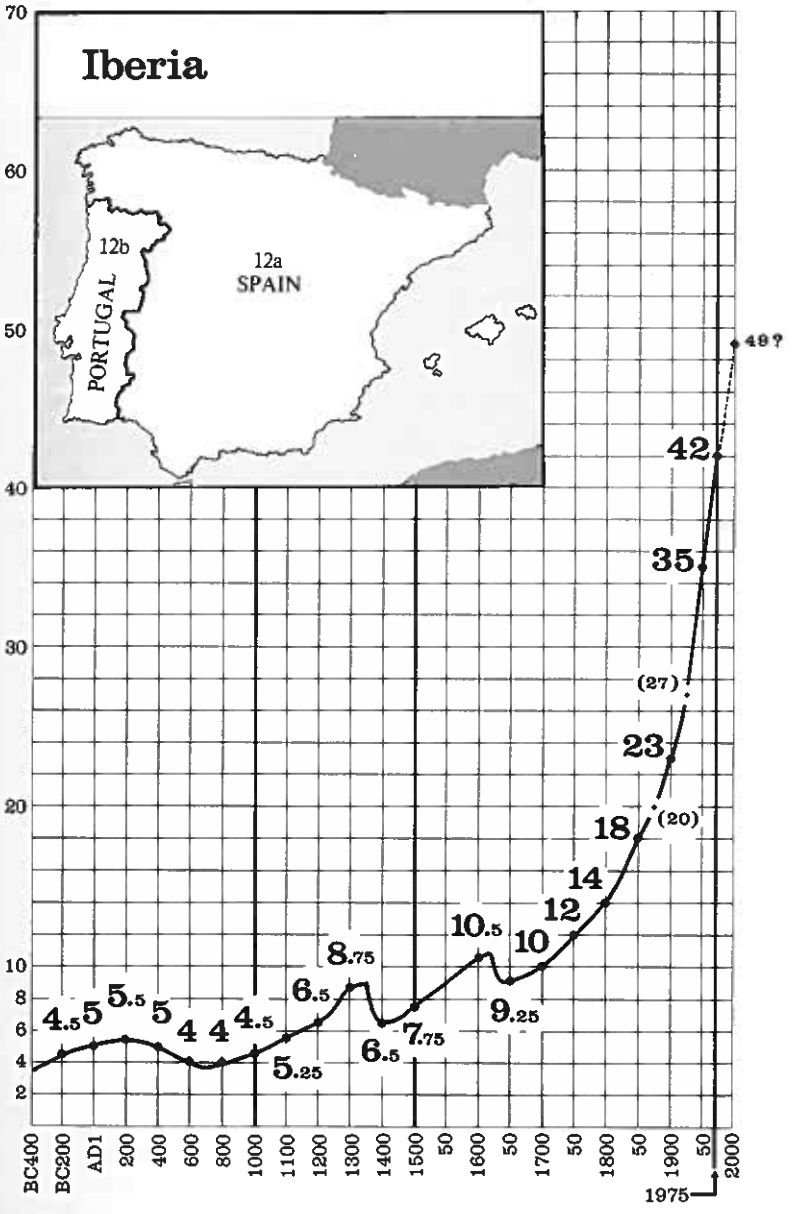
Europe Area 12b

on. The Portuguese series is: 1801, 1821, 1835, 1841, 1854, 1858, 1861, 1864, 1878, 1890, and then decennially.

Bibliography

** Russell, who endorses * Beloch's figure of 6m for the early Roman period, carries his survey through to medieval times with a complete sequence of estimates: as usual he dips a bit lower in the Dark Ages than we do. * Braudel has a useful discussion of the different 16th-century estimates: he finally comes to the conclusion that Spain had a population of about 8m and Portugal one of about 1m at the time. By contrast Mols in his contribution to * Cipolla favours 11·3m for Iberia as a whole at the same date. For the 17th century see the* *Cambridge Economic History of Europe, *Vol. 4; for the 18th century M. Livi Bacci in* Population Studies *22 (1) 1968 (summary in * Glass and Revelle).*

General works that pay particular attention to the demographic factor are J. Vicens Vives' An Economic History of Spain *(1969) and A. H. R. de Oliveira Marques'* History of Portugal *(1972). For migration figures see * Reinhard and * Kosinski.*



Europe Area 12

EUROPE AREA 13 Italy

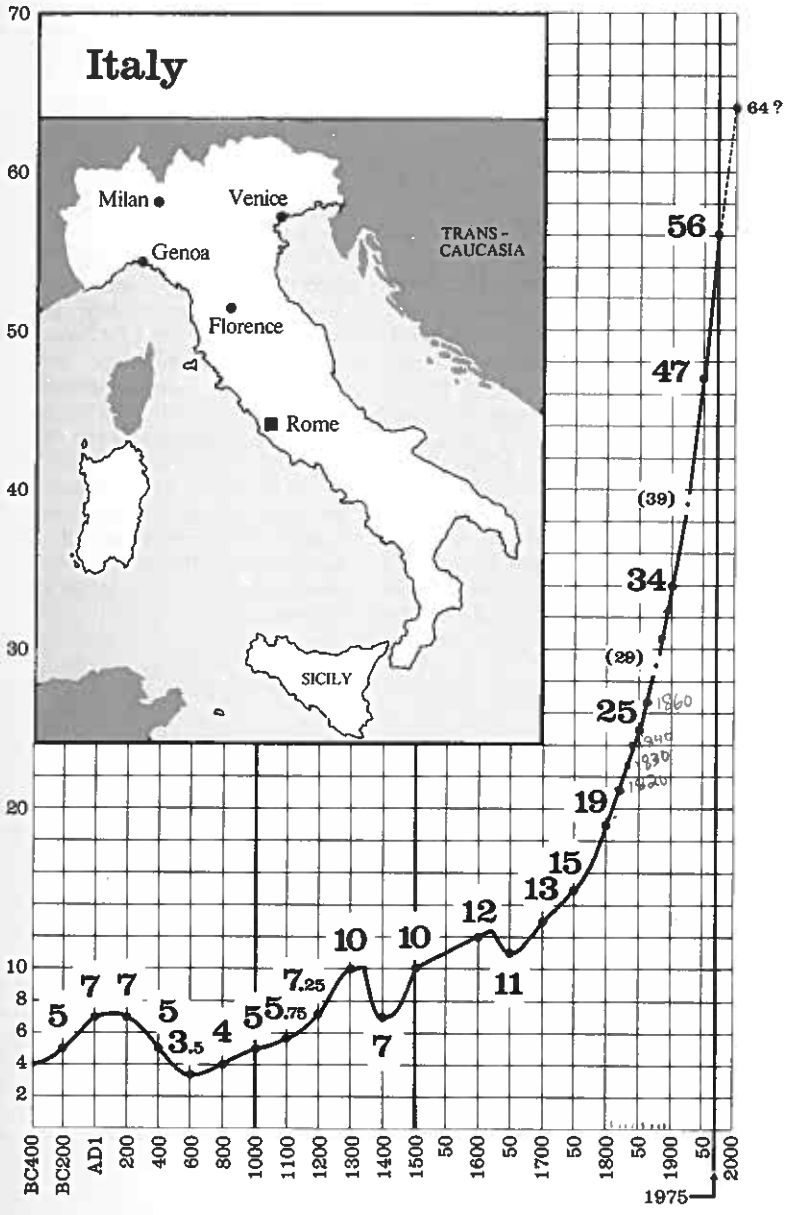
0·30m km²

Throughout the later prehistoric period Italy was the second most densely populated country in Europe (the first being Greece): we can think in terms of 0·5m people by 3000 BC, 1m by 2000 BC and 2m in 1000 BC. In the early Iron Age around 700 BC the rate of increase quickened: by 400 BC the area contained 4m people and when Rome succeeded in unifying the peninsula (which it did in the fifty years on either side of 300 BC) the manpower at its disposal immediately made it the leading power of the Mediterranean world. And success fed on itself: as tribute and slaves flowed in, Italy's population rose to reach 5m by the end of the Punic wars (200 BC) and 7m by the beginning of the imperial period (AD 1).

Seven million was more people than the Italian farmer could feed and it was only because Rome now commanded the resources of the Mediterranean basin and could bring in wheat from North Africa (particularly Tunisia and Egypt) that such a figure could be sustained. Even so the situation was a vulnerable one and when the Roman Empire got into trouble, which it did in the mid 3rd century AD, Italy's population was among the first to register a decline. With the complete administrative collapse that followed the Barbarian invasions and the sack of Rome in the early 5th century the decline became precipitous. Finally Justinian's reconquest, which was accompanied by famine and plague on an apocalyptic scale, brought the population to a 6th-century nadir that can be estimated at around 3·5m.

During the early Roman period the northern third of the country had been the peninsula's underdeveloped area. It caught up in the imperial heyday and by the time Italy emerged from the Dark Ages it was the north that was setting the pace. Indeed it set the pace for Europe as a whole: by the 12th century it had become the most economically advanced part of the continent. Its two major seaports, Venice and Genoa, almost monopolized Europe's trade with the Levant, while the goods and services generated by them and by such inland cities as Milan and Florence were the essential elements of the medieval trading network. As part of this upsurge Italy's population passed the best Roman levels in the course of the 12th century to reach a total of 10m by the end of the 13th.

In Italy as elsewhere in Europe the Black Death cut the population back by a third. However the economic base remained unimpaired, recovery during the 15th century was steady and by the early 16th century the figures for most areas were as high or higher than the pre-Black Death equivalents. The setback that took place at the beginning of the 17th century was more sinister, for it reflected the economic consequences of the discoveries of Columbus and Vasco da Gama – the shift of Europe's economic centre away from the



Europe Area 13

Mediterranean to the Atlantic and away from Italy to the Low Countries. The Italian standard of living began to decline. At the end of the 17th century the population was little larger than it had been at the beginning, the country as a whole a great deal poorer.

In the 18th century the population did begin to increase again. The situation remained unhealthy, however, for the increase was greater in the countryside than in the towns: Italy, which had once had the most urbanized and sophisticated population in the continent, seemed to be in danger of becoming a rural slum. In the early part of the 19th century the trend was much the same: then industrialization and emigration began to alleviate the situation. Industrialization, which was almost entirely restricted to the north, allowed Italy to recover a little of its former economic status. Emigration helped too, though the quantitative aspects of this are more than usually difficult to assess because Italians emigrating as young adults often returned to Italy when their working days were over. A fair summary is that over the years 1881–1936 the net effect was a reduction of about 6m in the total for Italy. Or, to put it another way, the population on the eve of the Second World War, which was 44m, would have been 50m if there had been no emigration at all.

The pace of industrialization has quickened in the 20th century and as a result the Italian standard of living has greatly improved. However, Italy, though homogeneous in terms of religion and language, remains in economic terms two nations to this day: the north is thoroughly European, the south almost North African. Internal migration is as yet only mitigating not closing the gap between the two. Sicily, for example, with near enough 10% of the area and population of Italy, is responsible for only 5% of the gross national product.

Primary Sources

As might be expected, more population figures have survived for Roman Italy than for any other part of the classical world. But though it could well be true that the census of Roman citizens was an institution as old as Rome itself – the Romans believed it – the earliest extant figures, which purport to relate to the 6th century BC, *are merely notional and anyhow refer to too small a part of Italy to be of much moment. By the late 3rd century* BC *the available figures are far more interesting, being consistent, believable and covering most of the peninsula. From this date until the death of Augustus in* AD *14 there is sufficient information available for us to chart the population of the country with confidence.*

For the late Roman period there are no reliable data. The hiatus lasts through the Dark Ages and up to the establishment of the first of the Renaissance archives in the 12th century. All Italian city states in the Renaissance period collected demographically useful data, usually for fiscal purposes but occasionally in the form of direct enumerations. By no means all the data survive, but by the 16th century we are once again in a position to make a reasonable estimate of the country's population. Thereafter, despite the political fragmentation of the country, the course of the population graph is sure, if tedious to calculate. The first in the present series of decennial censuses followed immediately on the unification of the country in 1861.

Bibliography

The controversies over the interpretation of the Roman statistics are reviewed and resolved in P. A. Brunt, Italian Manpower 225 BC–AD 14 *(1971). For the period* AD *500–1450 see J. C. Russell's contribution to the* *Fontana Economic History of Europe, *Vol. 1. The period from 1500 on is covered by Julius Beloch in his monumental, posthumously published* Bevölkerungsgeschichte Italiens *(3 vols., 1937, 1940, 1961). A summary of his figures, adjusted for the area of modern Italy, is given in Cipolla's contribution to* *Glass and Eversley.

EUROPE AREA 14 The Balkans

0·55m km²

14a	**Yugoslavia**	**0·26m km²**
14b	**Albania**	**0·03m km²**
14c	**Greece**	**0·13m km²**
14d	**Bulgaria**	**0·11m km²**
14e	**Turkey-in-Europe**	**0·02m km²**

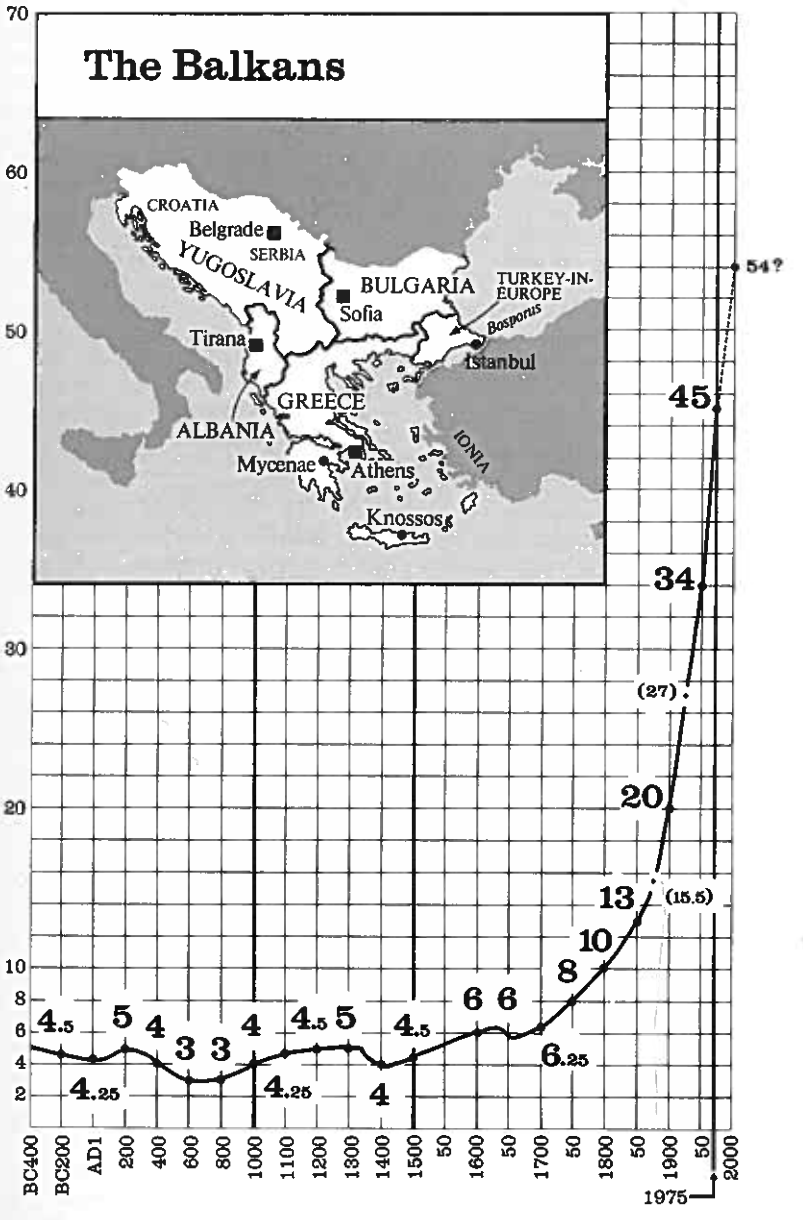
Because agriculture came to Europe from Asia via the Balkans, the Balkan peoples were the first Europeans to experience the neolithic transformation. As early as 5000 BC the area's mesolithic population of 25,000 had been replaced by a peasant society numbering 0·25m and over the succeeding millennia the total grew fast enough to bring it to 2m in the course of the later Bronze Age (13th century BC).

By this time Europe had imported a second art from Asia, the art of writing. The entry point was Greece, the script that evolved was the 'Linear B' that the Greeks used for their accounts, and from these it is obvious that their society had reached a degree of sophistication that puts it on a level with the contemporary civilizations of the Near East. Greece was far in advance of the rest of the Balkans, let alone Europe, a fact that we can be sure was reflected in the population distribution. If 2m people lived in the Balkans in 1250 BC, 1m of them lived in Greece.

The Greek colonization of Cyprus dates to this period of prosperity, the colonization of Ionia to the next phase – the first Greek 'Dark Age'. During this little-known period literacy was lost and, given the degree of social disintegration suggested by this fact and by the archaeological record, the population may well have fallen back a bit. If it did it certainly rebounded. When the classical period opened in the 7th century BC the country was in the throes of a population explosion that was carrying its share of the Balkan total over the half-way mark and the absolute figure past 2m. State-sponsored emigration created a Greek overseas population (excluding Ionia and Cyprus) of not less than 0·5m, but completely failed to halt the rise in numbers at home. By the mid 5th century the Greek peninsula and archipelago contained 3m people – 60% of the Balkan total of 5m.

Classical Greece – an alpha-plus society on any ranking – fits snugly into the idea that overpopulation brings out the best in people. For the Greeks at the time the situation was less comfortable: there were few places for would-be colonists to go that weren't already fully occupied, and taking other people's places meant war of the sustained sort that the Greeks were least good at. After a few false starts the military set-up needed was evolved by the Macedonians and in the spectacular career of the Macedonian King Alexander the Great the Greek demographic crisis found its solution. As a result of Alexander's victories the whole of the Orient as far as India was thrown open to Greek settlement. Greeks became the rulers, the defenders and the bureaucrats of Egypt and Asia Minor: the population, the problems and the achievements of the homeland began to dwindle.

Greek numbers continued to fall throughout the last three centuries BC, which was a period of slow growth elsewhere in the Balkans. By the days of the



Europe Area 14

Roman Empire Greece contained only 2m people out of a Balkan total of 5m. The shift in emphasis continued into the Byzantine period: in the general decline of the 5th to 7th centuries the Greek loss was disproportionately large and by the time the first signs of recovery were visible in the 8th century the population density of the peninsula was no greater than that of any other part of the Balkans.

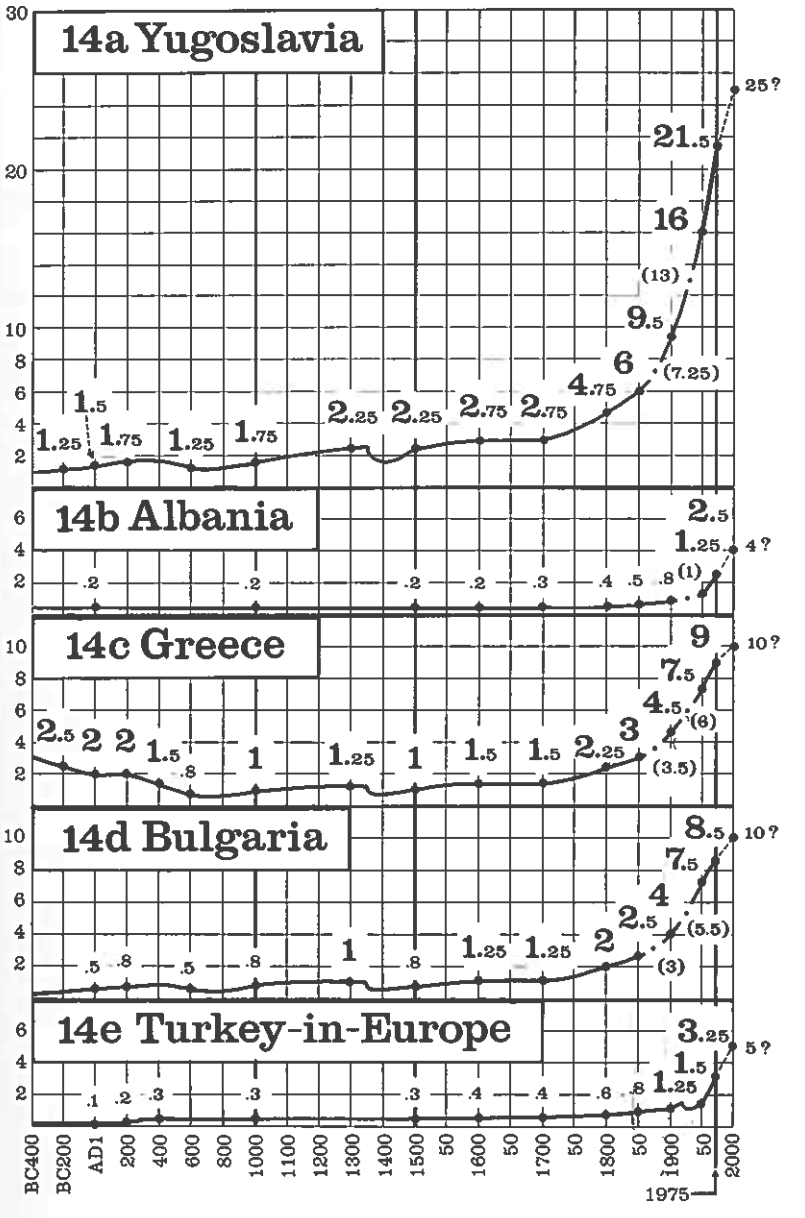
The most important event of this era was the replacement of most of the native peoples of the Balkans by Slavs from north of the Danube. This repopulation created the ethnic basis for the modern states of Yugoslavia (previously Illyrian) and Bulgaria (previously Thracian) and inserted a strong Slav component into the other Balkan communities. But though the Slav flood swept over the whole of the Balkans it did not sweep away everyone. In Greece the littoral fringe and the islands provided a refuge for the Greek nation and language which were eventually to recover their original territory: in the Albanian highlands the Illyrian tongue survived as it does to this day.

In the medieval period the population of Greece picked up from less than a million to a million and a quarter, the population of the Balkans as a whole from 3m to 5m. The arrival of the Black Death and the Ottoman Turks in the 14th century put a stop to this recovery: the latter also introduced a new element of heterogeneity, for, by the early 16th century, in addition to 4m Christians (3m Orthodox, 1m Catholic), there were 1m Moslems, most of them colonists rather than converts. The numbers of both Christians and Moslems increased in the 16th century: then, as elsewhere in the Mediterranean, there was a demographic recession in the 17th century before the strong rise typical of recent times began in the 18th.

By this time the Ottoman Empire was in decline and its subject races were struggling to regain their freedom. Serbia (the prototype of Yugoslavia) and Greece both managed to establish their independence by 1830, Bulgaria not till 1885. When the frontiers vis-à-vis Turkey were finally sorted out in the early 20th century, there were still large Moslem minorities in all these countries and the last new state to appear, Albania, actually had a Moslem majority. Since then migrations, forced or spontaneous, have steadily reduced the numbers of Moslems in Greece, Bulgaria and Yugoslavia (where the proportions are down to 1%, 8% and 10% respectively) while in Albania everyone is now officially communist.

Of the various Balkan countries Albania is the one with the highest growth rate: indeed, at 3% it has the highest growth rate in Europe. Yugoslavia has the biggest minorities (0·75m Albanians, 0·5m Magyars, 0·25m Turks – but no Germans since the flight of the 0·3m who lived there before the Second World War). Yugoslavia also has the problem of tension between the Croats (Catholic and westward-looking) and the slightly more numerous Serbs (Orthodox and eastward-looking). Greece is the most homogeneous, though its homogeneity has been achieved at a high price: after the final Greco-Turkish conflict of 1918–22 there was an enforced exchange of minorities which brought in 1·3m Greeks from Turkey and entirely removed the 0·3m-strong Turkish community in Greece.

The area likely to grow fastest in the remainder of this century is Turkey-in-Europe. The expulsion of its Greek and Armenian citizens – 40% of the whole – and the disfavour of the Turkish government after the move to Ankara had the effect of stunting Istanbul's growth in the first half of this century.



Europe Areas 14a–e

Now the increasingly European orientation of the Turk and the opening of the Bosporus bridge should lead to a strong resurgence in the economy and demography of this corner of the continent.

Primary Sources

The classical Greek historians contain clear indications of the orders of magnitude involved in ancient Greek demography, though they provide very little to go on when it comes to the rest of the Balkans. The Dark Ages are a blank for both. The first overall data appear in the Ottoman period in the form of hearth counts: totals for the count of 1525 are given on p. 39 of Vol. 4 of the * Cambridge Economic History of Europe *and in map form in* * *Braudel (Vol. 2, p. 662): the original publication is by O. L. Barkan* Journal of the Economic and Social History of the Orient, *1 (1957), p. 9. For sure there are more Ottoman counts to be found: together with the counts taken by the Venetians in the islands (notably Crete, which they hung on to till 1669) and the Morea (which they briefly incorporated in their Empire in 1685–1715) this means that one day it should be possible to chart the course of Balkan demography since 1500 with a high degree of confidence.*

The first censuses were taken shortly after independence in Greece (1828), Serbia/Yugoslavia (1830) and Bulgaria (1888). They have been held irregularly – on average once a decade – ever since. Albania's first census was taken in 1923, the next not till 1945. For Turkey-in-Europe since the First World War the situation is the same as for Turkey-in-Asia (Asia Area 1a).

Bibliography

* *Beloch devoted more space to 5th-century Greece than to any other part of the ancient world: on the whole his figures have stood the test of time. His overall figure for the Balkans in* AD *14 is less well founded (for the area as defined here it works out at 4·5m) but is certainly acceptable. For the medieval period see* * *Russell, for the 16th century* * *Braudel and for the modern period* * *Clark. Their calculations do not differ significantly from ours.*

Almost no work has been done on the demography of the prehistoric period: an exception is Colin Renfrew's article in Man, Settlement and Urbanism *(ed. P. J. Ucko* et al. *(1972)). There is also an absolutely first class regional survey by W. A. McDonald and G. Rapp –* The Minnesota Messenia Expedition *(1972): this covers the whole span from the Early Bronze Age to modern times though it is basically concerned with the period before 1200* BC.

EUROPE AREA 15 The Islands

15a Cyprus

9,250 km²

Cyprus has had a peasant population as long as anywhere in the Near East – at the very least since the 6th millennium BC. Slow growth from a few thousand at this time, to some tens of thousands in the Late Bronze Age, covers the prehistoric demography of the island. The population then enters the 100–200,000 band within which it remains for the whole of the period from the Iron Age to the mid 19th century. It touches the upper limit during the halcyon days of the Roman Empire, again during the Crusader era (13th century) and during the final phase of Venetian rule (16th century). It falls back sharply with the Black Death and, more lastingly, after the Turkish conquest.

The Turks conquered Cyprus in 1571. The subsequent decline in the island's population is well documented. The total was down to 120,000 by 1600 and little more than 100,000 in 1650. There it remained for about a century and a half, the first signs of recovery coming in the early 19th century. When the British took over in 1878 a rising trend was well established: the census that they carried out three years later revealed that the total was nearing 0·2m again. Subsequent growth has been steady – to 0·3m by 1920 and 0·5m by 1950.

Ottoman rule was responsible for the introduction of a substantial Turkish minority (currently 18%) in an otherwise Greek population. In 1974 the Turkish government intervened militarily on behalf of this Turkish Cypriot community. The present situation of de facto partition has caused economic havoc and makes it unlikely that the island will achieve the population growth foreseen for it a few years ago.

Primary Sources and Bibliography

* *Beloch's suggestion of 0·5m in* AD *14 seems too high now that we have the Venetian and Ottoman figures for comparison. These, which constitute the first hard data for the island, are clearly set out by T. Papadopoullos in his* Social and Historical Data on Population *(Cyprus Research Centre, 1965). The census series runs decennially from 1881 to 1931 since when there have been censuses in 1946, 1956 and 1960.*

15b Malta

316 km²

The Maltese islands were first colonized around 5000 BC. Within a millennium the settlers were raising megalithic temples on a scale which suggests that there must have been several thousand of them and if this is true the first phase of the population graph must be an extraordinarily flat one: neither the Roman nor the early medieval peaks are likely to have exceeded 20,000 and this is known to have been the number of Maltese when the Knights of St John took over in 1530. The knights and their retainers added some 5,000 to this figure and initiated a period of growth which doubled the population over the next century and brought it to 100,000 by 1800. The 200,000 mark was achieved early in this century and 300,000 by 1950. Emigration – a net loss of 100,000 in the last fifty years – is now tending to slow down the increase.

Primary Sources and Bibliography

For the prehistoric period see Before Civilisation *by Colin Renfrew (1973), pp. 154 ff. For the medieval data, the hearth and head counts carried out by the knights, and the counts (1828, 1837) and censuses (from 1842) taken by the British see M. Richardson in H. Bowen-Jones* et al., Malta: Background for Development *(1961).*

15c Iceland

100,000 km² (only 1% arable)

Iceland had perhaps been visited by the odd Irish hermit prior to its discovery by the Vikings in the late 9th century, but the settlement was a Norse achievement. Within half a century – say by AD 925 – the population had reached 30,000 and the flow of immigrants had ceased. Natural growth over the next three centuries produced a peak figure of 70,000; then the climatic deterioration of the 14th century caused the process to reverse. Over the next three centuries the total slowly dropped to 50,000 at which level it remained till the beginning of the 19th century. These figures are, of course, averages; after a bad harvest the population would fall a bit, to recover over the next few years. Particularly catastrophic harvest failures had longer-term effects: the famine of 1784, for example, caused a fall to 38,000, and recovery to the 50,000 level took a decade.

Iceland escaped from this Malthusian situation in the 19th century. By 1900 the population had reached 80,000, by 1950 it was 140,000, and the total today is over 200,000.

Primary Sources and Bibliography

Iceland has excellent – in fact almost unparalleled – early records, notably two lists of farms, the Landnamabok *of c.930 and a listing of c.1095. The Icelandic authorities can also take credit for holding the first census to satisfy modern criteria, the census of 1703. The later censuses follow the Danish sequence, for the island had been politically incorporated in Scandinavia in 1262.*

For a good outline see S. Thorarinsson's article in Geog. Rev. *51, (1961).*

15d The Azores

Nine major islands totalling 2,300 km²

This mid-Atlantic island group was uninhabited until discovered (between 1427 and 1452) and settled (from 1439 on) by the Portuguese. At first the rate of population growth was high, with the 60,000 mark being reached by 1580. Since then it has been slower: it took till 1800 to achieve the 150,000 level and till 1900 to get to 250,000. In the early 20th century population actually fell as unemployed Azorians sought a better life in America, and a second wave of emigration has recently cut numbers from the all time high of 327,000 reached in 1960 to the present figure of 290,000.

Primary Sources and Bibliography

Counts are available from the 16th century, censuses from 1841. See T. Bentley Duncan, Atlantic Islands *(1972).*

15e Madeira

800 km²

Madeira was settled by the Portuguese in 1420. Population grew rapidly from 100 in 1425 to 2,000 in 1460, 20,000 in 1510 and 30,000 in 1550. At this point the sugar producers who were responsible for the island's prosperity found themselves being undercut by Brazilian planters and as a result both economic and population growth faltered. Things began to pick up again when the Madeirans made the successful switch to viticulture for which the island was finally to become famous. Between 1650 and 1750 the increase was from 33,000 to 50,000 and steadily higher totals have been recorded since – 110,000 in 1850, 150,000 in 1900 and 270,000 in 1960. By the end of this period the limits of comfort had been exceeded and despite the growth of a prosperous tourist trade, there has been a small but significant drop in numbers over the last decade. The present population is near enough a quarter of a million.

Primary Sources and Bibliography

As for the Azores but for the early years the data are better: see A. H. D'Oliveira Marques, History of Portugal *(1972).*

15f The Canaries

Seven major islands totalling 7,300 km²

The easternmost of the Canaries is visible from the African coast and it is surprising that firm evidence of human habitation dates only from the early centuries of the Christian era, the period when the 'Fortunate Isles' are first

described by classical geographers. Between AD 300 (the earliest radiocarbon date so far) and AD 1300 (the approximate date of the archipelago's rediscovery by European mariners) Berber-speaking people from the Saharan littoral spread through the islands and multiplied up to a final total of about 20,000. There was then a catastrophic drop as a ruthless series of European adventurers undertook the conquest of the archipelago, a process which took the whole of the 15th century (to be exact, from 1402 to 1496) and reduced the number of aborigines to about 5,000.

The Portuguese had yielded their interests in the Canaries to Spain in 1479. The Spaniards set out to repopulate the islands with gentlemen from Europe and slaves from Morocco and Guinea. The recolonization was successful: the population has grown steadily ever since. It reached 100,000 in 1675, 150,000 in 1760, 250,000 in 1850, 0·5m in 1915 and 1m in 1965. Today it is about 1·2m.

Primary Sources and Bibliography

Since 1768 the islanders have been included in the Spanish censuses: no one seems to have worked up the earlier counts since Alexander von Humboldt published estimates for the period 1678–1790 (quoted in the seventh edition of the Encyclopaedia Britannica *(1842)). Estimates of the aborigine population are given in R. H. Major's introduction to his translation of* The Canarian *by Jean de Béthencourt (Hakluyt Society, 1872).*

POPULATION OF THE ISLANDS HISTORICALLY ASSOCIATED WITH EUROPE AD 1000–1975

Populations in thousands, to the nearest 10,000

AD	*1000*	*1100*	*1200*	*1300*	*1400*	*1500*	*1600*	*1650*	*1700*	*1750*	*1800*	*1850*	*1875*	*1900*	*1925*	*1950*	*1975*
CYPRUS	150	150	170	200	150	200	120	110	110	110	110	150	180	230	330	490	640
MALTA	10	10	10	20	10	20	40	50	70	80	100	130	150	190	250	310	330
FAROES	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	10	10	10	20	30	40
ICELAND	50	70	70	70	60	60	50	50	50	50	50	60	70	80	100	140	220
GREENLAND	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	10	10	20	50
AZORES						10	60	80	90	100	150	230	260	260	240	320	290
MADEIRA						20	30	30	40	50	70	80	130	150	200	270	250
CANARIES	20	20	20	20	20	10	50	70	100	140	200	260	280	360	500	790	1,200

The table includes two territories, the Faroes and Greenland, whose populations though small are of some historical interest. The Faroes (area 1,400 km²) were discovered and colonized by the Norse at the beginning of the 9th century AD. The population has grown fairly steadily from a few hundred in the 10th century to 1,000 in the 14th century, 5,000 in 1800, 12,000 in 1900 and 40,000 today. Greenland has an area of 2,176,000 km² but 86% of it is covered by ice and most of the rest is tundra. Eskimo, who are the only people who can really cope with this sort of environment, have been on the island since the 3rd millennium BC, which means that it has had a basal population in historic times of not less than a few hundred or more than a few thousand. During the period 1000–1300 the Eskimo were joined by Norsemen from Iceland. The Norse planted two colonies which, at their peak in the 13th century, held about 3,000 people. These colonies were abandoned when the climate worsened in the late 14th century and early 15th century. The Danes resumed sovereignty over Greenland in the 18th century. The first census, held in 1805, revealed a population of 5,000. In this century, perhaps as a result of the Danish government's generous welfare policies, there has been a population explosion among the Eskimo: numbers have shot up from 10,000 in 1900 to 50,000 today.

Fig. 2.1 *Asia, subdivision into areas*

1 NEAR EAST
1a Turkey-in-Asia (Anatolia)
1b Syria and the Lebanon
1c Palestine and Jordan
1d Arabia
1e Iraq
1f Iran
1g Afghanistan
2 RUSSIA-IN-ASIA
2a Caucasia
2b Siberia
2c Russian Turkestan
3 MONGOLIA
4 CHINA
4a Chinese Turkestan and Tibet
4b Manchuria and Inner Mongolia
4c China proper
4d Taiwan (Formosa)
5 KOREA
6 JAPAN
7 THE INDIAN SUBCONTINENT
7a Pakistan, India and Bangladesh
7b Sri Lanka
7c Nepal
8 SOUTH-EAST ASIA
8a Burma
8b Thailand
8c Indo-China
8d The Malay archipelago
8e The Philippines

Part Two
Asia

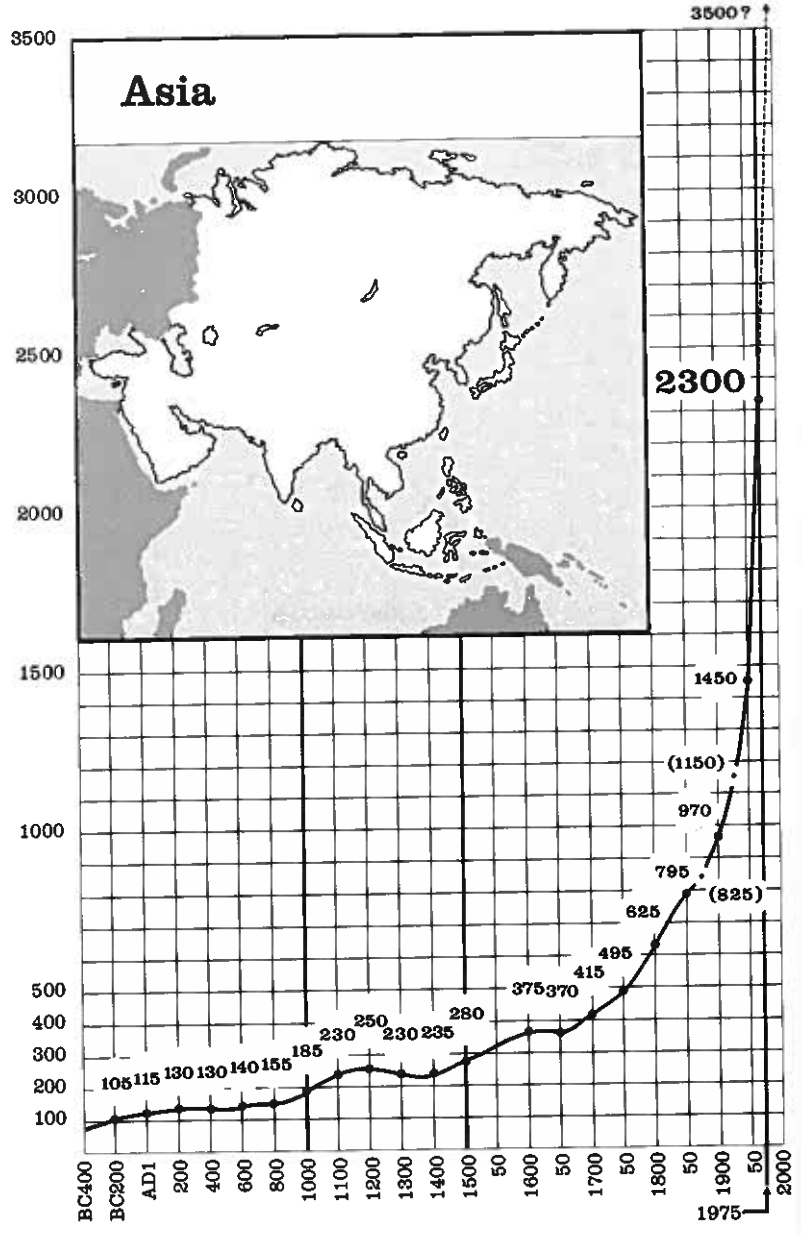


Fig. 2.2 *Asia, continental total*

ASIA: OVERVIEW

44m km²

A generation ago we had a fairly clear idea about the 'neolithic revolution', the appearance of the first food-producing as opposed to food-gathering communities. It all happened in the Near East in a zone that was centred on Palestine, Syria and Iraq. This was almost the same as the 'fertile crescent', the area within which the first civilization appeared a millennium or two later. Now, alas, we know more and understand less. It appears that different styles of food-producing evolved in many different places, often very slowly and undramatically, and, of particular interest to us, the demographic upsurge that it had been assumed would always accompany the change-over to food production seems to have been absent in some important instances. For example, during the period 5000–3000 BC knowledge of agriculture spread right across South-East Asia from Burma and Thailand on the mainland to the easternmost islets of Indonesia. Yet the tenfold increase in population that one would expect to result took at least another 2,000 years to achieve. (Our assumptions are that the number of food-gatherers in the area in 5000 BC is unlikely to have been less than 0·2m (cf. Australia) and that the 2m level was not reached until some time in the last millennium BC, a fair deduction from the trend in the historical period.)

However if we cannot always rely on agricultural innovation to explain why some Asian peoples multiplied and others didn't we can at least say that where there was no agriculture there was no real growth. Between 10,000 BC and 400 BC the population of Asia increased from 1m to 80m but the number of people in Siberia, Korea and Japan barely rose at all. From the Urals to Honshu the only inhabitants were simple hunters and fishermen: there may have been 0·2m of them, certainly no more.

Where then did all the Asians of 400 BC actually live? The answer is that nearly all of them lived in peasant villages in the Near East (12m), China (30m) or India (30m). These were the three areas which from the start of agriculture had made it their essential activity, which by the 4th century BC had already produced major civilizations and which were to continue to act as the cultural foci of the continent throughout its history.

The oldest of the three is the civilization of the Near East, which had its original centre in the country known to the ancients as Sumer and Akkad, to the classical world as Mesopotamia and to the present day as Iraq. Here,

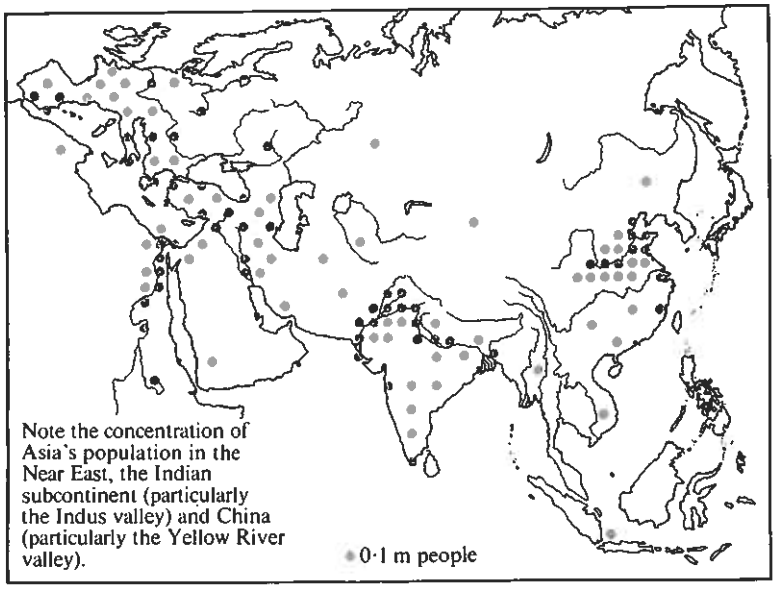


Fig. 2.3 *The Old World; population distribution in* 3000 BC

long before anywhere else, the agricultural revolution produced a full-blown demographic response, with villages growing into towns and regional population densities rising to levels of 10 per km². This was the take-off point for a new series of 'firsts' which give the Sumerians a fair claim to be the inventors of civilization: they include the first writing (certainly), the first bronze casting (probably) and the first wheeled vehicles (possibly). Because of the boost given it by these remarkable people – whose ethnic identity is a complete mystery – the Near East got a head start in the population league and for most of pre-classical antiquity was able to keep its share of the Asian total at about 25% – say 2·5m out of 10m in the early 3rd millennium, 5m out of 20m in the early 2nd millennium and 9m out of 36m early in the last millennium BC.

Then the picture changed. Though the Near East's population growth continued it was outpaced by India's and China's. By the 5th century BC both India and China were in the 25–30m class while the Near East's total was less than half of this. As a fraction of the figure for Asia as a whole it had sunk to a sixth (cf. Figs. 2.3 and 2.4).

The Near East also lost ground in relation to Europe. The failure was technological as well as demographic: the Persian Empire – Asia's biggest

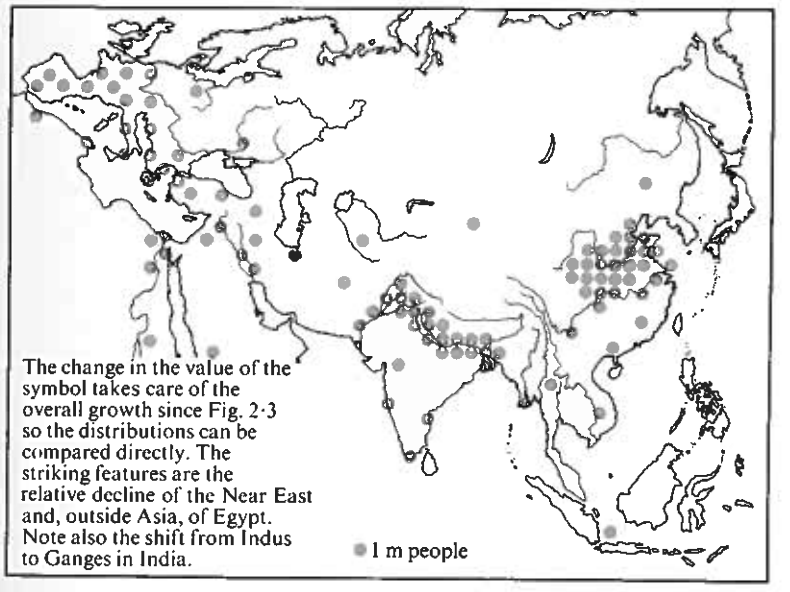


Fig. 2.4 *The Old World; population distribution in* 400 BC

yet – was smartly rebuffed when it attempted the conquest of Greece in the 5th century BC and it put up a surprisingly ineffective resistance to the counter-invasion of Alexander the Great and his Macedonians at the end of the 4th century. Within a dozen years Alexander succeeded in reducing the whole region to provincial status.

Alexander's empire was basically the old Persian Empire plus Greece and must be accounted an Asian state in terms of population:

Macedonian Empire	in Europe (Greece)	3·0m
	in Africa (Egypt)	3·5
	in the Near East (less Arabia)	12·0
	in Central Asia and India	1·5
	TOTAL	20·0
	NUMBER IN ASIA	13·5, or two thirds

However, if the demographic centre of the Empire lay in Asia its driving force was clearly European and its conscious aim was to promote the Greek way of life. The number of Greek settlers was, in absolute terms,

insignificant – no more than 0·25m – but as agents for the spread of Hellenism they proved sufficient. Later the Romans took over the Greek role and for the rest of the classical period the western Near East was part of their Empire. The eastern part did recover its independence under the Parthians but it remained completely overshadowed both numerically (5m as against 45m) and culturally.

The Near East may have lost out to Europe in the classical period, Asia did not. Not only were there more Asians than Europeans, there were more Indians or Chinese than Europeans. And both India and China had by now produced civilizations of comparable sophistication to Rome's. When we say India we are talking of a social unit, not a political entity, for attempts to create a pan-Indian empire only came near to success on two occasions: in the 3rd century BC when the Maurya emperors conquered most of the subcontinent and in the 3rd century AD when the Gupta kings established control over the northern half. As neither of these Indian empires lasted much more than a generation it is fair to say that the normal condition of the area was one of political fragmentation. China's story is the exact opposite: the dozen states that divided the Yellow River valley between them were brought together by Shi-huang-ti, the 'First Emperor', in the late 3rd century BC and union was the rule thereafter. The scale was colossal. During the Han period, which lasted from 206 BC to AD 220, the Chinese Empire always had a comfortable edge over Rome in terms of numbers: when Rome's population was 40-odd millions, Han China's was more than 50 million. In a world ranking of empires China had taken the place that was to become customary (see Fig. 2.5).

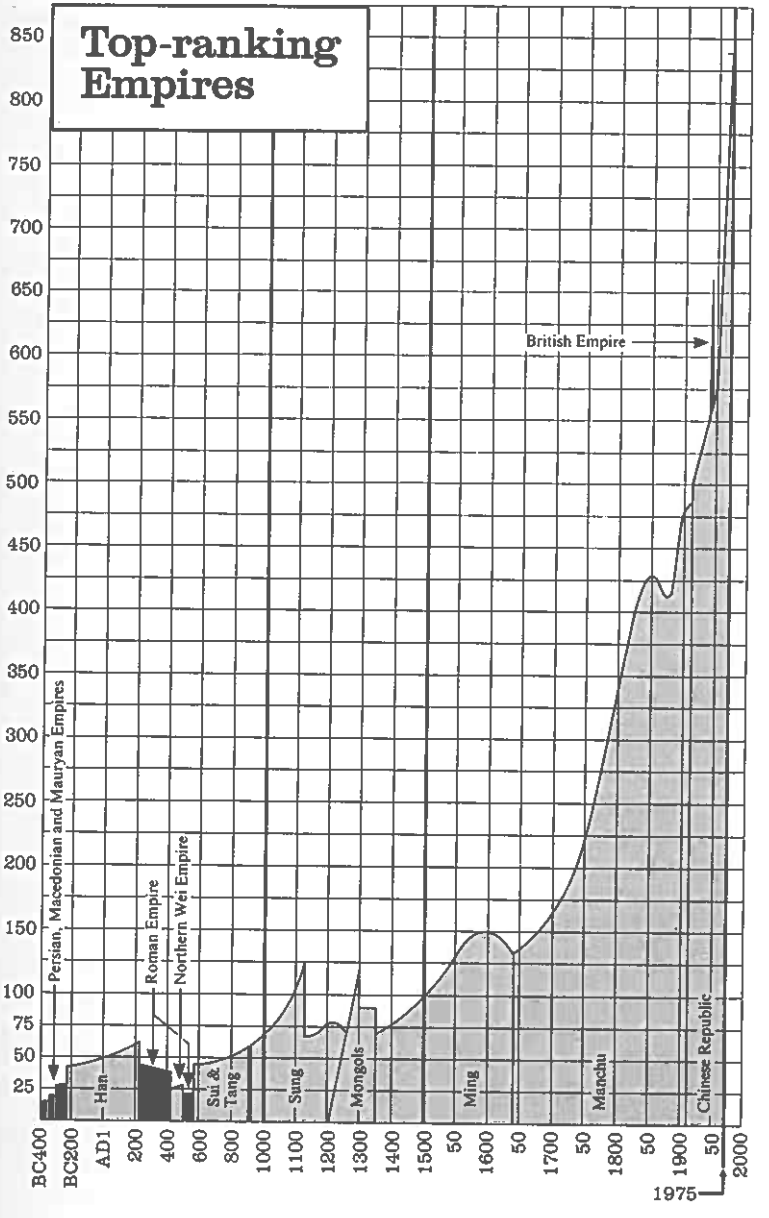


Fig. 2.5 *The only significant gap in China's monopoly of this sequence comes between the end of the Han Empire in* AD 220 *and the start of the Sui Empire in the* 580*s. During this period China was divided into at least two kingdoms, often more, and as none was as big as the Roman Empire in its undivided form Rome holds the lead during the 3rd, 4th and early 5th centuries. After the collapse of the western Roman Empire there are 100 years in which the north half of China (the Empire of the Northern Wei) outranks the eastern half of the Roman Empire, then a few decades in which the situation is reversed, partly because the east Romans expanded, more particularly because the Wei State divided. During the later 6th century the founder of the Sui Dynasty restored to China both unity and primacy. Since then China has always kept top position in the population league. There is a moment of uncertainty in the 13th century as the Mongols conquer China and are transformed into the Chinese Yuan Dynasty, and another in and around the Second World War during which the total for the British Empire and Commonwealth exceeds that for the Chinese Republic: in neither instance are we talking of more than a few years and in the British case it is debatable whether we are dealing with a genuine political entity*

In AD 220 the Han Empire fell apart: in 410 Rome was sacked by barbarians. One feature common to both situations was intervention by nomad tribes from central Asia – Huns, Mongols and Turks. There were never very many of these nomads – no more than 5m at the time of which we are speaking – but their way of life made them superb cavalrymen and as such they had a military impact far greater than their numbers would suggest. The same is true of the Arabs. Only about 20% of the 5m inhabitants of the Arabian peninsula were bedouin (desert nomads), but this was enough to give the Arab armies the edge when, inspired by the teaching of the prophet Mohammed, they fell upon the Byzantine and Persian Empires in the mid 7th century. By 800 they were masters of an empire that incorporated the whole of the Near East and added to it Spain, the Maghreb and Egypt in the west, and part of Central Asia and present-day Pakistan in the east.

The caliphate, as the Arab Empire is known, was impressive enough, counting some 30m subjects at its zenith. The real Arab achievement, though, was not the creation of this temporal kingdom but the imposition of Islam as the ruling culture of the Near East. In sheer numbers the caliphate was always outclassed by the Chinese Empire – now in its second incarnation under the Sui and Tang emperors (581–906) and once more numbering fifty millions; indeed the Near East's relative decline was actually accelerating, for after China and India with about a third of the Asian population apiece, the 8th-century Near East comes a very poor third with 20m, little more than 10% of the total. However, the genesis of Islam puts the Near East back into the world class culturally and in this sense its status has been secure ever since.

*

The rising phase of the medieval cycle brought Asia big gains in numbers: a 10% increase in the 9th century, another 10% in the 10th century, 25% in the 11th and – a definite slackening-off here – a bit under 10% in the 12th. In absolute terms this brought the continental total to 250m. At this point the graph turned down. By 1300 the total had fallen to 230m; in 1400 it was only fractionally greater.

This turn-around in Asia's demographic fortunes is marked politically by the appearance of Genghiz Khan, founder of the Mongol Empire. This grew to be far and away the most spectacular of all the empires created by the nomads of Central Asia: at its maximum, around AD 1300, it included the whole span of the Old World from European Russia to Korea inclusive, plus most of the Near East and all of China. As Mongol rule spread over this vast area, the population of every part of it dropped and anyone who has read accounts of the way the Mongols waged war would expect no less. But characteristically, peasant populations recover quickly from such decimations: why was there no recovery by the century's end – or by the next century's end either? The extra factor in the Mongols' case was their determination, where possible, to exterminate the peasantry as a class. The nomadic way of life was under threat from the way the peasants continually encroached on the grasslands. The Mongols not only massacred the peasants, they deliberately destroyed the peasants' infrastructure: irrigation works, villages and market towns. Then they brought in their flocks to graze among the ruins. The fall in population was long-lasting because there had been a shift from high-density farming to low-density pastoralism.

Maybe the rise of the Mongols wouldn't have been so dramatic if the medieval population boom hadn't been losing steam already, indeed maybe it wouldn't have happened at all if a downturn wasn't just around the corner. But the Mongols certainly made the process as bloody as could be and it was probably due to them that the fall started when it did (almost a century ahead of the end of the boom in Europe) and was so prolonged (three centuries before full recovery, as against a century and a half in Europe).

The first signs of a resurgence came in the 15th century. By the 16th growth was accelerating to unheard-of heights, reaching 35% for the century as a whole. There was a fall-off in the 17th century – a fall-off but to a figure (10%) that was still a high one by normal standards. Since then each century has set a new record: the 18th century 50%, the 19th century 55% and the 20th century a minimum of 200%. The 20th-century figure in all its enormity should not distract us from those for the previous four centuries, which show that, far from being 'awakened' by European colonization, Asia generated its own demographic revolution. Of course this must be so when you think of it. Except for the British in India the Europeans did no more than nibble at the edges of the continent until well on in the 19th century and they hardly started to do demographically useful things – improve communications, create new irrigation schemes – before its end. The upturn had come centuries earlier than that.

The specific reasons for the increasing size of the percentage increments are obscure: population growth just seems to go like this. The basis must be a favourable long-term trend in technology. Here again it is worth recalling that Asia's backwardness vis-à-vis Europe has been greatly overplayed. In the 15th century for example the two most important technical developments were the gun and the ocean-going sailing ship: the Chinese were well abreast of the Europeans in the development of both and only fell behind after 1500. But even then the Chinese – and the other Asians – continued to improve their technology, only they didn't do it as fast as the Europeans.

This is clear from the late arrival of the 'demographic transition' in Asia – the point in the modernization cycle when death rates begin to fall

rapidly and, because the matching fall in the birth rate only comes in later, the rate of increase receives a special boost. This happened in Europe in the 19th century, when the increase rose above 100% (as against 50% in the 18th): in Asia it didn't happen till this century, the rate in the 19th being much the same as Europe's a hundred years earlier.

Considered at a regional level (for the division into regions see Fig. 2.6) Asia's progress has been far from even. Up to 1900 the Near East continued to disappoint: in absolute terms it more than doubled its population from 21m to 47m but its share of the Asian total sank to 5%. Only in this century, really only since 1950, has the Islamic world put on demographic weight. Growth rates are now very high – too high according to some – and the current figure of 155m represents 7% of the Asian total, a recovery to the proportion held in 1500.

This does not mean that the Near East is near to regaining the position it held for so long as Asia's third most populous region, a title it lost at the beginning of the 16th century, when Japan emerged as a major population centre. Japanese history is almost the opposite of the Near East's, for it is the only Asian state where something like the complete modernization cycle of runaway growth followed by restabilization is visible. The expectation is that between now and the end of the century Japan will add only 10% to its present population of 112m and that its growth rate will then have fallen to zero.

Today Japan and Korea together constitute the fourth most populous of Asia's regions. They lost their third position to South-East Asia around 1850: they are likely to slip another place soon because the Near East is close behind and gaining fast. South-East Asia's position as No. 3 seems impregnable: throughout modern times its growth rates have been among the highest in the world and its current total of 319m is more than that of the present No. 4 (Japan and Korea) and No. 5 (the Near East) combined. Moreover it has scarcely begun urbanization, the phase of the modernization cycle that is usually associated with the highest growth rates of all.

This is also true of the two giants, the Indian subcontinent and China. It is probable that the Indian subcontinent is now more populous than China proper – our figures are 775m as against 720m – though the Chinese could well be level and some estimates put them ahead. It seems certain however that the Indians are multiplying faster and will be more numerous by the end of the century – our figures being 1,240m for the subcontinent and 1,020m for China proper. This does not mean that China will lose her position as the world's biggest political unit, for her outer areas will be contributing another 165m to the republic's total in AD 2000 and Taiwan with a further 20m can be expected to have returned to mainland control by then. This makes a total for the Chinese republic at the end of the century of 1,200m. By comparison the Indian subcontinent's 1,240m will

Fig. 2.6 *Asia, subdivision into regions. Present-day political frontiers are not always appropriate to the discussion of historical trends and for the purpose of this overview the areas of Fig. 2.1 have been rearranged to produce this map of regions. The most important change is the amalgamation of areas 2c, 4, 4a and 4b (Russian Turkestan; Mongolia; Chinese Turkestan and Tibet; and Manchuria and Inner Mongolia) to produce a Central Asian region. The remaining part of mainland China, 4c or 'China proper', is then given regional status, as is Siberia (2b). The Near East is completed by the addition of Caucasia (2a), while Japan and Korea (5 and 6) are amalgamated. Areas 1, 7 and 8 are unchanged*

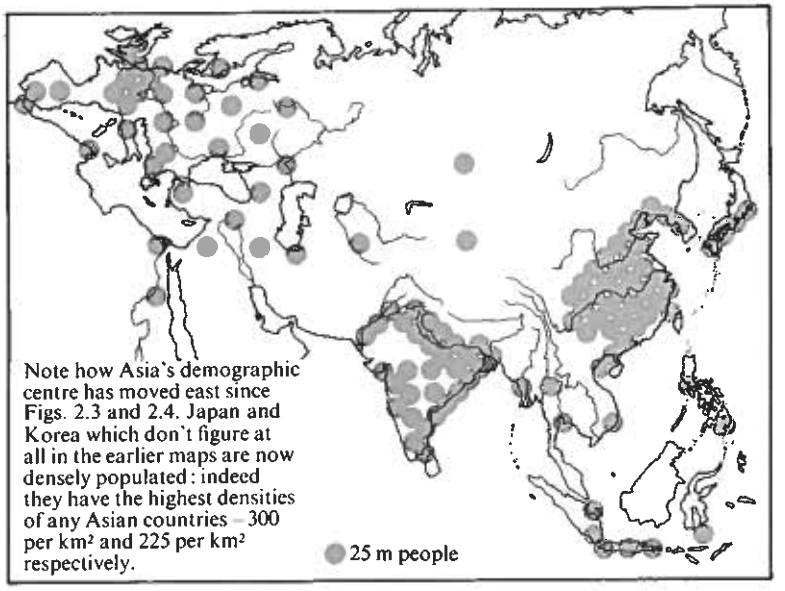


Fig. 2.7 *The Old World; population distribution in* 1975

presumably still be divided between India, Pakistan, Bangladesh, Nepal and Sri Lanka, with no more than 1,000m (!) in the Indian republic.

The Asian outlook then is sombre. The Indian subcontinent, with its traditional third of the continental total, is going to remain grindingly poor because its population explosion is rural and unfettered by dreams of a different life. The Chinese, constituting near enough another third and equally rural, may be able to escape this equation: the communist state possesses the social machinery for injecting new skills and attitudes at village level. However, the Chinese are certainly not industrialized to the degree where one could expect a spontaneous drop in the birth rate, and whether their way will work remains to be seen. The regions favoured by nature – the Near East, with its huge oil resources, and South-East Asia, which is still relatively underdeveloped – have potentially brighter futures clouded by rates of increase that are doubling their populations every generation. Only the Japanese have really got their demography under control and they form a very small slice of the whole now.

ASIA AREA 1 The Near East

6·76m km²

1a Turkey-in-Asia (Anatolia) 0·75m km²

Anatolia is one of the more welcoming of the countries of the Near East and its population has always been considerable. From 40,000 in the mesolithic it rose to 200,000 in the early neolithic (6th millennium BC), 1·5m by the chalcolithic (2500 BC) and 3m during the course of the full Bronze Age.

At this time – the later 2nd millennium BC – the ethnic and political situation was straightforward: in most of Anatolia the people were of Hittite stock and subjects of the Hittite Empire; the exception was the eastern quarter, where the people were Transcaucasians (the group to which the present-day Georgians belong) and independent. This relatively simple picture did not survive the upheavals that marked the beginning of the Iron Age (*c.*1100 BC): two new peoples arrived from Europe, the Phrygians, who crossed the Bosporus and moved on to the central plateau, and the Greeks, who crossed the Aegean and colonized the Aegean and Black Sea coasts. By 500 BC there were perhaps 0·25m Greeks on the seaboard, 3m Phrygians and neo-Hittites (Lydians, Carians etc.) in the interior and 0·75m Armenians (relatives of the Phrygians) and Transcaucasians in the eastern mountains – all pursuing very different life styles.

The Persians imposed a superficial hegemony on all these peoples: it was inherited first by the Macedonians, then by the Romans. It was only in Roman times that the Anatolians were truly pacified and homogenized. By AD 200, when the area had reaped the full benefits of the imperial peace, some 6m Anatolians acknowledged the rule of Rome and the cultural heritage of Greece. A million more dwelling in the Armenian highlands looked alternately to Rome and Persepolis as the political pendulum swung between these great powers.

Seven million was to prove the upper limit in a series of population swings occupying the next fifteen centuries. The lower limit was around 5m. The first dip came during the phase of late classical decline; then, following the Byzantine recovery of the 9th and 10th centuries, there was a second, far more dramatic collapse. In the early 1040s the first Turks had appeared on the eastern frontier; by 1060 the Armenians were migrating to the western Taurus under the pressure of Turkish raids and in 1071 the disastrous overthrow of the Byzantine army at Manzikert – the work of the Turkish sultan Alp Arslan – opened the Anatolian plateau to an inrush of Turkish tribes. Within a few decades the demography of Anatolia was entirely recast: the plateau had become the domain of the Turks, the Taurus the refuge of the Armenian nobility, while only the west remained to the Greek-speaking peasantry who had seen the Empire through so many crises in the past.

The arrival of the Turks meant a drop in the overall population of the country

because the nomadic and pastoral way of life typical of the Turks at this time cannot support as high a density of population as agriculture. But as the Turkish conquest moved to completion under the leadership of the Ottomans, the Turks began to discover the advantages of farming. By the mid 14th century the shift to settled agriculture was unmistakable and the population was once again approaching 7m. For the third and last time it was cut back again, this time by the Black Death; then in the late 16th century the 7m ceiling was finally breached.

The achievement was to prove something of an anticlimax. Stagnation both economic and intellectual now overtook the Ottoman Empire, even as its armies and frontiers were still advancing. The 17th, 18th and 19th centuries produced only a sluggish growth and the population had barely reached 13m by 1900.

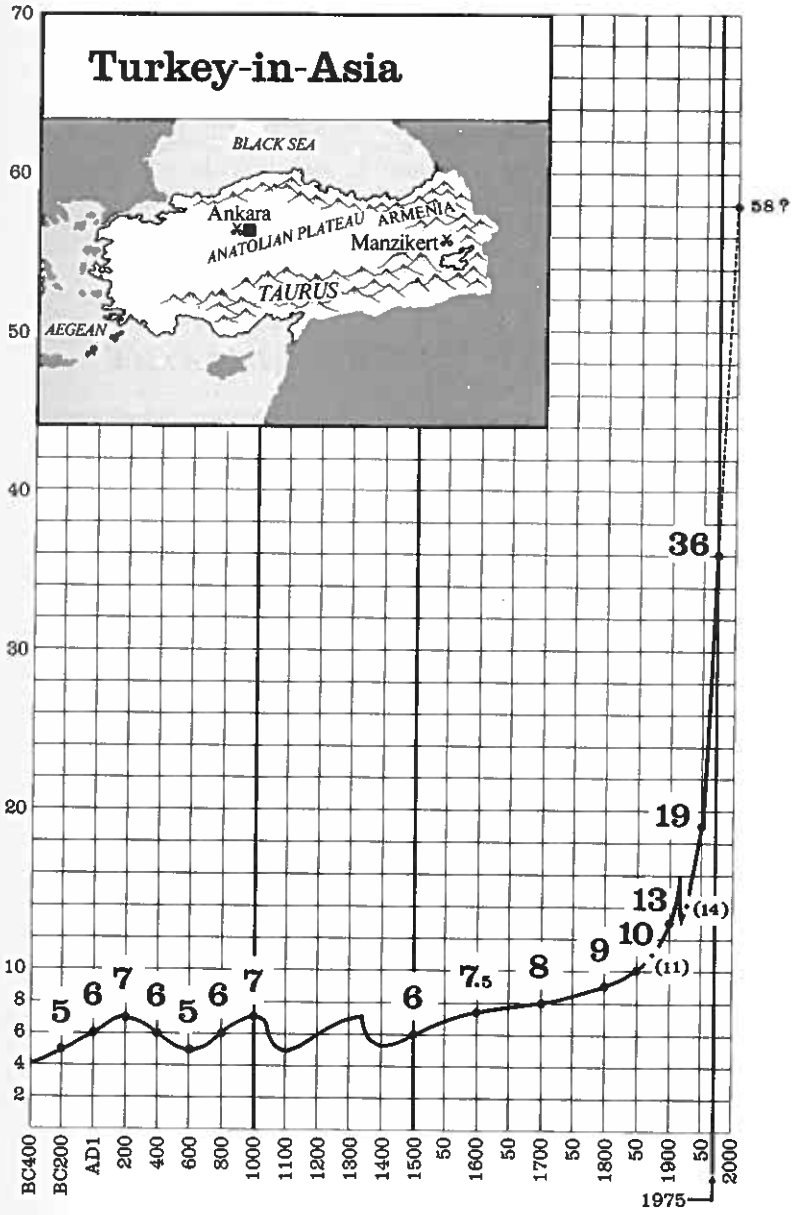
During the 19th century various cures were suggested for the 'sick man of Europe': the necessary physic was finally administered by Enver Pasha and Kemal Ataturk during and immediately after the First World War. Enver was a startlingly bad general and a sizable proportion of Turkey's 0·5m war dead are attributable to his cheerful ideas on strategy. He also had ideas on minorities. During 1915 a near complete massacre of the million-strong Armenian community was carried out on his orders, a chilling foretaste of what a 20th-century dictator could do. Kemal, the opposite of Enver in every way, created victory out of defeat and his expulsion of most of the 2m Greeks and 0·25m Bulgars who lived in European and Asiatic Turkey prior to the First World War was as humanely conducted as such affairs can be. Between them the two leaders created present-day Turkey; the nation which was for so long a typical example of the polyglot oriental despotism is now ethnically and religiously homogeneous and intermittently democratic.

During the remainder of the 20th century the Turks have known peace and achieved a high rate of multiplication. Between 1950 and 1975 the population of Anatolia nearly doubled: it is now 36m and is likely to be approaching 60m by the year 2000.

The Ottoman Empire

The nucleus of the Ottoman Empire – the western half of Anatolia and the south-eastern half of the Balkans – was put together by the first four sultans in the course of the 14th century. By 1402 it had a population of over 6m and the status of a major power. In that year a shattering defeat at the hands of Timur the Lame reduced the Anatolian half of the Empire to chaos.

Recovery of the position and territory lost in this single battle – ironically enough named after the present Turkish capital, Ankara – took the best efforts of the next Ottoman generation: it was not until the second half of the 15th century that the advance began again. By 1500 the Empire had acquired new provinces in both Europe and Asia, and its total population was approaching 10m; in the next half-century there was an explosion of military activity, with Hungary, the Fertile Crescent and Egypt all succumbing to Turkish arms. At its late 16th-century maximum the Empire included most of North Africa (where 8·5m people were under Ottoman rule), much of the Near East (12m) and nearly the whole of the Balkans



Asia Area 1a

(7·5m): the grand total of 28m was to be exceeded only at the end of the 19th century, when the rise in the rate of population increase characteristic of modern times added numbers faster than the loss of territory subtracted them. For the history of the Ottoman Empire after 1600 is one of continuous decline. At first this was a matter of internal shrinkage, an aspect of the general Mediterranean crisis of the 17th century. Then, one after another, important provinces started to escape central control – notably the Maghreb by 1700, Egypt in 1800 and much of the Balkans in the course of the 19th century. Finally, in the Balkan wars of 1912–13, Turkey-in-Europe was reduced to its present meagre dimensions. The Empire entered the First World War, the catastrophe that was to end in its complete dismemberment, with a population of only 24m.

The second graph on page 137 shows the populations of the area within the boundaries of the present-day Turkish republic, i.e. the combined totals for our Turkey-in-Europe (Europe 14e) and Turkey-in-Asia.

Primary Sources

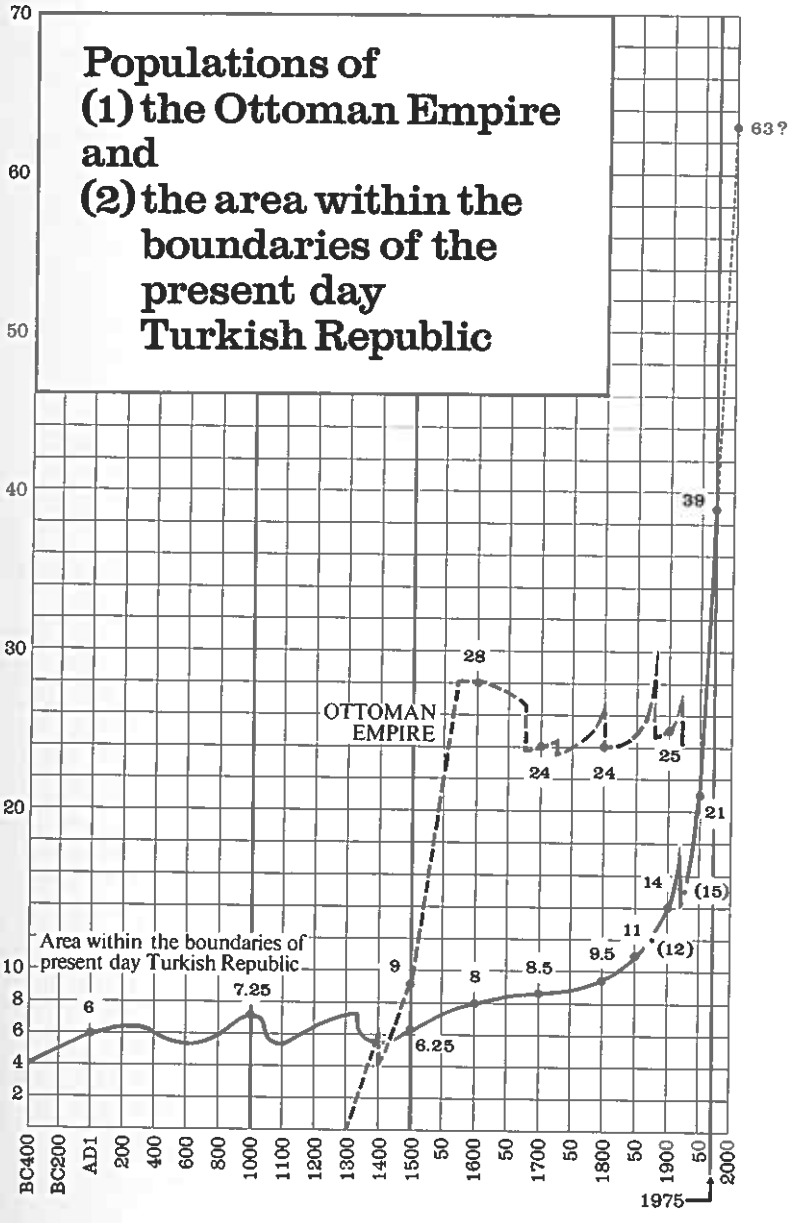
The only firm piece of information on the population of Anatolia in the pre-Moslem era is contained in an inscription of Pompey's in which he claims that the area he conquered contained 12,183,000 people (recorded by Pliny the Elder in his Natural History, *book 7 para 97). Pompey conquered Transcaucasia, Syria and Palestine as well as Anatolia, which makes it unlikely Anatolia was responsible for more than 7 or 8 out of the 12: the real population may well have been a million or so less than this because Pompey is very possibly referring to an even wider area – including places like the Crimea, which he never conquered but which sent a formal submission – and because victorious generals tend to round off their totals upwards.*

The first statistically useful information to survive is in the Ottoman archives. Starting in the 15th century the Ottomans carried out intermittent 'recensions' – enumerations of adult males. Two of these surveys have been worked up by modern historians so far: the earlier is the recension of 1575 which yields a figure for total population of about 8m; the other is the return for 1831 which suggests a total population of about 10m. Doubtless others will be published in time.

The first Turkish census of modern times was taken in 1927: since 1937 there have been regular quinquennial censuses.

Bibliography

** Beloch postulated a population of 13m for Roman Anatolia, a figure which implies that the area of modern Turkey-in-Asia contained 16m or more: this is just not on.*
** Russell suggests a more believable 6–8m for the period AD 600–1500. The Ottoman recension of 1575 is discussed in M. A. Cook's* Population Pressure in Rural Anatolia *(1972); the recension of 1831 in Issawi's contribution to* Studies in the Economic History of the Middle East *(ed. M. A. Cook, 1970, p. 397). Cook has also contributed the chapter on 20th-century Turkey in * Clarke and Fisher.*



1b Syria and the Lebanon

0·20m km²
(more than half desert)
1b–1 Syria 0·19m km²
1b–2 The Lebanon 0·01m km²

Syria and the Lebanon were among the first countries in the world to experience the agricultural revolution and its demographic effects. By 5000 BC their combined population was approaching the 100,000 mark, a tenfold increase on the mesolithic figure. By the final phase of the neolithic, *c.*3000 BC, it had increased to a quarter of a million.

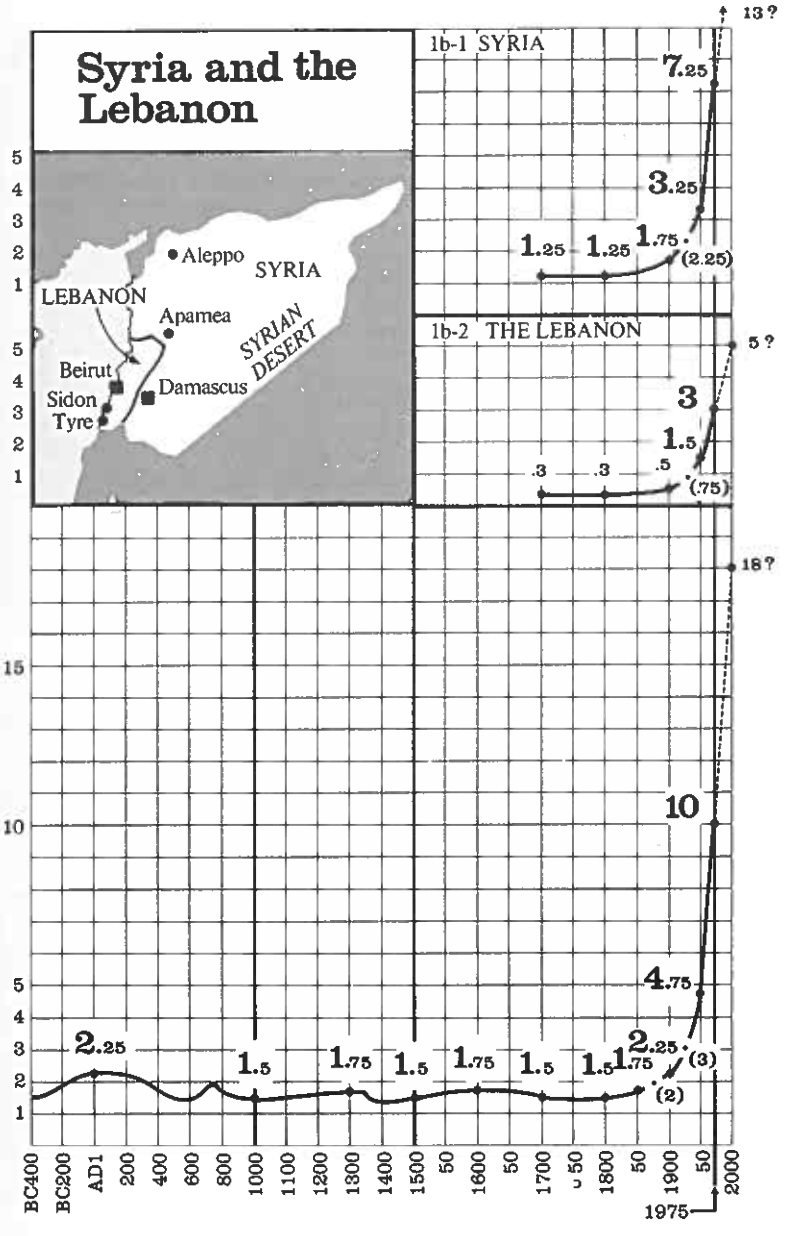
The next two millennia saw some of the bigger villages growing into towns, and names that have remained famous to this day – Aleppo and Damascus, Tyre and Sidon – appear in the historical record. The number of Syrians rose to 600,000 by 1000 BC: the Phoenicians, to give the Lebanese the name by which they were known in antiquity, then numbered 200,000. The secular trend was still upwards.

Unfortunately for them neither the Syrians nor the Phoenicians ever created stable political units of any size, and this failure condemned them to subordinate status within the major Near-Eastern empires. Between the 10th and 6th centuries BC the Assyrians, neo-Babylonians and Persians came, saw and conquered. The next in the sequence was Alexander the Great, in 333 BC. He had no special plans for Syria but his lieutenant Seleucus had: after Alexander's death he carved himself out an empire which had Syria as its metropolitan province. His successors held on to it till they in their turn were forced to yield to Rome.

When Alexander the Great entered the area the Syrians and Phoenicians numbered 1·5m. The Seleucids brought in Greek settlers – perhaps 100,000 of them – and the combination of new blood, new ideas and administrative fervour set off an economic and demographic boom. The population climbed towards the 2m mark and if it slipped back a bit in the chaotic years between the collapse of the Seleucid monarchy and the incorporation of Syria and the Lebanon in the Roman Empire, it surged up again as soon as order had been restored. For the first two centuries of the imperial period the total for the area was around 2·25m, split roughly 4 : 1 between Syria and Phoenicia.

This was the high point. The area shared in the general decline of late antiquity and when it was conquered by the Arabs in the 7th century numbers had fallen below 2m. Briefly, under the Ummayad caliphs, Damascus was the capital of the Arab Empire and Syria the recipient of revenues that flowed in from as far away as Spain and Seistan. But now the secular trend was down. When the caliphs moved to Bagdad the area's population rapidly sank to a mere 1·5m. And this was to remain the norm for the next eight centuries. There were sluggish upward movements in the 13th and 16th centuries, but the Black Death and the dead hand of Ottoman bureaucracy put paid to them. Not till the opening years of this century did the area match the best figures of antiquity.

The current growth rate is high. In the



case of the Lebanon it has been reduced by substantial emigration – a total of 0·3m Lebanese (nearly all of them Christian) have left the country since the late 19th century (most of them for western Europe and the Americas) – but there are now 7m Syrians and 3m Lebanese, and the projections for the year 2000 suggest that by then there will be at least 16m people in the area.

Primary Sources and Bibliography

One isolated census return survives from Roman times: according to an inscription (CIL iii 6687: Journal of Roman Studies *24, 1934, p. 187) the district of Apamea had 117,000 inhabitants in* AD *6. This is less helpful than it appears to be because, though we know that the Romans divided the area into about 35 or 40 such districts, which suggests a total population of 4 or 5m, we also know that the city of Apamea was one of the most important in Syria and Lebanon. It is likely, therefore, that it had more citizens than the average city and Syria less than 4m people. More directly useful is Pompey's overall total for this part of the world (see p. 136), which suggests that 3m or 4m would cover Palestine and Jordan as well as Syria and Lebanon. * Russell takes the higher of these two figures, we have opted for the lower. * Beloch's 6m seems far too high.*

*The Arab centuries are an almost total blank. * Russell (p. 101, table 100 and note 30) has assembled data on the population of the cities of the Levant in the 12th century and made these the basis of a population estimate for the area: the figure he finally produces (2·7m for our areas 1b and 1c together) is more readily acceptable than the method. In fact, our figures for the period 1000–1500 are the same as his except that our pre-Black Death peak is lower by almost a quarter. See also * Poliak.*

Between 1516 and 1918 our areas 1b and 1c were ruled by the Ottoman Turks. In the archives at Istanbul is the record of a census of households in these areas taken at the end of the 16th century. The provincial totals have been published by O. L. Barkan in Studies in the Economic History of the Middle East *(ed. M. A. Cook, 1970, p. 171): the figure for areas 1b and 1c together is 284,000 households, which, even using as high a multiplier as 5, indicates a population total of only 1·4m. This seems much too low – by more than 50% in our view – and one would need to see more returns published, and a fuller style of publication, before accepting that the demographic situation was ever as bad as this.*

A poor substitute for primary documents are the contemporary Western estimates – the earliest from the late 18th century – which have been collected by Charles Issawi (The Economic History of the Middle East, *1960, see p. 209): they are helpful only in the sense that they establish orders of magnitude. For the 20th century we have the reasonably accurate estimates produced by the French, and in the case of Syria two censuses taken in 1960 and 1970.*

The Lebanon has never had a census as all: attempts to hold one in 1921, 1932 and 1941 all foundered amid intercommunal tensions and the government now actively doesn't want to know any more: true figures could disturb the necessary fiction that the population splits exactly into Moslem and Christian halves. The real split is probably more like 60 : 40.

1c Palestine and Jordan

0·12m km²

1c–1 Palestine 0·03m km²
(of which the southern half is desert)

1c–2 Jordan 0·09m km²
(all but the western tenth desert)

The stony landscape of Palestine and Jordan is unlikely to have supported more than a few thousand people in mesolithic times and, though the area is among the first in which neolithic agricultural techniques appear, the population figures must have remained very low – in the 30,000 to 100,000 range – for many millennia. After 1500 BC village life took deeper root: the Egyptians brought law and order to the area, and in the heyday of their empire the land may have held a quarter of a million people, two thirds of them in Palestine.

The collapse of the Egyptian Empire in 1200 BC left Palestine and Jordan defenceless: the Philistines seized the coast, the children of Israel moved in from the desert. According to scripture the Israelites were numbered at something over 2m. Ten thousand would be a better figure, but if they were few they were tenacious: they multiplied and proselytized with such remarkable success that by 800 BC they constituted rather more than half the total population of the area – say 0·3m out of 0·5m.

A population of this size, though sufficient to dominate Palestine and Jordan, was hardly enough for an empire. For a century, under David and Solomon, Israel managed to live beyond its demographic and political means; then the kingdom divided, dwindled and, ultimately, fell. Up to 100,000 Israelites were actually deported to Mesopotamia by the conquering Assyrian and Chaldaean kings: it is remarkable that 40,000 descendants of this Diaspora retained sufficient sense of their Jewish identity to ask for repatriation when Cyrus of Persia finally brought peace to the Fertile Crescent (539 BC).

The population of Palestine and Jordan seems to have stagnated for some centuries after this. The Greeks displaced the Persians as rulers and only in the 2nd century BC, when the Greeks in their turn were losing control of the situation, are there signs that the local population was on the increase again. The new Jewish state created at this time will have had a population at least as big as its more famous Davidic predecessor and by the time the Romans appeared on the scene Palestine and Jordan probably held more people than ever before – say 600,000.

This population, already a bit too large for comfort, was to go on increasing. By AD 1 it had reached 0·8m and cracks were appearing in the normally well-disciplined Jewish social system. Way-out religious and political sects began to multiply; ascetics, zealots and messiahs preached to eager crowds. The Roman reaction was vigorous. Anyone preaching anything that could be construed as sedition was smacked down and when discontent finally flared into revolt the Roman army brutally repressed it (AD 66–73). The bloodletting sufficed for this generation and the next, but the same factors continued at work and there was a second explosion in AD 132. This time the Romans decided to apply a 'final solution' to their Jewish problem: the

legions ground their way forward killing everyone in their path. Tacitus has a phrase for his countrymen when on this sort of campaign: '*ubi solitudinem faciunt, pacem appellant*' – 'they make a wilderness and call it peace'. By the time the war ended in AD 135 Palestine was a graveyard: almost the entire Jewish population had fled or died.

To replace the Jews, the emperor Hadrian brought in new settlers. By AD 200 there had been a partial recovery to a total of perhaps 0·5m for Palestine and Jordan together. And round this point the population of the area was to fluctuate for the next 16 centuries. Peaks of up to 600,000 may have been reached at particularly busy periods – under the caliphs in the 8th century and under the crusaders in the 12th century – and troughs of 400,000 during the periods of general demographic retreat – the Byzantine nadir of the early 7th century, the half century after the Black Death and the Ottoman demographic low of *c*.1700. But essentially Palestine and Jordan slumbered on untouched by the innovations that were transforming the rest of the world.

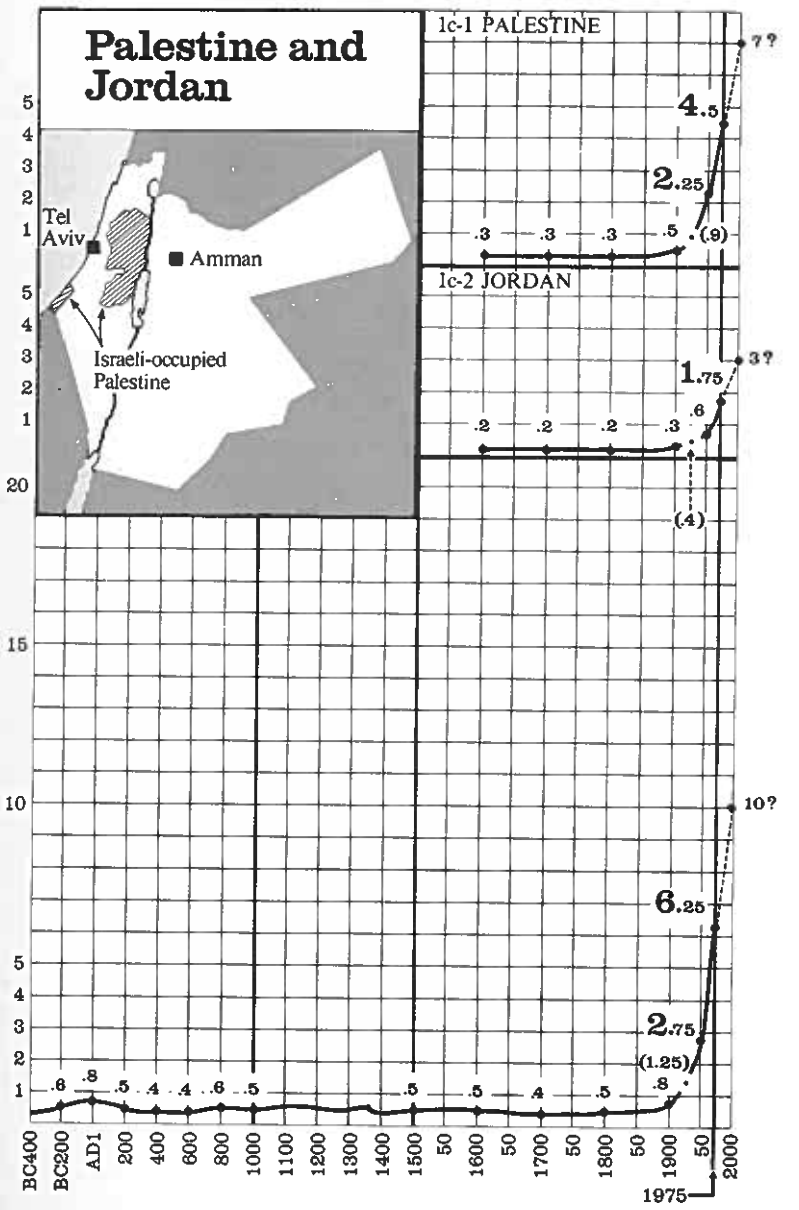
During the 19th century the first signs of change became visible: the population slowly increased to 0·75m. In the mid 20th century both the politics and the population of the area suddenly exploded. Literally millions of people poured in or were pushed out: the disadvantages of having Jewish, Christian and Moslem holy places in one city became startlingly apparent.

Demographically as politically the dominating fact in the modern history of the region has been the recolonization of Palestine by the Jews. Numbering less than 5,000 through the Middle Ages, the local Jewish community began to grow significantly in the 19th century, increasing from 10,000 at its beginning to 70,000 at its end. The census of 1922 recorded 84,000 Jews, that of 1931 175,000, while the new-founded state of Israel had a Jewish population of 0·8m at its birth in 1948. Today the figure is 3m. Immigration has been the predominant factor in this growth, with some 700,000 immigrants arriving in the first five years of Israel's existence. About a third of the post-1948 arrivals have come from Eastern Europe and about a fifth from North Africa. This contrasts with the pre-1948 pattern of origins which was predominantly Western European and North American.

Mirroring the rise of Israel has been the relative decline of the Arab community in Palestine. This is not at all the same thing as the Palestinian Arab community, which has multiplied vigorously during its exile. It was 1·25m strong in 1948 and is reckoned at 3·6m today. Of the present total 0·4m live in Israel and 1·1m in the rest of Palestine – at the time of writing, under Israeli occupation. Another 1m are in Jordan, where they actually form a majority of the country's present-day population of 1·75m. The remainder live in the Lebanon (0·4m), Syria (0·2m) or elsewhere in the Arab world (0·5m).

The present situation in area 1c can be tabulated as follows:

		Jews	*Arabs*	*Total*
Israel	21,000 km²	3·0	0·4	3·4
Israeli-occupied Palestine	6,000 km²		1·1	1·1
Total Palestine	27,000 km²	3·0	1·5	4·5
Jordan	90,000 km²		1·75	1·75
Total Area 1c	117,000 km²	3·0	3·25	6·25



Primary Sources and Bibliography

The Amarna Letters show that Late Bronze Age Palestine and Jordan had a tiny population: W. F. Albright puts both together at 200,000 (Cambridge Ancient History, *3rd edn, Vol. 2, Part 2 (1975): see also C. C. McCown in* Journal of Biblical Literature *66 (1947)). By the early Iron Age one could believe that the combined total had doubled, but given this background the early Jewish statistics in the Bible – 603,000 adult males at the time of the exodus (Numbers 1, 46); 1·2m adult males under David – have to be dismissed as fabulous or miraculous. On the other hand the figure for those returning from the exile in Babylonia (Nehemiah 7, 66) is perfectly credible: 42,360 people (ignoring a suspicious-looking rounding-up to 50,000) could well have been involved in the sort of mass deportations practised by the Assyrians and Babylonians. Unfortunately this isn't really any help in determining the total population of the area. Nor is Josephus, who garbles all his figures.*

*Palestine is lumped in with Syria by both * Beloch and * Russell. Neither has anything very much to go on, but for what there is see p. 140. The 16th-century Ottoman data are also dealt with there because the provincial divisions used by the Turks make it impossible to give separate figures for our Areas 1b and 1c. For a good survey of the entire Islamic period see * Poliak.*

Trustworthy figures begin with the British-administered censuses of Palestine of 1922 and 1931, and a series of estimates for Jordan of the same vintage. Since independence things have improved further: the Israeli authorities held censuses in 1948 and 1961; Jordan carried out a preliminary enumeration in 1952 and took a proper census in 1961. The Jordanian counts covered the west bank which has since been occupied and recounted by Israel (1967).

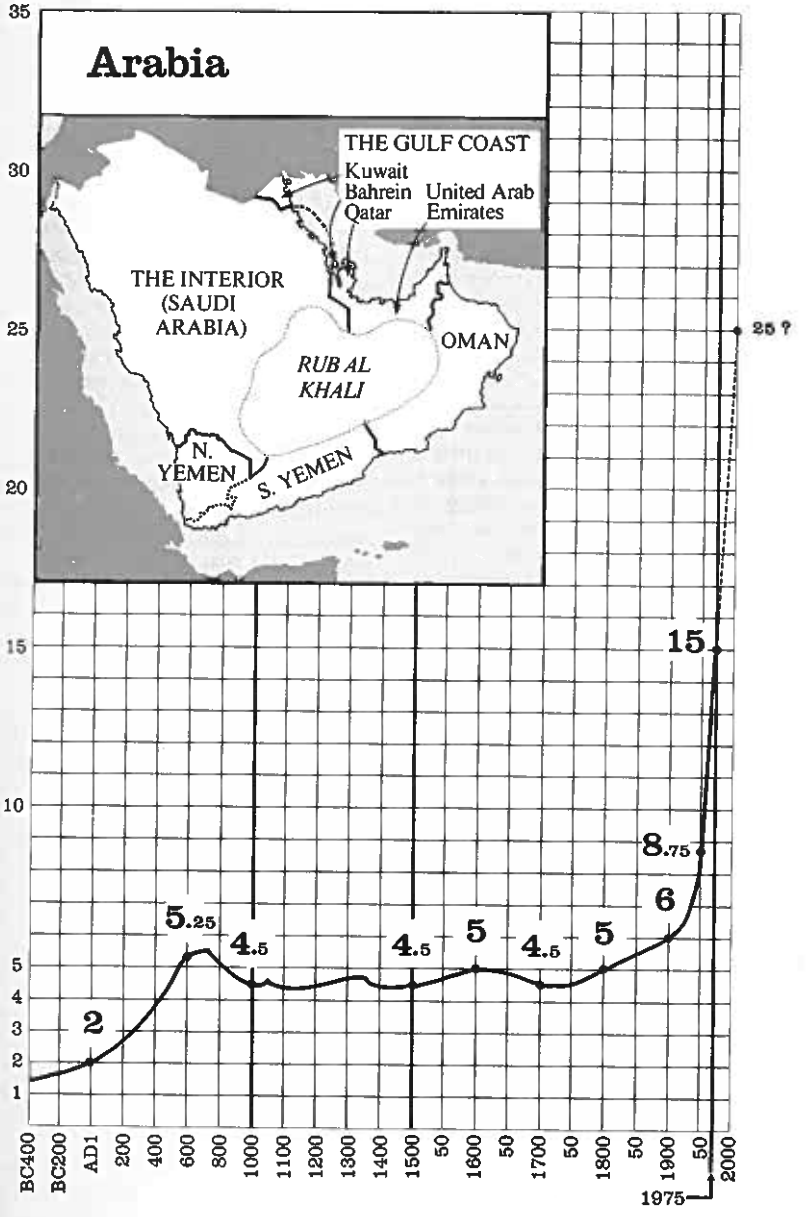
1d Arabia

2·95m km²

The Arabian peninsula is currently divided between eight sovereign states which can be grouped as follows:

1d-1	The Gulf coast: *Kuwait, Bahrein, Qatar and the United Arab Emirates*	**0·10m km²**
1d-2	The interior: *Saudi Arabia*	**2·15m km²**
1d-3	The southern corner, the Yemen: *The Yemen Arab Republic and the People's Democratic Republic of Yemen (or, to put it more comprehensibly, North Yemen and South Yemen)*	**0·48m km²**
1d-4	The eastern corner: *Oman*	**0·21m km²**

Until recently the geography of these subdivisions entirely determined how their inhabitants lived: on the Gulf coast and in Oman the population was traditionally seafaring; in the vast interior – a mixture of desert, steppe and oases – there was a



Asia Area 1d

thin scattering of the pastoral bedouin with no more than the occasional settlement, and in the Yemen, the only part of the peninsula with enough rainfall for peasant agriculture, there was the relatively high and even density of population that goes with this way of life. Today geology is as important as geography and the rates of growth are strongly influenced by the enormous oil revenues which are flowing, very unevenly, into the peninsula.

1d-1 The Gulf Coast

The Persian Gulf is the setting for the world's oldest authenticated trade route. Ships plying between Iraq and Pakistan were calling at Bahrein as early as 2000 BC and the scattered fishing communities will have made the transition from a mesolithic culture to one with a predominantly commercial colouring by this date. In 2000 BC one can think in terms of 25,000 people, in classical times of 50,000 and by AD 600 of 100,000. In 1900 the population was still only 200,000. Since then the discovery and exploitation of the region's colossal oil reserves has caused dramatic changes in every aspect of Gulf life. Between 1950 and 1975 the population tripled; it can be expected to rise by at least a further 100% between now and the end of the century.

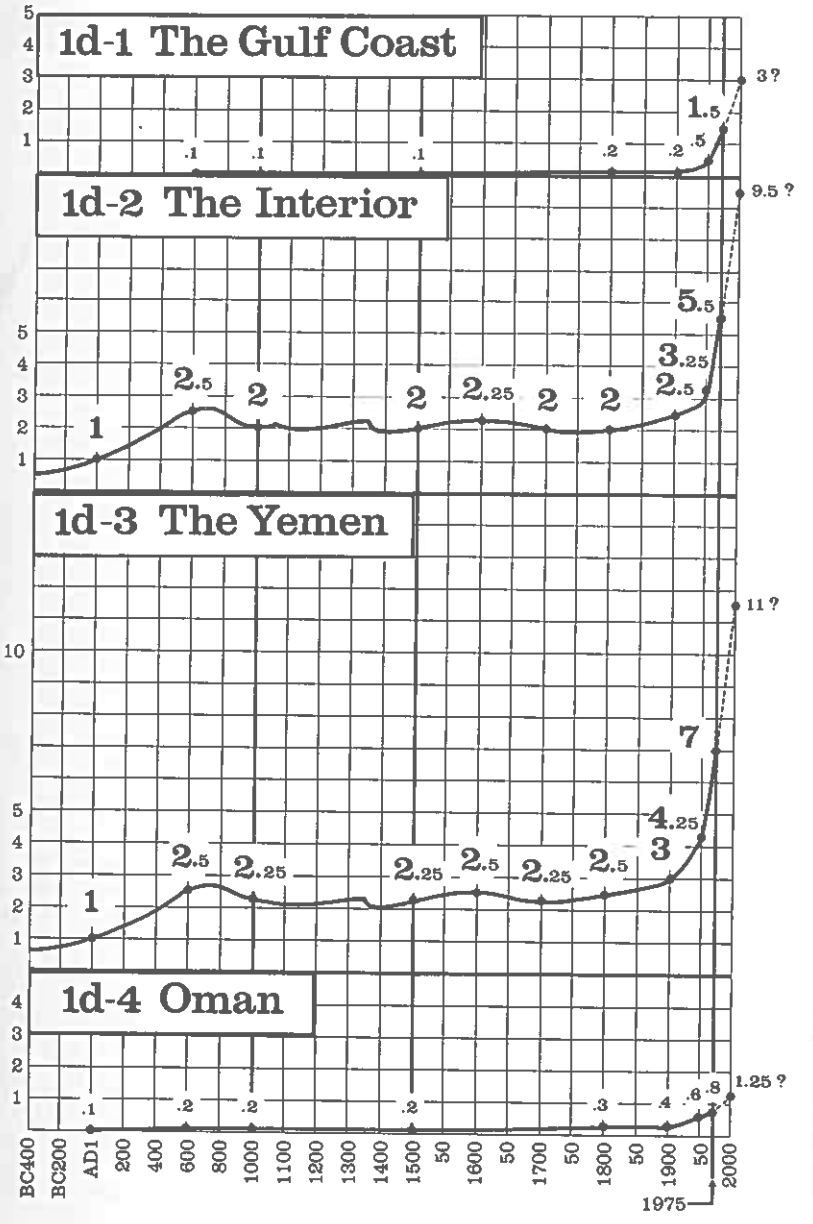
1d-2 The Interior

Within the Arabian peninsula lies a truly uninhabitable area, the 0·8m km² sand sea known as the Rub al Khali or 'Empty Quarter'. Through the rest of the interior human existence has always been just possible. At first the modes of support were limited to simple food-gathering at the oases and hunting of the animals that lived in the desert scrub; ultimately these life styles were replaced by a more deliberate harvesting of the oases and, in the semi-desert, a system of pastoralism based on the camel. As far as the oases are concerned one can equate the changeover with the appearance of neolithic techniques elsewhere in the Near East around 5000 BC. The evolution of the typical pastoralism of the bedouin appears to have taken place later, in the 2nd millennium BC. Most of the growth in population will have coincided with these developments, with numbers rising from 10,000 in 5000 BC to 0·1m in 2000 BC, 0·5m in 1000 BC and 1m in AD 1. In Mohammed's time the figure soared past the 2m mark, putting real pressure on resources. The result was the outpouring of bedouin armies which created the Arab empire of medieval times and the Islamic world of today.

Pressure never built up to the same extent again, the population remaining in the 2m–2·5m band for the rest of the medieval and early modern periods. Even now the total of Saudis is no more than 4m. However, oil riches have attracted in 1·5m foreigners (mostly Yemeni labourers) so the current total stands at 5·5m. At the most 0·5m of these could still be called nomads, as against the fifty-fifty split between bedouin and oasis-dweller that was the norm in the past.

1d-3 The Yemen

The comparatively friendly climate of the Yemen explains why the classical geographers referred to it as Arabia Felix (Arabia the Fortunate) in contrast to the rest of the peninsula (Arabia Deserta): it enables this relatively small area – little more than 10% of the whole – to support half Arabia's



Asia Areas 1d–1 to 1d–4

population. This ratio has probably been constant since the days of the Queen of Sheba (Sheba being one of the Yemeni kingdoms during the last millennium BC), or for that matter since the introduction of agriculture. This means that if we think of a Yemeni population of something like 1m in classical times, something over 2m in Mohammed's day and something like 3m in 1900 we are in the right order of magnitude.

Today the population is 7m, slightly less than 50% of the peninsular total. This drop in the ratio is due to high emigration. Yemen has been far from Felix in the matter of oil, having found none at all, and many of its young men – currently more than 1m – are off working in Saudi Arabia.

1d-4 Oman

Oman's population has probably always been around its current 5% of the Arabian total. However, unless the country turns out to have oil reserves on the same scale as the other states of the Gulf it is likely that this percentage will slowly fall and that the million mark will only just be reached by the end of the century.

Primary Sources and Bibliography

There are no primary data for the period before this century. For detailed estimates of the peninsula's population during the First World War see Vol. I of the Handbook of Arabia *produced by the (British) Admiralty War Staff, Intelligence Division (London 1916: quoted hereafter as A W S). For the post-Second World War period see * Clarke and Fisher. The position since the Second World War may be summarized as follows:*

The Gulf States. *The Emirate of Bahrein held the first census ever taken in the peninsula in 1941 (and has held censuses since in 1950, 1959, 1965 and 1971). Kuwait followed in 1957 (and has held repeat censuses in 1961, 1965 and 1970), the United Arab Emirates in 1968 and Qatar in 1970. The figures suggest that the estimates made during the first half of the 20th century were sound, for the earliest, the A W S figure of 0·25m, needs reducing by only about 10% to make it consistent with what is known now.*

Saudi Arabia. *The Saudi authorities have held two censuses, the first in 1962–3, the second in 1974. The figure obtained in the first was 3·3m, about half the official estimate. The government tried to suppress this result but it leaked out all the same. In the case of the second census it did better and no figures at all have been published. Official figures are still based on projections from the pre-census estimates; the current runner is 8·75m.*

The Yemen. *British estimates for South Yemen in the 1950s were probably reasonably accurate, being based on a measure of administrative control, though the first census was taken only after independence, in 1973. The first census in North Yemen was taken in early 1975.*

Oman. *No census or enumeration has ever been carried out here. The quoted estimates have slowly risen from the 0·5m suggested by A W S to the current official figure of 0·75m*

1e Iraq

0·44m km² (about one fifth productive)

The north-west of Iraq is hill country with sufficient rainfall to support agriculture: the rest of the country is arid except where directly watered by the Tigris and Euphrates. The north-west, modern Kurdistan, is part of the zone within which agriculture was first practised, while the south, ancient Sumeria, is the site of an equally important social advance – it was here that villages first grew into towns. Both these 'revolutions' had important effects on Iraq's population. The first, the neolithic revolution, involved an increase from something under 10,000 to something over 100,000, though, as the change was spread over the whole of the period from the 7th to the 5th millennia BC it is better described as evolutionary than revolutionary. The second, the urban revolution, was comparatively abrupt. During the middle centuries of the 3rd millennium the population of Sumeria surged up to the half-million mark, its villages became towns and the towns became the political powers of the area.

The Sumerians were historically the most important element in ancient Iraqi society but they were never a majority: equally important were the hill farmers of Kurdistan and the nomads of the desert. Indeed demographically Kurdistan was much more stable than Sumeria. From the start the irrigating agriculture of the south was menaced by an insidious enemy, salt. The water table of south Iraq is saline and so near the surface that it only takes a bit of injudicious over-irrigation to bring it up to root level. When this happens the crops die and the fields become barren. In the end the area has to be abandoned to the nomads.

This process explains the collapse of Sumerian society at the end of the 3rd millennium BC: the contemporary influx of Amorite bedouin, which some have seen as a cause, turns out to be a consequence. It was not a permanent change: in time the fields recovered and the cycle could begin again. This happened at the beginning of the 2nd millennium BC and again at its end. We can reasonably postulate population rises to maxima of 1m and 1·25m in these two instances, with falls to 0·75m and 1m between and after.

In the final millennium BC there was an even more dramatic boom and bust. The political expression of the boom was the Assyrian Empire, the creation of the city state of Assur at the northernmost point of the irrigating area. The number of Assyrians must have been tiny – a few tens of thousands at most – but as in the case of Rome a few were enough to conquer the world as they knew it. By the 7th century BC Assyrian governors were installed throughout the Near East from Egypt to Iran: a steady stream of captives and adventurers flowed into the new capital of Nineveh, bringing the total population of Iraq to an all-time high of 2m. The end came with dramatic suddenness. All the enemies of the much-hated empire ganged up together, razed Nineveh to the ground (612 BC) and turned the territory of Assur into an empty land.

Many centuries were to pass before Iraq regained the levels of prosperity and population achieved under Assyrian rule. Iraq became an adjunct of Iran and a province of the successive Iranian empires – Achaemenid, Parthian and Sassanid. Its population fluctuated between 1m and 1·25m. Then in the 7th century AD the Arabs conquered Iraq

and in the 8th century the Abbasid caliphs made it the centre of the Arab Empire. From their new city of Bagdad they presided over an empire of 30m and a metropolitan province that reached a 9th-century peak of about 2·5m. It was Islam's – and Iraq's – golden age.

In the 10th, 11th and 12th centuries this prosperity gradually ebbed away again. The Abbasid caliphs were respected throughout the Middle East but outside Iraq they were not obeyed: once again mounting salinization reduced the country's agricultural productivity. By the time the pagan armies of the Mongol Khan Hulagu reached Bagdad Iraqi society was in full decline. Hulagu's sack of the capital in 1258 set the seal on the national humiliation. There was a rapid drop of population to the million mark as nomadism again became the dominant way of life. What had once been the wonder of the Islamic world became a backward and impoverished district ruled by Ottoman pashas.

By contrast the 20th century has seen the population increasing at a rate that is exceptional even for the Middle East. The upturn began about 1850, with the 2m level being reached shortly before the end of the 19th century and the 5m mark in the late 1940s. The current population is 11m. As the totals have risen, the percentage of nomads has fallen – from 40% in 1850 to less than 5% in 1950 and a mere 2% today.

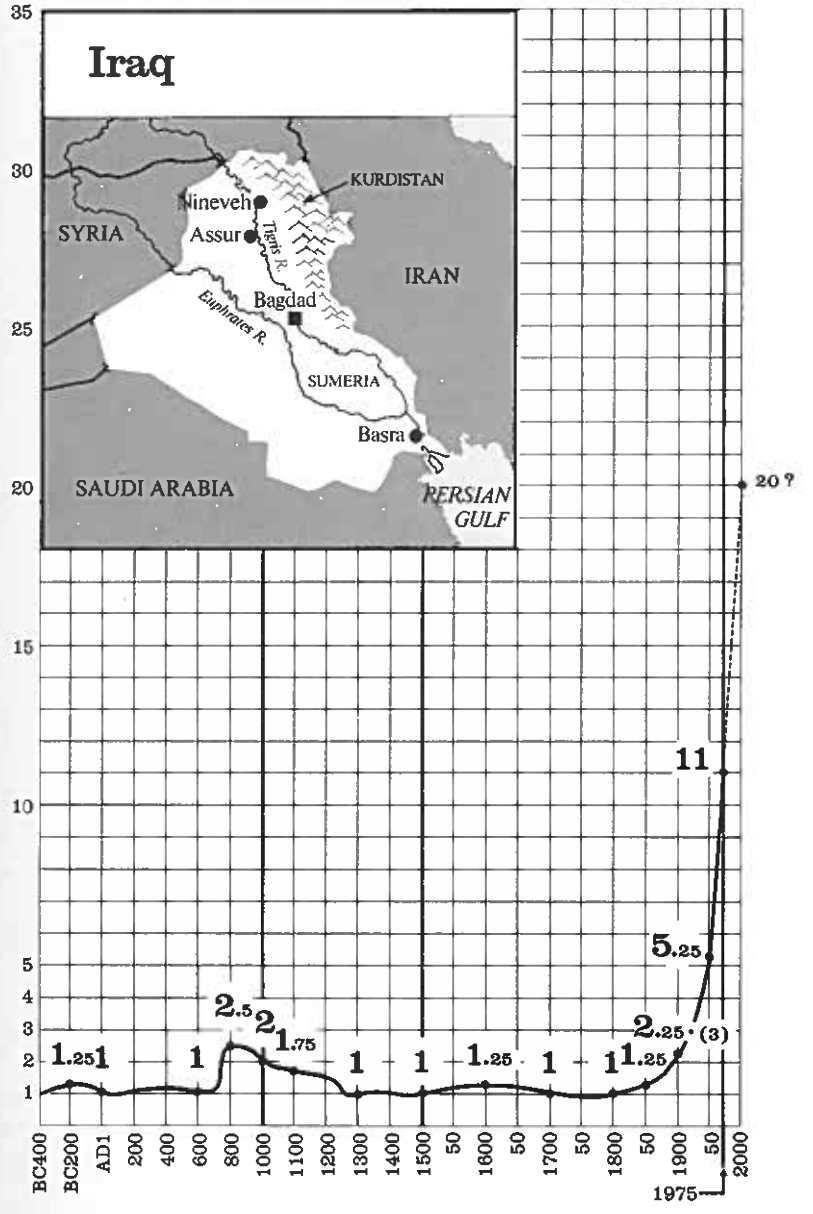
Primary Sources and Bibliography

The only bases for estimates of the population of ancient Iraq are provided by studies of urban and rural densities. For the sizes of ancient Mesopotamian cities see the Cambridge Ancient History, *3rd edn, Vol. I, Part 1 (1970), p. 332; H. Frankfort,* Kingship and the Gods *(1965) and David Oates* Studies in the Ancient History of North Iraq *(1968). For rural densities see Braidwood and Reed* (Cold Spring Harbour Symposium on Quantitative Biology *XXII (1957), p. 19)), who have proposed a figure of 0·5m for Sumeria in 2500* BC *on the basis of a rural density estimate of 15 per km²; this is compatible with a population for Iraq as a whole of 0·75m.*

*No one apart from * Russell appears to have attempted any reasoned estimates between this figure for 2500* BC *and one of 1m for* AD *1800 put forward by * Bonné. Absurd figures like 20m appear in accounts of the Bagdad caliphate but these belong in the realm of the Arabian Nights. Unfortunately they seem to have influenced the normally sober Russell, who allows Iraq 9m and apparently believes that the population had been as high as 15m under the Sassanids. Luckily his method calculation is quite implausible. There is, in fact, no reason for believing that medieval Iraq was capable of supporting more than 5m people or that the number of people who actually lived there ever exceeded half this figure.*

The results of a Turkish count of households in the Bagdad and Basra provinces (equivalent to the southern half of Iraq) at the end of the 16th century have been published by O. L. Barkan in Studies in the Economic History of the Middle East *(ed. M. A. Cook, 1970, p. 168). The figure of 88,000 households can be equated with an overall Iraqi total of just under the million mark if multiplied by 5 (per household) and 2 (for the other half of Iraq). The proportion of nomads was a third.*

For the recent period M. S. Hasan gives a series of estimates starting in 1867



(Bulletin of Oxford University Institute of Statistics, *20, 1958*). *These are based on a partial Ottoman census of 1890, British official estimates of 1866–7, 1900–1908 and 1919, and a partial enumeration in 1934. Proper censuses were taken in 1947, 1957 and 1965. The whole of this period is summarized by R. I. Lawless in * Clarke and Fisher.*

1f Iran

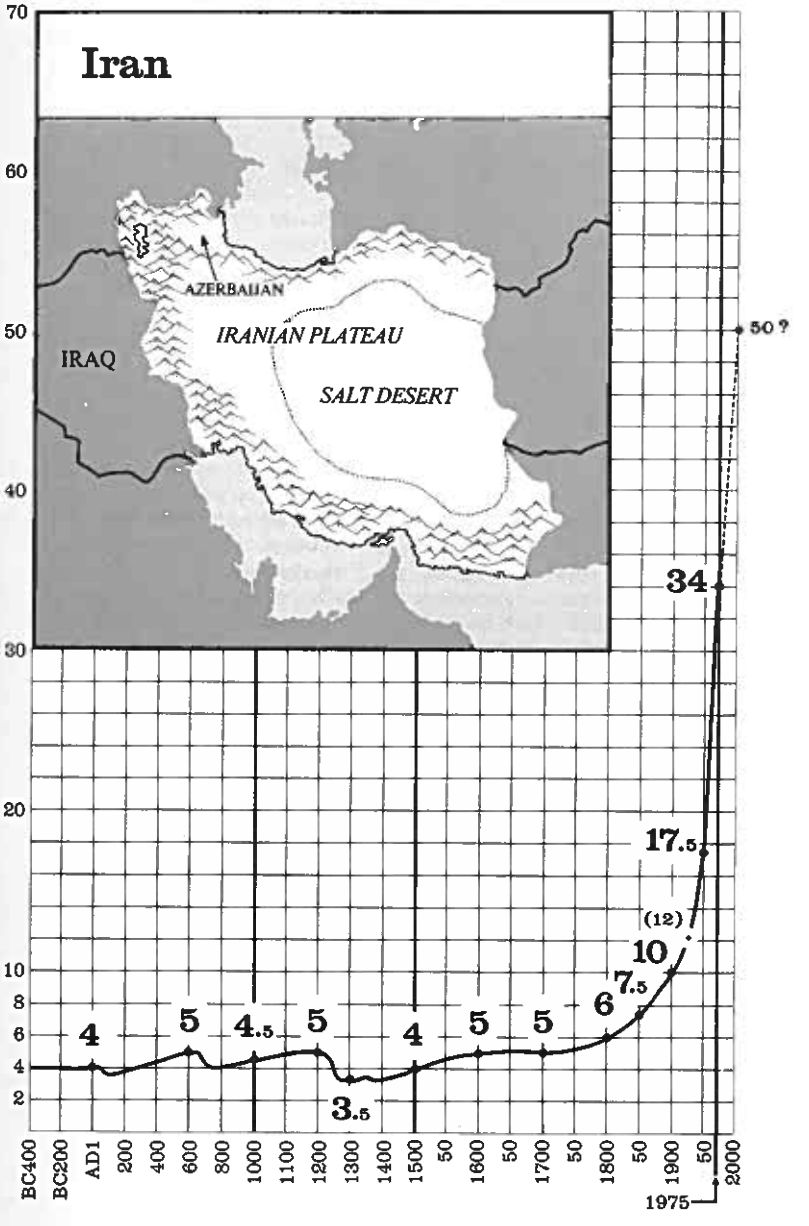
1·65m km²

There are village sites in western Iran that archaeologists have claimed are among the oldest agricultural settlements in the world, and though views on when and where the neolithic revolution began are currently in a state of flux there can be no doubt that agriculture in Iran is very old indeed. On the other hand the pattern of rainfall restricts the practice of agriculture to a mere 10% of the land surface. Another 20% can be used for grazing: most of the rest is desert and waste of the most depressing sort. The result is that the overall density of population has always been low and the overall totals far from imposing. The likely mesolithic population is of the order of 30,000; the likely population in the early neolithic period (the 5th millennium BC) not more than 0·5m and the comparable figure for the Late Bronze Age (around 1000 BC) no more than 2m.

By this time Iran was inhabited by horse-riding pastoralists as well as agriculturalists. The pastoralists, who dominated the central plateau, were of the same 'Iranian' stock as the present-day Persians: the peasantry in the mountain folds that form the western border of the plateau were in the linguistic sense Transcaucasians, i.e. similar to the Georgians of the Caucasus Mountains. During the 8th and 7th centuries BC these Transcaucasian peoples of Iran suffered severely from the warfare that raged between the Iranians of the plateau and the Assyrians of north Iraq: when the war ended with the triumph of the Iranians, the Transcaucasians were already slipping towards extinction. The Iranians – the Medes and Persians of the Bible – became the masters of an empire that stretched from Greece to India.

As tribute flowed in to the heart of the new empire the population of Iran rose from around 2·5m to 4m. A new equilibrium between the settled and nomadic ways of life was established by the development of the *qanat* system of underground water-courses for irrigation, and in both style and numbers the Persians now achieved a stable state. Their society was to continue almost unchanged through the conquest of Alexander the Great, the rule of his successors and the restoration of native power by the Arascid kings of Parthia. Under the Sassanid Dynasty (AD 226–649) this traditional Iranian culture reached its apogee: the population peaked to 5m. It was already beginning to slip from this high level when, in the 7th century, the armies of the Arabian caliph mounted the plateau and forcibly converted its inhabitants to Islam.

After the initial upheaval was over, Islamic Persia reached a level of prosperity that certainly equalled and possibly surpassed the Sassanid best. In fact, in a demographic as opposed to a political sense, it was not the arrival of the Arab that is the significant event in medieval Persian history but the arrival of the Turk. For the Turkish invasions –



a series of migratory movements that continued over the whole period between AD 1000 and 1500 – added a new component to the population of the country. Moreover, as each Turkish tribe moved into the area the balance swung from agriculture to pastoralism. The effect was usually immediately visible in the form of a massacre of Iranian peasants by nomad Turks.

The first Turkish invasion, the migration to which the Seljuks have given their name, was not too destructive, for most of the Turks passed on to Turkey; the bad one came in 1220 when the armies of Genghis Khan appeared from the north-east. For the next forty years Iran and Iraq were subjected to merciless slaughter and a 25% drop in population is a minimum estimate. Moreover, the 14th and 15th centuries cannot have seen any significant recovery for a cluster of reasons – the renewed dominance of pastoralism, the arrival of the Black Death and the final outburst of terror during the reign of the last of the nomad conquerors, Tamburlaine. By 1500 1m of the 4m people living in Iran were Turkish-speaking nomads. The newcomers dominated the provinces of Azerbaijan and Khorasan and far outnumbered the only other important minority in the country, the 0·5m Arabs who lived in the provinces bordering Iraq.

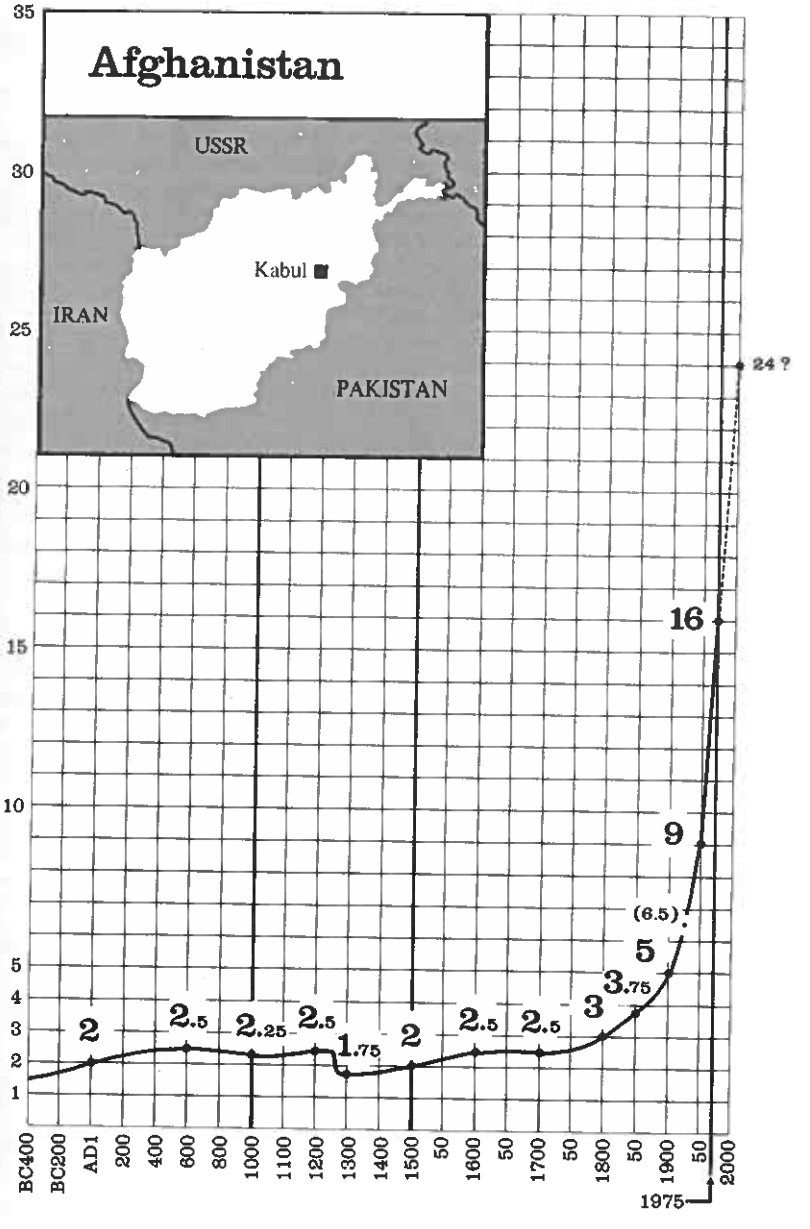
The 15th century was probably the high point of the pastoral way of life in Iran. Gradually during the next three centuries the greater potential of settled agriculture reasserted itself and as the total population rose towards 6m the percentage of nomads dropped towards 20%. By 1900 there were 10m people in Iran, a far higher figure than had ever been attained before: at the most only 2m of these were nomads.

Since then the process has accelerated as the population explosion has hit Iran with full force and the urban and agricultural populations have soared. There are currently about 34m Persians, of whom 27m are Persian-speaking, 4m Turkish and 2m Arabic. Only about 0·5m, mostly Turks, continue to practise pastoralism: by the end of the century, when, if anything approaching the current rate of increase is maintained, Iran will have a population of about 50m, it seems most unlikely that any of them will be nomads.

Primary Sources and Bibliography

For the prehistoric period there is a series of estimates of population density per km² of productive land in an article by Frank Hole and K. V. Flannery in Proceedings of the Prehist. Soc. *(1967). Taking the productive area as 10% of the whole, their figures imply overall population estimates much the same as ours. For a guess at the medieval population, again comparable with ours, see * Russell, p. 89.*

The population since 1900 is the subject of an excellent article by Julian Bharier in Population Studies *22 (2) 1968. His figures and the few estimates available for the 19th century are summarized in B. D. Clark's contribution to * Clarke and Fisher. The 20th-century figures are based on registration (which got off to a shaky start in 1928), a partial enumeration covering the twenty-five most important population nuclei (carried out in 1939–41) and two post-war censuses (1956, 1966).*



Asia Area 1g (text overleaf)

1g Afghanistan

0·65 km² (about 12% productive)

Although today remote from the currents of world affairs Afghanistan was sufficiently close to the heartland of the Old World where agriculture was invented to get off to a good start demographically. By 5000 BC the 15,000 or so pre-agricultural inhabitants of the area had been replaced by five times as many farmers: by 1000 BC some 1m people were occupied in tilling the plains on the northern border of the country and the fertile valleys hidden within the mountains of the central massif.

This population had risen to around 2·5m in the 2nd century AD when the Kushan kings made it the centre of a half-Iranian, half-Indian empire of the type that is characteristic of Afghanistan's brief moments of glory. It is probable that the population was no larger when such a moment came again in the years immediately before and after AD 1000. This time the empire was Moslem (the Kushans had been Buddhists) and its prosperity was based – under the excuse of religion – on the plunder of north India. A deserved retribution came in the form of the pagan Genghiz Khan in the early 13th century: the cities built from the spoils of India were sacked so thoroughly that the population of the country fell below 2m for the next century and a half.

Afghanistan now began to slip out of the mainstream of history. Periods as a border province of such empires as Timur's or the Moghuls' alternated with periods of chaotic independence. In the 19th century British and Russians came to see that their interests were best served by leaving Afghanistan alone: in this relatively tranquil period numbers went up significantly for the first time in centuries: from 3m in 1800 to 5m in 1900.

Growth in the 20th century has been faster, to about 9m in 1950 and to 16m in 1975. Afghans (Pathans) constitute about 60% of the population, Tajiks about 30%. The remaining 10% is accounted for by a series of small tribal groups of which the Uzbek Turks – with about 5% – are the most important. In 1960, between a quarter and a fifth of the population was still nomadic, though as a way of life pastoralism, in Afghanistan as everywhere else, is clearly in decline.

Primary Sources and Bibliography

There are no primary sources for Afghanistan – at least, though some counts of sorts have been made in recent years, there has never been a proper census. The government estimates – issued annually since 1920 – are held to be much too high by Donald N. Wilbur (in 'Afghanistan', Human Relations Area Files, 1962), who suggests 9m for c.1960 (cf. the official estimate of 13·3m for 1959). Wilbur possibly goes too low but seems to be the only writer to have seriously considered the question.

Perhaps the best approach is to compare Afghanistan with Iran. Afghanistan has about half the cultivable area of Iran: if its population is in proportion it would have been about 11m in 1960 – half way between the official figure and Wilbur's. This would fit with a World Bank estimate of 14·6m in 1971. For earlier periods a population roughly half that of Iran seems a reasonable hypothesis in the absence of any actual evidence.

ASIA AREA 2

Russia-in-Asia

16·5m km²

2a Caucasia

0·47 m km²

Caucasia is divided in two by the Caucasus Mountains, with Ciscaucasia lying north of the divide and Transcaucasia to the south. Historically, Ciscaucasia has been part of the Russian steppe while Transcaucasia has belonged to the Near Eastern community, or, to put it another way, Ciscaucasian population densities have been pastoral and Transcaucasian densities (except in the east) agricultural. So, since the beginning of the neolithic period – which in this area can be dated back to the 7th millennium BC – the Transcaucasians have significantly outnumbered the Ciscaucasians. By the Bronze Age, when there will have been at most 100,000 people in Caucasia as a whole, three out of every four Caucasians lived south of the mountains and this same proportionate division can be assumed for the Iron Age (total population 0·25m) and the classical period (0·35m).

None of the classical empires established direct control of Caucasia but Transcaucasia was divided into spheres of influence: the Romans became the protectors of the western two thirds – the alpine redoubt of the Georgian people; the Persians of the eastern third. This dividing line hardened when the Georgians accepted Christianity from Rome and the East Transcaucasians followed the Persians in converting to Islam.

In the 12th century the kings of Georgia managed to buck the generally pro-Islamic trend of the era and conquer most of the area south of the watershed. About half the 1m inhabitants of contemporary Caucasia were Georgians, which goes some way to explaining their dominance: the remainder divided equally into Ciscaucasians and Eastern Transcaucasians. Both these populations, originally Iranian, were becoming progressively more Turkish in character as each century brought a fresh wave of Central Asian Turks through the area.

The armies of Islam finally proved too strong for the Georgians. The power of the kingdom was broken by Timur the Lame at the end of the 14th century, and by the 16th century Transcaucasia had been divided between Ottomans and Persians along a line very similar to the division of the classical period. Several centuries of cultural and demographic stagnation followed with the Caucasian population growing only slowly – from 1·5m in 1600 to 2m in 1800.

At the beginning of the 19th century Caucasia was conquered by the Russians. The result was a sharp upswing in the population graph, partly because of an increase in law and order, partly because of Russian immigration and partly because of the complex of factors that constitute the opening phase of the cycle of modernization. By 1900 there were 3·5m people in Ciscaucasia (as against 0·75m in 1800) and 4m people in Transcaucasia (as against

1·25m). Apart from the interruptions imposed by the two world wars both populations have continued to grow rapidly since. There are now 13·75m Transcaucasians and 11m Ciscaucasians.

The Transcaucasians are currently divided between three republics: the Georgian SSR – pop. 5m (3m of them Georgians); the Armenian SSR – pop. 3m (almost all Armenians); and Soviet Azerbaijan – pop. 5·75m (85% Turk). Azerbaijan has the highest growth rate: its population was smaller than Georgia's as recently as 1965. Movements in and out of Transcaucasia since the Russian conquest have been relatively small-scale. About 0·2m Turks left during the pacification programme; about 0·2m Armenians arrived from Turkey before and during the First World War; Russians have moved in in moderate numbers and now constitute about 10% of the population. This is a very different picture from Ciscaucasia, where the indigenous peoples have been swamped by a massive influx of Russians. Russians constitute 70% of the total population and the area is counted as part of the Russian SSR.

Primary Sources and Bibliography

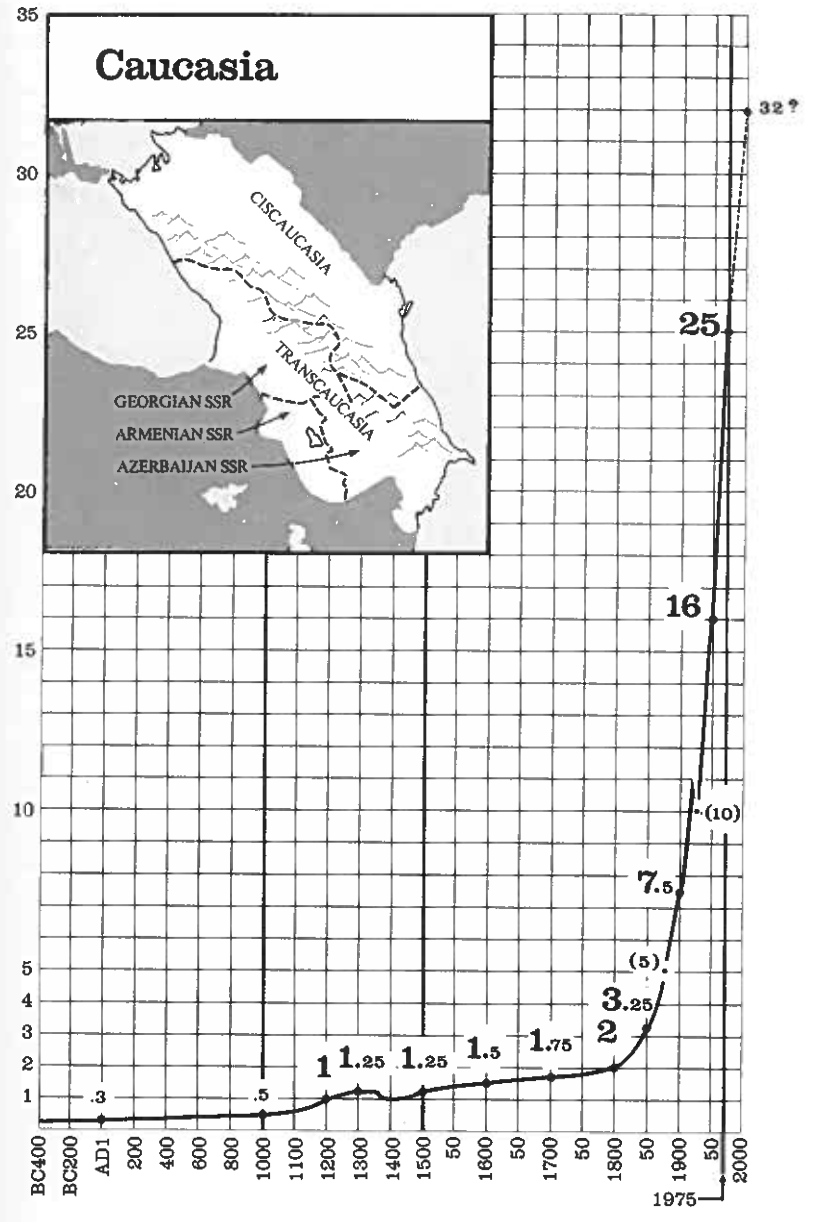
The traditional figure of 5m for medieval Georgia is absurd: in fact there are no usable primary data prior to the year 1800. Starting in the early 19th century the Russians produced believable estimates but as they didn't establish administrative control of the more remote areas till the late 1860s these have to be taken with a pinch of salt. The only impeccable figures derive from the Soviet censuses, of which the first was held in 1926 (see Europe Area 7).

2b Siberia

12m km²

When the first Russians crossed the Urals at the end of the 16th century they entered a land that was both immense and empty. Considering the distances involved, the speed with which they established control over the whole area – the feat was near enough complete by 1700 – was amazing: in that year the Russian flag was flying on the Sea of Okhotsk and 100,000 Russian fur-trappers and traders had been added to the 200,000 native hunters and fishers. Peasants, prisoners and political exiles followed in a steady trickle. By 1800 the total population was 1m and by 1850 2·5m.

Though only a thin ribbon of Siberia is arable the country is so vast that the agricultural potential is considerable. By the mid 19th century the teeming peasantry of European Russia had become aware of the opportunities that existed in the east and one of the great migrations of history was under way. The number of new colonists arriving each year passed the 25,000 mark in 1870, reached 50,000 in 1890 and 100,000 in 1896, the year the first major section of the Trans-Siberian railway was opened to traffic. For the years 1901–14 the annual average was over 200,000. At the outbreak of the First World War the



total population had reached 14m and the cumulative total of immigrants was nearing 7m.

The pre-First World War rate of growth – a doubling of the population in twelve years – was not one that could be sustained. Though the Soviets accorded the development of Siberia the highest priority the growth rate in the second quarter of the century fell back to 40% and in the third quarter it has dropped to 25%. The gains are still very high in absolute terms and probably a figure of about 6 or 7m extra people a generation is as many as can be reasonably provided for in this harsh environment. On this projection the population of Siberia will be around 40m at the end of the century.

Bibliography

Population figures for the period from 1622 to 1921 are set out on p. 32 of Donald W. Treadgold, The Great Siberian Migration *(1957). The earlier figures are the result of calculations performed by P. A. Slovtsov in the late 19th century: recently B. O. Dolgikh (quoted in George Vernadsky* A History of Russia, Vol. 5: The Tsardom of Moscow, *pp. 672–3 (1969)), has reworked the data and come up with slightly lower figures.*

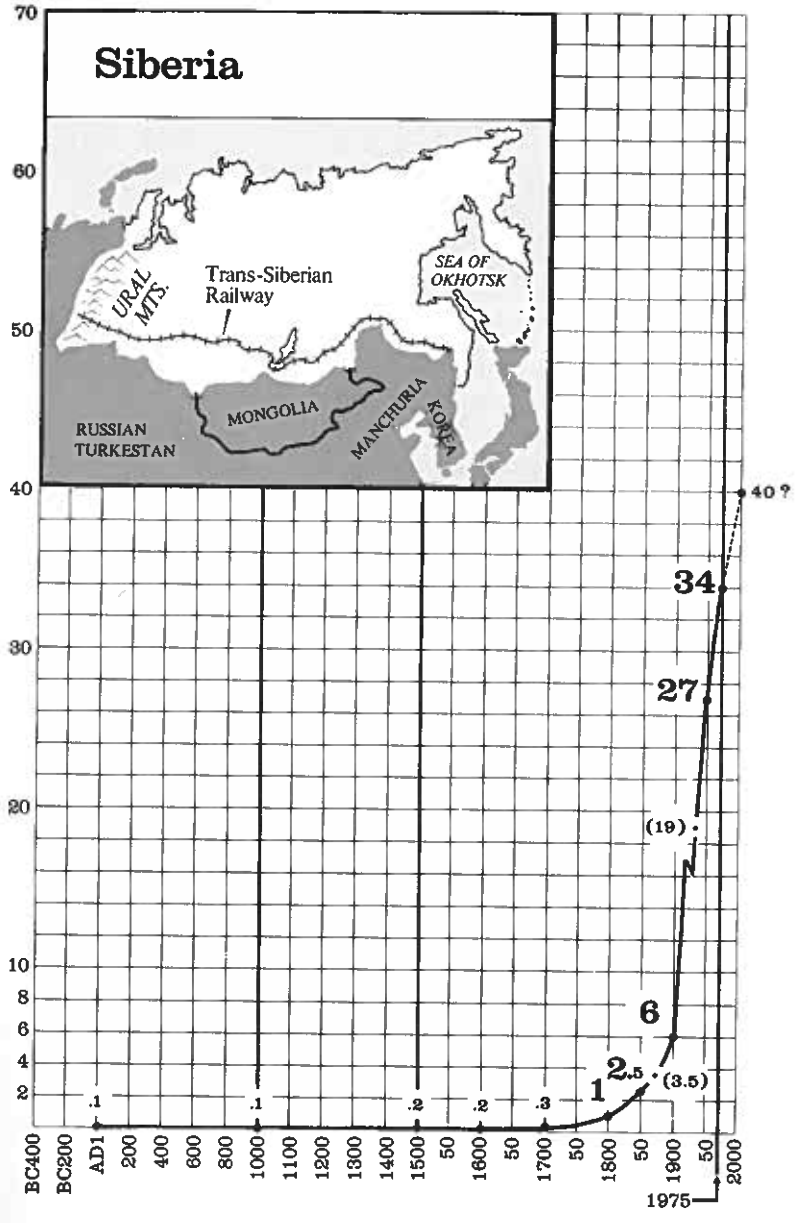
2c Russian Turkestan

4m km²

Russian Turkestan is currently divided between the Kazakh, Uzbek, Kirghiz, Turkmen and Tadzhik peoples, each with their own republic (SSR). All but the Tadzhiks in the mountainous south-east corner of the country are Turks, but historically the Turks are relative latecomers to the scene. The earliest inhabitants we know of were the Scyths and they were Iranians like the Tadzhiks.

The Scyths were the people who developed the horse-riding style of animal husbandry which was to prove the first practical way of exploiting the extensive but thin pastures of the Central Asian steppe. Scattered through the area there are, it is true, tracts of land suitable for settled agriculture and these have been farmed since the neolithic era. But Turkestan is a world where, once established, the nomadic way of life dominated the picture: the men of the steppe outnumbered the peasants and town-dwellers until well on in the 19th century. It is the opposite situation to that of Iran, where the nomads were always outnumbered by the peasantry. This is the basis for the age-old division of the Iranian-speaking world into Iran, the land of agriculture, and Turan, the land of pastoralism.

Russian Turkestan is a very large country, and even in the days before the evolution of an efficient pastoral style the population will have been considerable. In 1300 BC we can think in terms of 100,000 people on the steppe and another 100,000 scattered through the oases and in the areas where neolithic agriculture was possible. The appearance of the Scyths, their horses and their flocks is dated to the first half of the last millennium BC: it is to be associated with an increase in numbers, say from



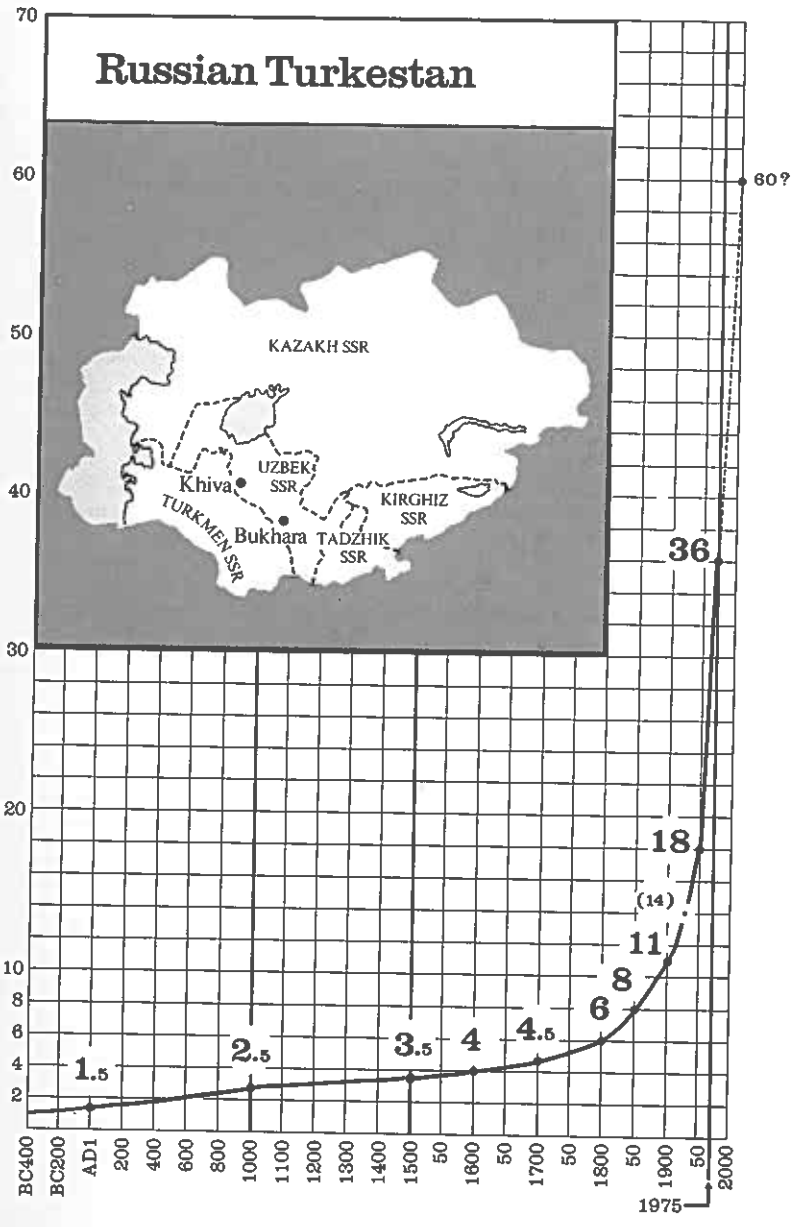
half a million to a million. Between 500 BC and AD 500 the population doubled again to reach 2m. About half a million of these were agriculturalists, most of them living in the areas near Iran and getting incorporated in the various Iranian empires from time to time.

In the period AD 500–1600 the population of Turan doubled again. It also changed its character – though not its nomadic economy – as Turkish tribes flooded in from the north-east and drove out the Iranians. The arrival of the Turks, and more particularly their conversion to Islam, gave the country a new cultural unity.

This was not to last long. In the late 19th century the area was conquered by the Russians and became part of the Empire of the Tzars. Since then administrators and settlers have arrived in such numbers that today Turan contains some 8m ethnic Russians. The conquest also released a demographic explosion among the Turks and Tadzhiks: their numbers have risen from 10m in 1900 to 28m now. In fact the native peoples of Turkestan have the highest rates of increase of any of the USSR's minorities: largely because of their efforts the population of the area is currently increasing by nearly 1m a year.

Primary Sources and Bibliography

*A. K. Validi (quoted by * Russell, p. 87) gives some estimates for the densities of the steppe peoples in the 1st century BC and the 10th century AD, but there is nothing at all substantial to go on before the Russian conquest in the 19th century. In fact even after the area was brought under Russian control the figures remained a bit uncertain, for the Khanates of Khiva and Bukhara returned only rounded estimates in the census of 1897. There are no really reliable figures before the Soviet census of 1926.*



ASIA AREA 3 Mongolia

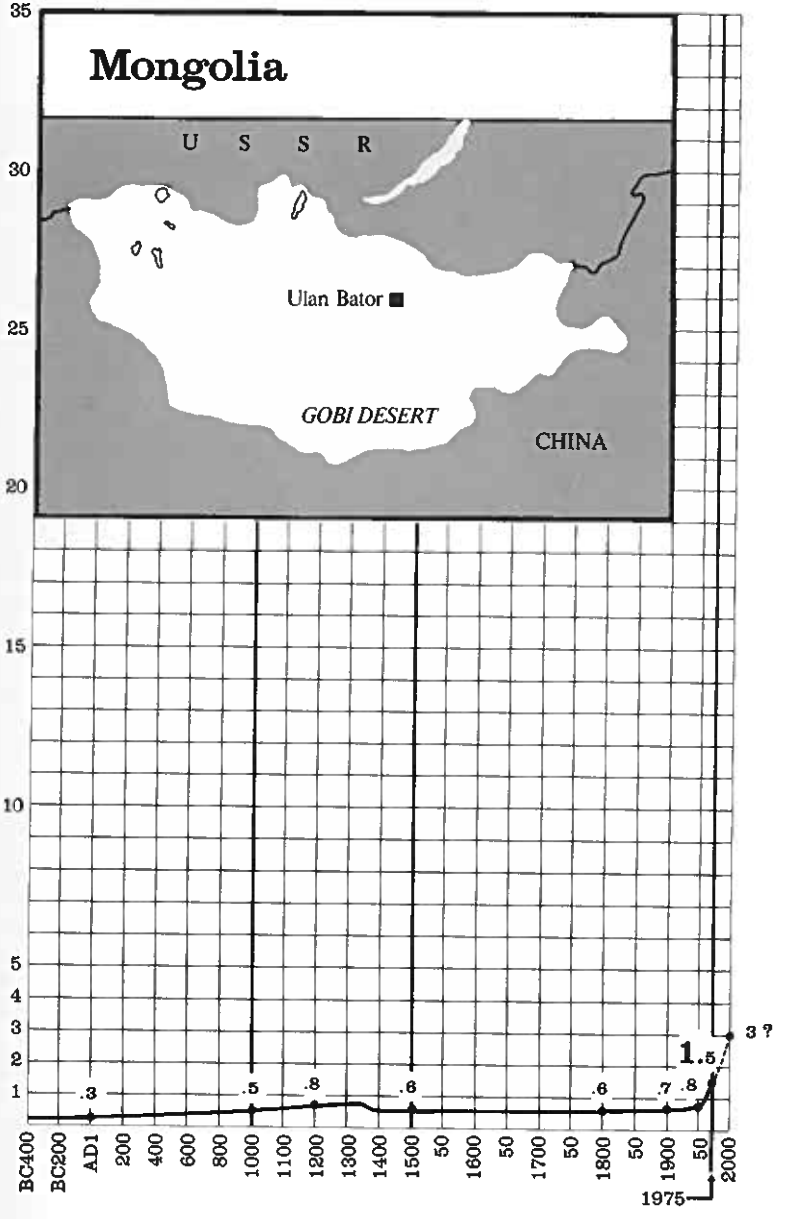
1·57m km²

Sometime in the third quarter of the last millennium BC the Mongolians learned to ride: their entire culture has been centred on the horse ever since. The changeover from a footbound pastoral society, perhaps 30,000 strong in 500 BC, to one of horse-riding clans, numbering not less than 200,000 by 250 BC, created the unchanging Mongolia of the historical period: the demographic base was of the same order of magnitude – about 800,000 when in the 13th century Genghis Khan set out from Mongolia to conquer the world, and it was still in the same band – in fact slightly lower, about 600,000 – when the Chinese established control over the country in the 18th century. Following the recovery of independence in 1911 the population grew towards its historical upper limit again, reaching 0·75m in about 1940.

In the last two decades the first tremors of the demographic revolution have reached Mongolia; there has been a sharp rise in the rate of increase, which has now reached the Asian average. It looks as though the population, currently 1·5m, will reach 3m by the end of the century.

Primary Sources and Bibliography

*A. K. Validi (quoted by * Russell, p. 87) suggests a figure of 0·5m for Mongolia in the 6th–9th centuries AD. This is no more than an informed guess, for only one figure of use survives from the pre-modern period, the size of Genghis Khan's army. This was established at 129,000 men, which H. D. Martin,* The Rise of Chingis Khan and His Conquest of North China *(1950), p. 14, considers compatible with a total Mongolian population of around 0·75m. C. R. Bawden* (The Modern History of Mongolia *(1968)) quotes a mid-19th-century Russian estimate of 'not much over 0·5m' and G. S. Murphy* (Soviet Mongolia *(1966)) one made in 1918 of about 0·7m. The first census was taken in 1956, the second in 1969.*



ASIA AREA 4 China

9·6m km²

The area within the frontiers of the People's Republic of China falls naturally into two parts: on the one hand, China proper – the area bounded by the Tibetan plateau and the Great Wall – which is big, densely populated and racially Chinese; on the other hand, the outlying areas which together are even bigger and which either still are, or were within living memory, sparsely inhabited with people of non-Chinese stock. To this second category we have added Taiwan (Formosa), which is small but, until relatively recently, was both underdeveloped and ethnically non-Chinese.

So we treat China under four headings:

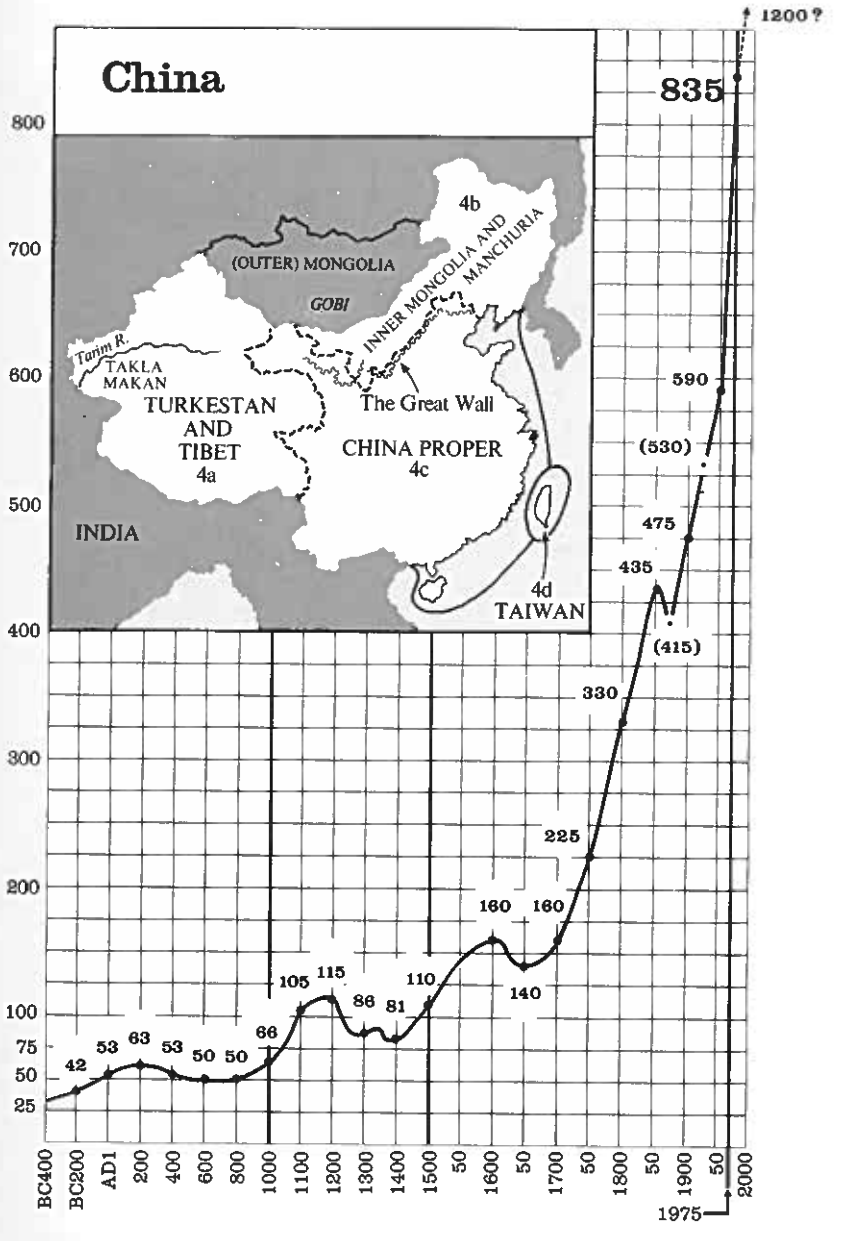
4a Chinese Turkestan and Tibet **area 3·6m km²**[2]
The province of Tsinghai, the Sinkiang Uighur Autonomous Region and the Tibetan Autonomous Region.

4b Manchuria and Inner Mongolia **area 2·0m km²**
The provinces of Heilungkiang Kirin and Liaoning, the Inner Mongolian Autonomous Region and the Ningsia Hui Autonomous Region.

4c China Proper **area 4·0m km²**
The provinces of Kansu, Shensi, Shansi, Hopei, Shantung, Honan, Anhwei, Kiangsu, Chekiang, Kiangsi, Hupei, Hunan, Szechwan, Yunnan, Kweichow, Kwangtung and Fukien, plus the Kwangsi Chuang Autonomous Region, the Portuguese colony of Macao and the British colony of Hong Kong.

4d Taiwan (Formosa) **area 0·036m km²**

Migrations between the constituent parts of Area 4 boil down to emigration from China proper to Manchuria, Inner Mongolia and Taiwan, and so are treated in sections 4b and 4d. There are about 15m people of Chinese stock living outside Area 4, the majority of them accounted for by the Chinese communities in Singapore (1·75m), Malaysia (3·75m), Thailand (4m) and Indonesia (2·5m).



4a Chinese Turkestan and Tibet

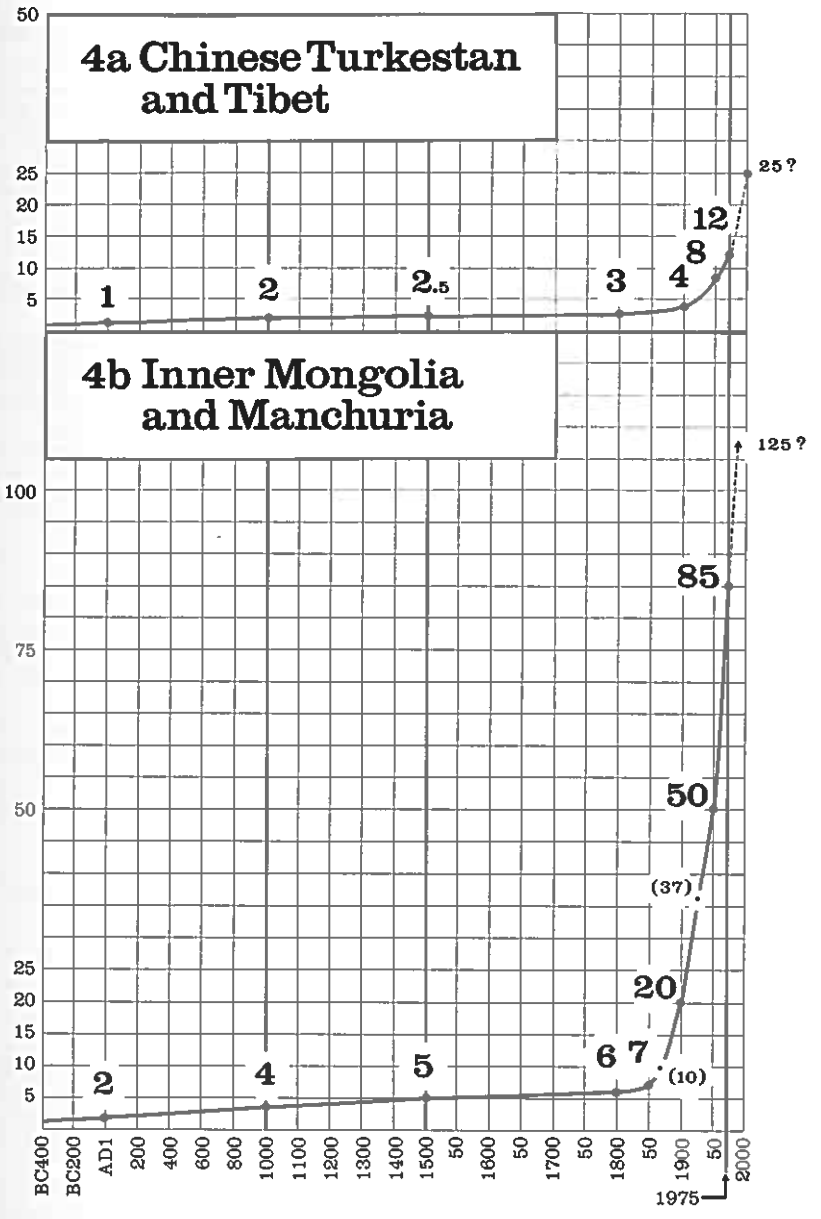
Chinese central Asia is a desolate part of the world: two more hostile environments than the Takla Makan (the desert that occupies the Tarim basin) and the Tibetan plateau it would be hard to imagine. Yet the oases of the Takla Makan have probably been inhabited as long as man has walked the earth, for they provide the stepping-stones between Near and Far East. By 4000 BC we can think of a population of some thousands living in the Tarim oases, with a scattering of hunters and herdsmen over the rest of the vast area. The area is, in fact, so vast that even at a density of 0·03 per km² we would have a total population of over 100,000.

Over the succeeding millennia man will have slowly learnt to make more out of this unpromising habitat. The historical landmarks that suggest periods of relatively rapid population increase are the appearance of horse-riding nomads in the last millennium BC, the opening of the Trans-Asian silk route in the 1st century AD and the genesis of the Tibetan state in the 7th century AD. By AD 1 we can think in terms of a total population of 1m, in AD 1000 of 2m and by AD 1800 of 3m. Official estimates for the end of the 19th century suggest a moderate growth in the late 19th century, quickening in this century to produce a 1975 total of about 12m. Some third of this total would be Moslem Uighurs and roughly a quarter Tibetans.

4b Manchuria and Inner Mongolia

The steppe country north of China proper is historically the domain of the nomads. With the evolution of the more efficient horse-riding style of herding in the last millennium BC we can assume that the population of the area doubled, reaching a figure of 2m by AD 1. In the next 1,000 years it is reasonable to believe that it doubled again, for the nomads increase steadily in political importance during this period and there is also a Chinese colony in south Manchuria to take into account. The growth of this colony was deliberately halted by the Manchus after their conquest of China in 1644. With the aim of preserving the race the Manchus turned their homeland into a sort of human game reserve: Chinese immigration was prohibited so that the Manchu stock and the Manchu way of life might continue uncontaminated.

This policy had to be reversed when the Russians appeared on the scene. By the second half of the 19th century Chinese immigration into Manchuria was being positively encouraged in an effort to forestall a Russian occupation. The flow of migrants, initially only a trickle, became a flood with the opening of the Peking–Mukden railway. By the later 1920s half a million Chinese were pouring into Manchuria every year and it has been calculated that for the first half of this century the total number of immigrants was of the order of 20m. Nearly all of them were Chinese from the overcrowded provinces along the



Asia Areas 4a–b

lower Huang Ho but about 1m settlers came in from Korea.

Inevitably, the newcomers have swamped the Manchus. Though 2·4m people gave Manchu as their race in the 1953 enumeration it is believed that only 10% of these were actually living in Manchu-speaking communities. The rest had been culturally absorbed by the 40m Chinese who dominated the province.

Much the same thing has happened to the Mongols of Inner Mongolia. Perhaps a quarter of the 1·3m reported in 1953 were still leading the nomadic life: the rest were sinking into a Chinese population five times as large.

Primary Sources and Bibliography for Chinese Turkestan, Tibet, Manchuria and Inner Mongolia (Areas 4a and 4b)

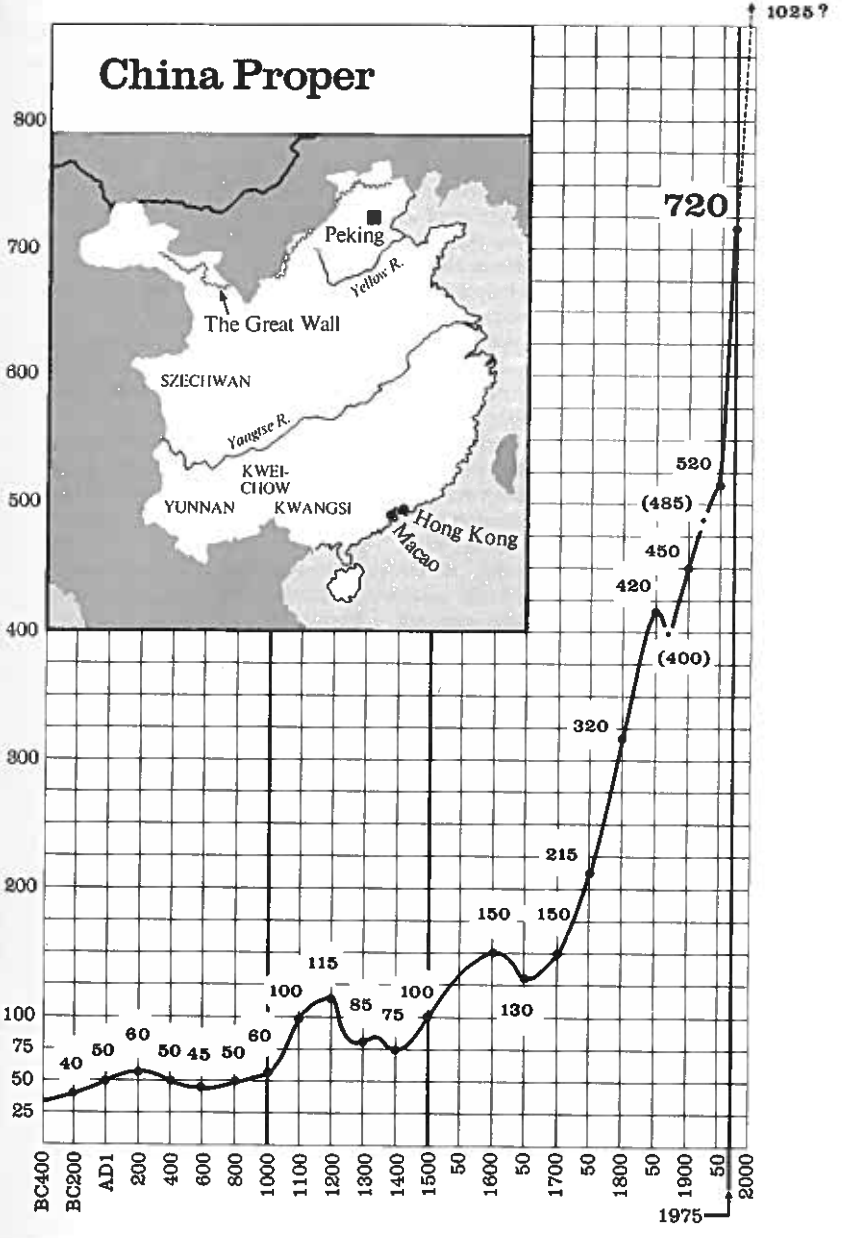
*Fragmentary data for the steppe zone go back as far as the Han period: A. K. Validi (quoted by * Russell, p. 87) has used them to make crude estimates of the populations of Inner Mongolia and Chinese Turkestan in the 1st century* BC *and the 10th century* AD. *Manchuria became part of the Chinese world at the end of the 10th century: contemporary estimates of population in the 10th, 11th and 17th centuries are quoted in two articles in* Population Index: *1945, p. 260, and 1952, p. 85. Tibet's first census followed the Mongol conquest of the country in the 13th century (see H. E. Richardson,* Tibet and its History *(1962)): the results of an 18th-century census are given in an article by W. Woodville Rockhill in the* Journal of the Royal Asiatic Society *(1891, p. 15).*

The official 19th- and 20th-century estimates for all these areas are collected in Dwight H. Perkins, Agricultural Development in China 1568–1968 *(1969). Some of them are almost worthless. For example, the government of Manchuria completely failed to appreciate the scale of the late-19th-century immigration. It was only when the Japanese took over the administration in 1905 that it became apparent that the 1893 estimate of 5·4m was impossibly low. Nor are things all that much better today. The present government has admitted that in the case of 'remote areas where communications were poor' figures in the 1953 returns were no more than estimates. Given the rate of increase in the outer areas, figures obtained by extrapolation from 1953 to 1975 are doubly insecure.*

4c China Proper

The chronology of the neolithic in China is still a matter of dispute but we do know that the first farming communities grew up along the lower Huang Ho (Yellow River) and that their agriculture was based on wheat, not rice. By 3000 BC we can think in terms of a million peasants in the area either side of the lower Huang Ho, which, together with another million food-gatherers elsewhere in China, gives us a total figure for China proper of 2m.

The population rise during the neolithic and Early Bronze Age periods



was slow. But it was also steady as, with the accumulation of agricultural experience, crop yields improved allowing an increase in population density within the cultivated area. And the cultivated area itself expanded. However, even in the full Bronze Age – the era known as the Shang period because during it kings of the Shang Dynasty claimed overlordship over the whole of the lower Huang Ho area – the agricultural zone did not exceed 1m km², nor the population within it 5m, nor the population of China proper 6m.

With the collapse of the Shang hegemony around 1000 BC, civilized China split up into a dozen warring states. Surprisingly, the rate of population increase quickened. This was partly because an irrigation system was being developed in the Yellow River basin, and partly because the valley of the Yangtse was now being brought under cultivation. By 400 BC there were not less than 25m people in an agricultural zone that covered the northern half of the country. The contemporary population of the southern half – ethnically consisting of non-Chinese peoples related to the Thai – is unlikely to have exceeded 10% of the figure for the Chinese peasantry in the north.

In the last quarter of the last millennium BC, political unification, first achieved in 221 BC, provided the background for continuing growth. Early on in the days of the Han Empire (206 BC–AD 220) the population passed the 50m mark. But thereafter it was to stay in the band 45–60m for a thousand years. This poor demographic performance matches that of Europe in the late Roman and early medieval periods with an exactness that is hard to explain.

The breakthrough to new demographic ground came during the Sung period around the year 1000. The basis for the new advance was fuller exploitation of the rice-growing potential of the Yangtse valley and there was consequently a southward shift in the country's political centre of gravity. The effect intensified in the years immediately after 1211, when Genghiz Khan first led the Mongol hordes across the Gobi to attack China proper. This was the beginning of one of the bitterest and most prolonged wars of conquest in world history. The Mongols, though hardly ever checked on the battlefield, had such trouble making lasting progress in the city-studded countryside of north China that they eventually switched from a policy of massacre in punishment for rebellion to one of straight genocide. Within a decade, flight and the Mongol fury had reduced the population of the northern provinces by three quarters or more. Though the subsequent conquest of the southern areas was faster and less bloody, the country as a whole lost perhaps a third of its numbers by the time the war was over. The loss – around 35m on this estimate – is a staggering one for the era.

Mongol Khans ruled China for a little more than a century. In the upheavals that accompanied their expulsion and replacement by emperors of the native Ming Dynasty, the demographic recovery that had begun in the late 13th century was aborted. But when growth was resumed it was sustained: a benign and orderly government encouraged the philoprogenitive Chinese to give full rein to their reproductive talents and the population doubled in the course of the next two centuries. On the eve of the Manchu invasion there were around 150m Chinese within China proper.

The Manchu conquest cost China about a sixth of her population – say 25m people. By 1700 this loss had been made up and in the political calm of the 18th century came a population surge that carried the total past the 300m mark. This rate of growth – 100% in 100 years – was too fast to be good: there was now little scope for further extensions to the area under cultivation and the techniques of cultivation had hardly changed for centuries. The Malthusian spectre of overpopulation had arrived. Few doubt that this was an important factor in the political troubles that now overtook China, the series of revolts of which the most famous and most damaging was the Taiping rebellion of 1850–65. The Manchus, against most expectations, succeeded in suppressing these rebellions. The cost has never been accurately determined – figures of the order of 25m are hazarded – but was certainly sufficiently large to put a noticeable kink in the population graph.

The pattern of hopeless poverty and endemic strife was to continue into the 20th century when the Manchu government finally collapsed. By the time the communists succeeded in restoring order in 1949, China had behind it a century of remarkably low population growth – something of the order of 25%. World population during the same period rose by more than 100%.

Of course, even small percentage rises can result in colossal absolute gains when the existing population is measured in hundreds of millions. With the return of peace and the appearance of the sort of growth rate one would expect in the case of an underdeveloped country in the 20th century, the magnitude of the increase in Chinese population becomes staggering – of the order of a million a month. The 1975 population of China proper is at least 720m and could be 100m more: projections for the year 2000 fall in the 950–1,250m range.

Minorities and Enclaves

Figures as big as a billion make the statistics of the minority and enclave populations of China look silly. However, for what they are worth, here they are:

Minorities

(1) The 7m Chuang, who are related to the Thai, form roughly one third of the population of what is now the Kwangsi Chuang Autonomous Region in the south-west of China proper. In neighbouring Kweichow are 1·25m similar people going under the name of Puyi.

(2) Along the southern half of the border with Tibet in Szechwan and Yunnan provinces are 3·25m Yi and 2·5m Miao. The Yi are relatives of the Tibetans. The Miao rank as an independent member of the Sino-Tibetan group.

Enclaves

(1) Hong Kong. The area of present day Hong Kong had a negligible population (*c.*10,000) when ceded to Britain in 1842. By 1900 the population was 0·25m, in 1975 it reached 4·25m. The projection for the year 2000 is 6m.

(2) Macao has been a Portuguese possession since 1849. Its population in 1900 was 0·08m; it is now over 0·25m.

Primary Sources

Though the Chinese have been counting heads ever since the days of the warring states in the 1st millennium BC, *the earliest surviving figure is for the number of households in*

the Han Empire – 11·8m. The figure refers to the year AD *2. For the period between* AD *2 and 1194 Durand (see below) lists twenty-one enumerations of which some results – sometimes only the final total – are still extant. These enumerations, plus the figures that survive from the Mongol period, give the order of magnitude of the population of China proper prior to the first reliable count – the Ming enumeration of 1393. Since then, counts have been taken at irregular intervals and estimates issued to cover the intervening periods. As there is no registration of births or deaths, the estimates can only be crude: less than twenty years after the only half-way accurate enumeration held in this century, the count taken by the communist government in 1953, official estimates for the country's population vary by up to 7% on either side of the mean of all the estimates. Given the magnitude of the population, this means that the range of uncertainty is now 100m and growing fast.*

Bibliography

For educated guesses at the population of China under the Shang (c.*1100* BC) *and during the period of the 'Warring States'* (c.*400* BC), *see Wolfram Eberhard's* History of China (*1967*), *pp. 21 and 25. For the census figures for the Han period on, see J. D. Durand's article in* Population Studies *13 (3) 1960, and for the Ming period onward, see Ping-Ti Ho,* Studies on the Population of China 1368–1953 (*1959*). *There is a good discussion of the 1953 enumeration and the likely population changes since then in Leo A. Orleans,* Every Fifth Child: The Population of China (*1972*).

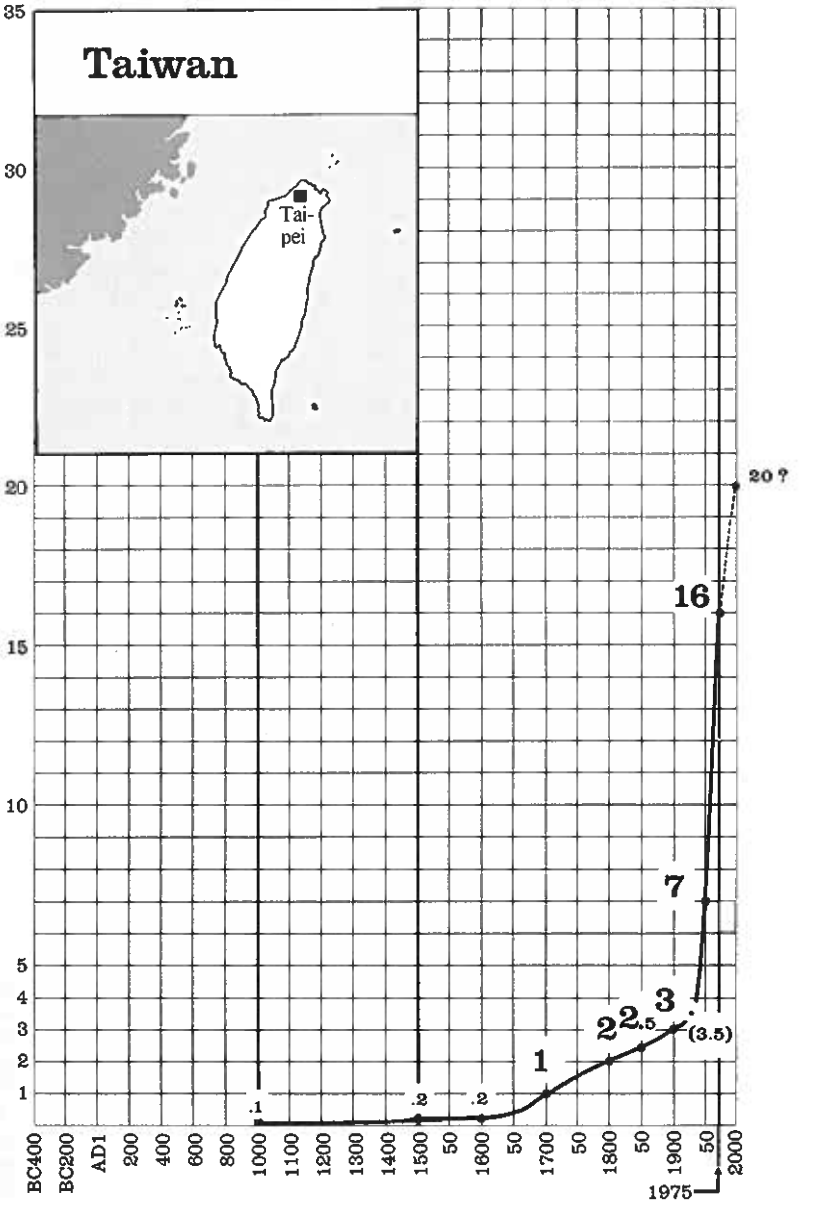
4d Taiwan (Formosa)

When the Chinese began to colonize Taiwan in the 17th century it was inhabited by about 200,000 aborigines of Malayo-Polynesian stock. Presumably this native population, which has remained at the same level since, had grown slowly over the preceding millennia. The arrival of Chinese settlers started the island on a very different demographic course, immigration bringing the total population up to 2m by the beginning of the 19th century and 3m by 1900.

Growth accelerated during the period of Japanese rule (1895–1945) and moved into even higher gear with the establishment of the Chinese Nationalist government on the island in 1949. Though the 0·3m Japanese who had settled on Taiwan were expelled at the end of the Second World War, their places were more than filled by the 2m Chinese who arrived from the mainland in flight from the communists. These refugees boosted the birth rate to a record figure and though the rate of increase is now slackening it is unlikely that the island's population will be less than 20m when the century ends.

Primary Sources and Bibliography

The Manchus enumerated the Chinese population of Taiwan in 1811 and 1887, the Japanese instituted a quinquennial census in 1905. The data are presented by Irene Taeuber in an article on p. 101 of the 1961 issue of Population Index.



ASIA AREA 5

Korea

0·22m km²
(North 0·12, South 0·10)

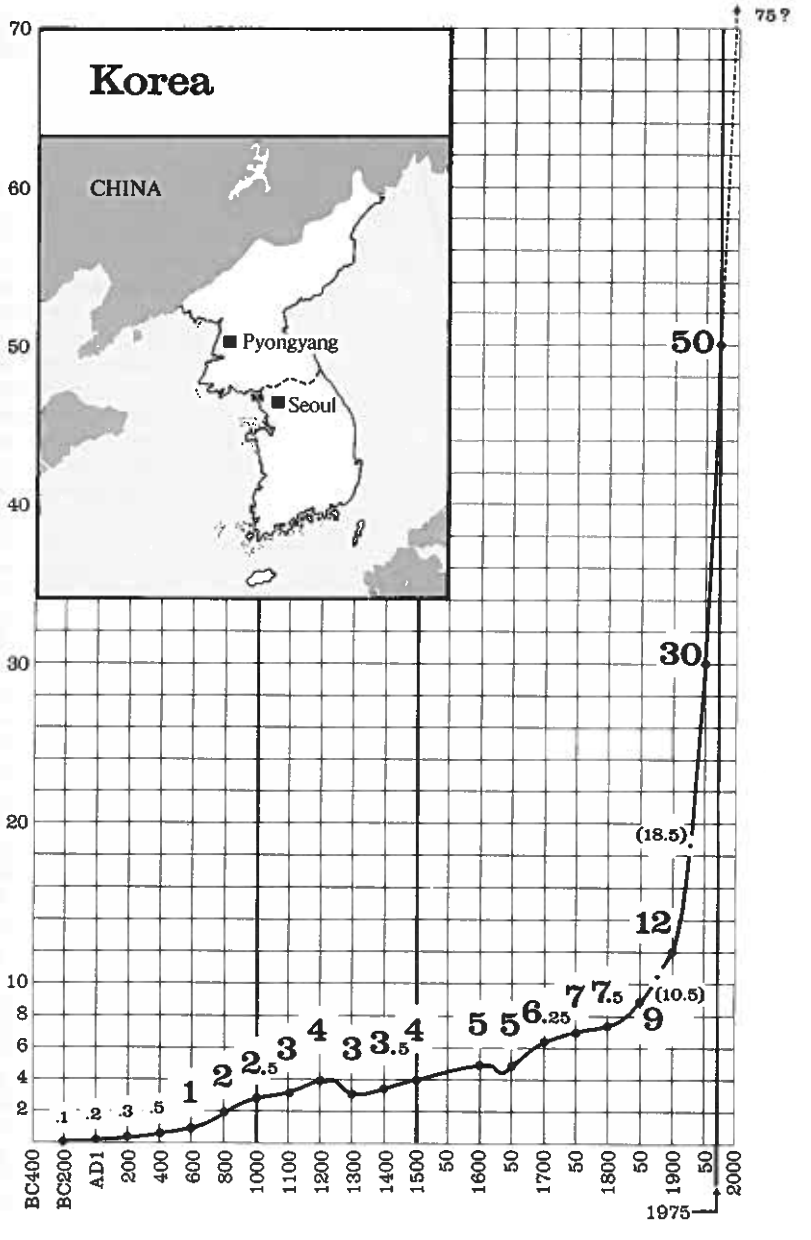
The population of the Korean peninsula remained at a mesolithic level until well on in the last millennium BC: numbers in this phase are unlikely to have exceeded 10,000. In the next period, covering the years between 500 and 100 BC, the practice of agriculture became general and consequently numbers rose to a final total of about 0·2m. However, it was still a comparatively empty country that lay before the first Chinese army to reach Korea, an event that is dated to 108 BC and marks the beginning of the historical record.

The Chinese established a protectorate over the north-west corner of Korea and planted a colony there. The number of colonists was probably only a few thousand, but their presence stimulated the natives into political consciousness. Three kingdoms arose and for most of the rest of the first millennium AD they divided the peninsula between them. The Chinese colonists – and the Japanese fishermen and pirates who frequented the south coast – were expelled during this period, which saw the population figures climb to something over 2m by AD 1000.

Five hundred years later Korea's population was approaching 4m. Growth had been steady apart from the setback inflicted by the Mongol conquest in the 13th century. There was a similar pause in the late 16th and early 17th centuries as a new set of invaders fought their way up and down the country – the Japanese in 1592, the Manchus in 1627 and 1636: then growth was resumed. By 1800 the population was 7·5m and by 1900 12m. In the first half of the 20th century, the period of Japanese occupation (1905–45), the pace vastly accelerated: by 1950 the total was 30m.

The liberation of the country from Japanese rule was followed by its division: the northern part of the country, containing a third of the country, containing a third of the population, became a Russian satellite; the southern part, marginally smaller in terms of area but containing two thirds of the population, looked to the USA for its ideology and protection. The inequality of numbers soon became more marked as thousands fled from the communist north to the free south, a movement that was to become a flood on the outbreak of open war in 1950.

The war of 1950–53 cost the lives of more than 3m Koreans. It also led to the displacement of about 3m people from north to south. It is a tribute to the resilience of the peninsula's inhabitants that the holocaust scarcely notches the population graph. Since the cessation of hostilities, both sides have shown a truly remarkable capacity for growth. South Korea, taking Japan as its model, has followed the path of all-out development. Its people, now numbering 35m, are just beginning to have their economic expectations fulfilled. In the north, so far as can be ascertained, growth has



been somewhat less (1975 pop. 15m) but then the north suffered far more severely from the war. If the two countries go on at their present rate, their combined population in the year 2000 will be in the order of 75m.

Primary Sources and Bibliography

Apart from a set of figures for the number of households at the beginning of the 10th century, the earliest data to survive are some totals from the triennial 'census' instituted in 1639. From 1678 on, the figures are consistent and believable. The same cannot be said of the new series of 'censuses' instituted in 1807: only the first figure is of any use, the remainder showing a stationary population (presumably to indicate that there was no basis for increasing taxation) at a time when we can be sure that the population was expanding rapidly. There is consequently a yawning gap between the last Korean figure (5·7m in 1904) and the first Japanese estimate (13·3m in 1910) which in itself was certainly an underestimate. The Japanese instituted a population register and, starting in 1925, a quinquennial census. Since they left, there have been censuses in South Korea in 1949, 1952, 1960, 1966 and 1970: the North Korean government has produced official estimates though it is unclear on what these are based.

The figures of interest to the historical demographer are tabulated in Hoon K. Lee, Land Utilisation and Rural Economy in Korea *(1936).*

ASIA AREA 6

Japan

0·37m km²
(0·06m km² arable)

Agriculture reached Japan comparatively late, its introduction to Kyushu being dated to about 250 BC. At first its spread along the island chain was rapid – farmers had reached the Kanto, the plain round Tokyo, by the beginning of the Christian era. The last leg went more slowly, the northern quarter remaining the exclusive property of the pre-agriculturalists, the Ainu, until around AD 900. As for Hokkaido, the development of the special agricultural techniques necessary for the colonization of this, the least welcoming of the Japanese islands, took place only in the late 19th century. So throughout Japan's history two processes have been going on side by side: an increase in total numbers and a movement of the demographic centre of gravity outwards along the island arc.

Towards the end of the food-gathering stage, that is around 400 BC, the population of Japan consisted of about 30,000 hunters and fishermen. With the introduction of wet rice cultivation the rise in numbers must have been rapid: certainly the 300,000 figure will have been reached by AD 1 and the 3m mark by the time the Japanese state emerged in AD 650. All the indications are that the population continued to grow fairly steadily over the next millennium, increasing on average by about two thirds every two centuries with a slight quickening of the rate in the late 15th century bringing the total up to 30m by 1700.

What followed, an 125-year period of zero growth, has usually been regarded as a textbook example of Malthusian checks operating in a closed society. From this unhappy condition the Japanese were liberated by Commodore Perry, who in 1853, on the orders of the United States government, forcibly opened up Japan to Western shipping and Western ideas. So goes the story. In fact, there is convincing evidence to show that population growth cannot have been checked by sheer want because the Japanese improved their standard of living and their national resources during this period. It is now considered that, by allowing time for the processes of urbanization and capital accumulation to mature, the policy of isolation, whatever its initial rationale, served an important social purpose, and that the Japanese could not have coped as well as they did with the problems of Westernization without this period of consolidation. The limitation of family size which allowed the increase in wealth seems to have been achieved partly by infanticide, partly by later marriage.

Once Westernization was under way the population soared. Between 1850 and 1950 the rise was from 32m to 84m, a gain of over 150%. Part of the nation's surging energies went into the creation of an overseas empire, an adventure that at first cost relatively few Japanese lives but ended up with the Second World War, economic collapse and 2·4m dead.

It now seems a curious aberration in a process of industrialization which has gone from victory to victory.

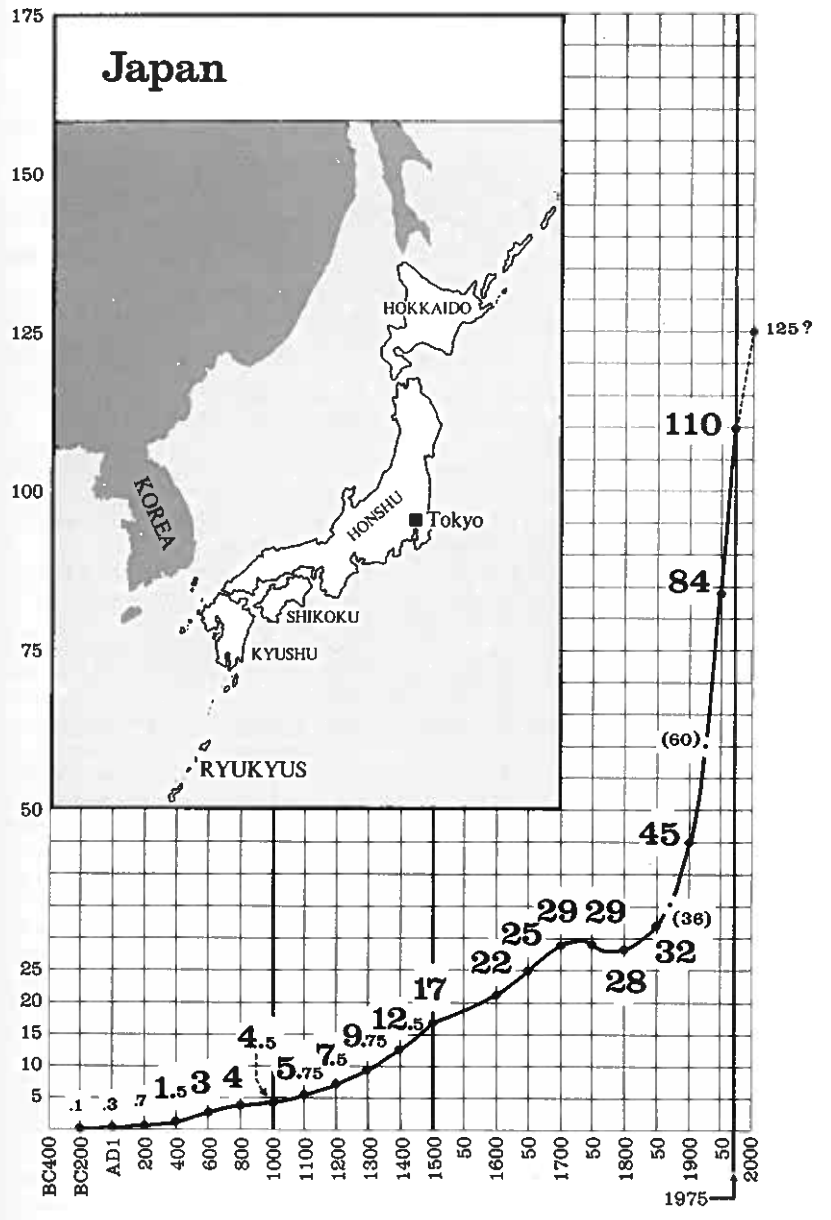
Since the Second World War the Japanese have recognized that they have a population problem on their hands. By terminating 1m pregnancies a year they have kept this within bounds and the hope is that the steadily falling birth rate will permit the country to enter another period of zero population growth at the turn of the century. By then there will be about 125m people in the Japanese and Ryukyu archipelagos which, considering that only 16% of the land area is cultivatable, seems like enough. The Ainu, incidentally, have declined slowly over the last 2,000 years: there are now less than 10,000 of them left.

Primary Sources

Japanese tradition tells of a population count held in the year AD *610 which returned a figure of 5m. Totals of this type cannot be accepted as suggesting more than an order of magnitude, but there can be no doubt that proper surveys of Japan's population were made from the 9th century onwards because fragments of household registers and land-allotment records survive. These can be used as a basis of moderately reliable calculations of the overall population in the period 800–1600. In the second half of the 17th century the quality of the surviving information improves sharply: there are records of enumerations carried out in many different counties, in some of them on several occasions. And since the early 18th century the demographic record is clear, for in 1721 the shogun (regent) ordered a nationwide count and in 1726 a regular six-yearly census was instituted. This census has its gaps (1738, 1810, 1816 and 1840) but was kept going until the middle of the 19th century. In 1871 a registration system was introduced which, in theory at least, made annual population figures available. The first of the present quinquennial series of true censuses was held in 1920.*

Bibliography

All the historical data are given in The Population of Japan *by Irene B. Taeuber (1958). For the interpretation of the statistics of the 18th and 19th centuries see the article by Hanley and Yamamura in *Glass and Revelle, pp. 451 ff.*



ASIA AREA 7 — The Indian Subcontinent

4·5m km²

7a Pakistan, India and Bangladesh

4·22m km²

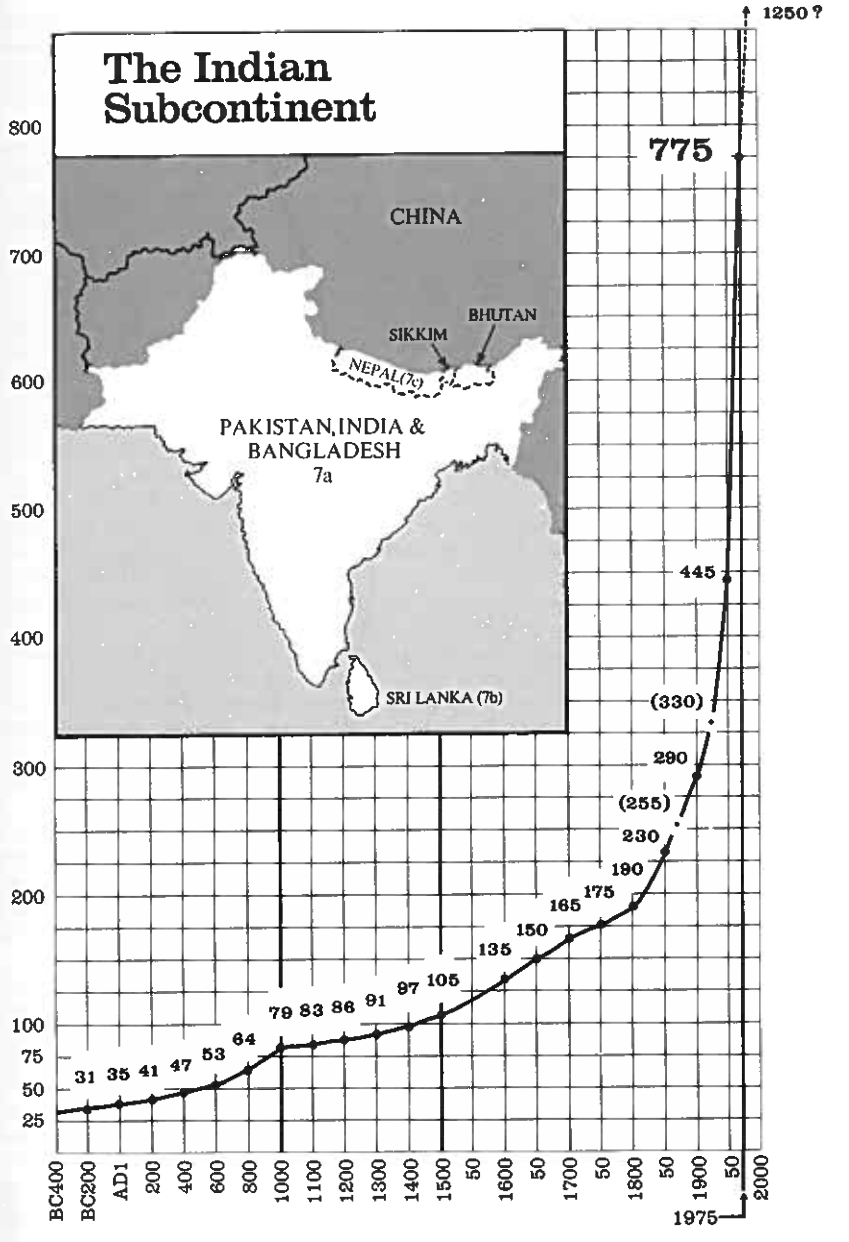
7a-1	**Pakistan**	**0·80m km²**
7a-2	**India**	**3·27m km²**
7a-3	**Bangladesh**	**0·14m km²**

The population of the Indian subcontinent in 10,000 BC can be estimated at about 100,000. Its rate of increase was low and remained so until 5000 BC, when the practice of agriculture began to spread into the north-west, the Indus valley, from Afghanistan. By 4000 BC there was a respectable population in this area, perhaps as high as a million: by 2000 BC, when the Indus valley civilization – usually named after one or other of its two chief towns, Mohenjo-daro and Harappa – reached its full flowering, there were possibly 5m in the Indus valley as against 1m in the still mesolithic remainder of the subcontinent.

The Indus valley civilization collapsed and disappeared, surprisingly completely, around 1600 BC. Apparently this was a result of the invasion of Iranian tribes – the legendary Aryans – coming from the far side of Afghanistan. Certainly Indo-European languages of the Aryan group now became dominant throughout the northern two thirds of the subcontinent while the Dravidian languages spoken by the creators of the Indus valley civilization were confined to the southern third. On the other hand many of the cultural peculiarities that now characterize the northern 'Aryan' zone seem to have been evolved by the Dravidians before the Aryan invasion, so presumably the newcomers imposed themselves on the natives there rather than exterminated them. The cultural setback was major though, with no urban settlement on the scale of Mohenjo-daro or Harappa appearing anywhere in the subcontinent for the next thousand years.

The upturn from this dark age began with the introduction of iron-working from Iran in the 8th century BC and the development of rice cultivation at much the same time. Iron tools cleared the Ganges valley, rice supported a population boom there and the demographic centre of the country now moved firmly to where it has always remained since, the Gangetic provinces of Uttar Pradesh, Bihar and Bengal. By 500 BC the subcontinental total had reached 25m, of whom 15m lived in the Ganges basin: by 200 BC, when the Guptas of Bihar had put together the first major Indian empire, the figures were 30m and 20m.

The next fifteen hundred years consolidated without significantly altering this pattern. The population totals slowly mounted, reaching 50m in the 6th century, 80m in the 12th, and 100m by the end of the 15th. Presumably the



vicissitudes of empires, the onslaught of epidemics and the fluctuations of food supply kinked the graph on many occasions, but of these we know almost nothing. The political fragmentation of the country makes it difficult to generalize from such local data as exist and, before the Moghul era, little is left from the few brief moments of near-unity that did occur. The comparison with China's graph, so often notched by catastrophe, is striking but could easily be due to China's better records. Happy is the graph that has no history.

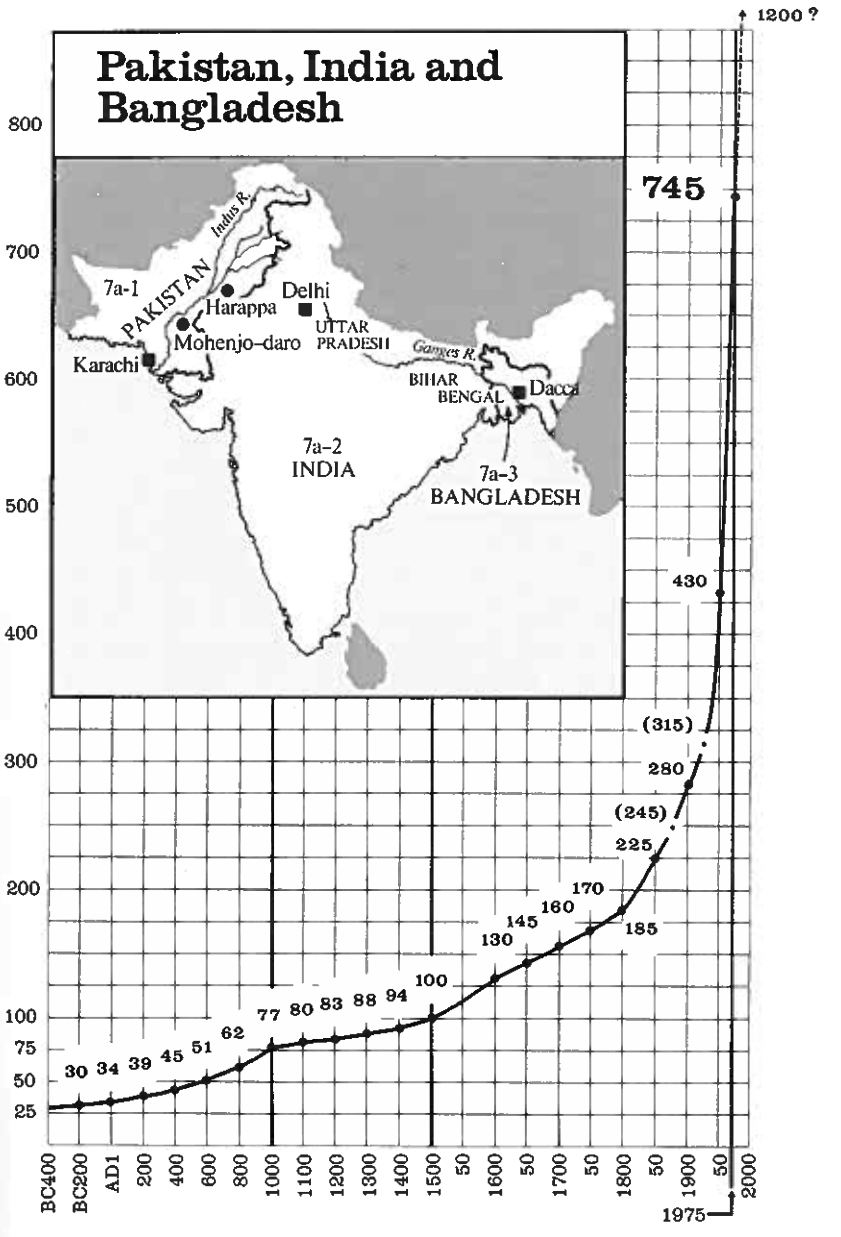
With the rise of the Moghuls we arrive at modern times: In the course of the 16th century the new dynasts brought most of the subcontinent under their rule: their advance coincided with an unprecedented demographic and economic upsurge which boosted the population total from 100m in AD 1500 to 145m in AD 1650. How far, if at all, this impetus was lost in the years of Moghul decline is uncertain. Though the period is clearly one of considerable local disorder it is difficult to believe that overall totals fell at any time in the 18th century: certainly by the century's end growth was accelerating again. When the British took control in the years immediately before and after 1800, the population of the subcontinent proper was approaching 200m.

Rapid growth continued in the 19th century, though when it becomes possible to examine the process in detail (i.e. after the institution of the census in 1867–72) it is apparent that progress was far from smooth. There was, in fact, a peculiar staircase effect in which decades of rapid increase alternated with decades of little or no growth. The last such pause occurred in 1911–20 when, largely because of the 20m deaths caused by the influenza pandemic of 1918, the population actually fell slightly.

Since 1920 long-term growth has been unimpeded, even though at times famine has taken a massive toll – several millions in Bengal in 1943 for instance. The explanation of this acceleration is straightforward. Better administration and better transport made it possible to contain an increasing proportion of famines, then the more easily controlled diseases declined under the impact of simple public-health measures. Death rates fell, birth rates continued as high as ever, population totals rose to staggering heights – to 431m in 1950 and 745m in 1975. If the next quarter century sees the same rate of growth as the last – and the evidence suggests that it will – the figure in AD 2000 will certainly not be less than 1,200m.

In 1947 British India was split three ways in an attempt to give as many as possible of the Moslems their own nation, Pakistan. The division was not made easily. Minority groups that found themselves on the wrong sides of the new borders were often forced to flee under threat of massacre: about 17m people moved; 0·25m who didn't died. The division was also an awkward one. The original Pakistan consisted of two geographically separate areas which gradually pulled apart politically. In 1971 India helped the eastern half to secede under the name Bangladesh, so now Pakistan means the western half only. (We use it in this way in the rest of this section, even when referring to the 1947–71 period.)

Both Pakistan and Bangladesh are relatively homogeneous nations. Pakistan is 97% Moslem and 66% Punjabi-speaking. Bangladesh is 80% Moslem and 98% Bengali-speaking. India is by any standard heterogeneous. Though the initial partition of 1947 was made on religious grounds India is still 11% Moslem, which means that it has a current Moslem population of 66m. It also



Asia Area 7a

contains 15m Christians, 12m Sikhs, 4m Buddhists and 3m Jains, not inconsiderable minorities even though the nation as a whole is more than 80% Hindu. But the real diversity is in language. Less than a third of the population speaks the officially recognized national tongue, Hindi. Very sizable numbers speak Bengali (48m), Marathi (42m), Urdu (30m) or Gujerati (28m) – the other major Aryan languages – while about a quarter speak languages of the quite unrelated Dravidian group (Telegu, Tamil, Malayalam and Kanarese).

In absolute numbers India has a far larger population than either Pakistan or Bangladesh: 600m as against 70m and 74m respectively. But Pakistan has the highest growth rate, a situation which, as can be seen from the retrospective estimates in the table below, has existed since the mid 19th century. A low initial density and a steady expansion of the irrigated area have helped to sustain this. In Bangladesh an equally high fertility has been counterbalanced by the high mortality sadly characteristic of this overcrowded and disaster-prone land. With a current density figure of 529 per km² (contrast India's 183 per km², Pakistan's 88 per km² and the 400 per km² of Europe's top-ranker, the Netherlands) Bangladesh has the Third World's problems about as badly as possible. In India the trouble is really one of scale. The geometric increases that now threaten are so enormous as to make clear thinking about them difficult. If Pakistan and Bangladesh continue at their present rates of growth they will add 78m and 56m to their present populations by the end of the century, figures that are comprehensible. If India carries on as now, her population in the year 2000 will be larger by 400m, a really fearsome addition to a land already overloaded with people.

Despite the pressure of poverty and overpopulation Indians are reluctant emigrants. Though the total outflow over the last century and a half amounts to about 35m, the return movement has been so high that the net efflux works out at only 7m, hardly enough to affect the statistics of the homeland at all. The most important overseas populations are in Sri Lanka (2·8m), Malaysia (1·1m) and the U.K. (1m); communities between 0·5m and 0·75m strong exist in South Africa, Mauritius and Burma and smaller ones (between 0·25m and 0·5m) in East Africa, Trinidad, Guyana and Fiji.

Area of:	*1850*	*1875*	*1900*	*1925*	*1950*	*1975*
Bangladesh	23	24	29	34	42	74
India	189	210	237	260	356	600
Pakistan	11	12	16	22	33	70

7b Sri Lanka

0·066m km²

The island of Ceylon (Sri Lanka) has a peculiar history. The original inhabitants, a few thousand mesolithic Vedda, were overwhelmed by iron-using, rice-growing immigrants from India in the course of the last five centuries BC. But these immigrants were not, as might be expected, Tamils or any other of the Dravidian-speaking people who inhabit south India, they were the Aryans from somewhere in the north of the subcontinent. Moreover these Aryans, the ancestors of the modern Sinhalese, first of all created an irrigating agriculture of impressive size and elaboration, then, after a thousand years of development, suddenly abandoned it. They moved from the northern half of the island (the Dry Zone) to the south (the Wet Zone), leaving the extreme north to be recolonized by Tamils and their original capital Anuradhapura an empty ruin.

This dramatic change took place in the second half of the 12th century. There was a certain amount of warfare going on between the Sinhalese and the Tamils at the time, but then there nearly always was: as a reason for the abandoning of the Dry Zone it is quite unbelievable. Something made the previous mode of cultivation impossible (malaria? – irrigation tanks are ideal breeding grounds for mosquitoes), or unpopular (a devolutionary change in Sinhalese society making large-scale enterprises impossible to sustain?), or simply obsolete (the development of better methods of clearing the forest in the Wet Zone?). Interestingly enough the Khmers of Indo-China 1,500 miles away to the north-east began to abandon their exactly similar system of tank irrigation about the same time (see Asia Area 8c).

The Dry Zone phase of Sinhalese history had seen the population grow slowly to 1m. There is no reason to believe that there was any significant fall in numbers at its end for there was now a compensating development of the Wet Zone. There was also the movement of Tamils into the extreme north. Nevertheless, if the population didn't fall, it didn't grow much, passing the 1·5m level only in the course of the 18th century. This was the period when the island was divided between the Sinhalese Kingdom of Kandy and the Dutch who controlled the littoral.

The British took over from the Dutch in 1795. During the next quarter century they extended their rule over the interior as well as the coast and they finally left only in 1948. Their contributions to the demography of the island were two: they brought in a new lot of Tamils to work on the tea plantations they established and they released a demographic up-swing that has recently outpaced the island's economy and agriculture. The new Tamils ('Indian Tamils') are even more unpopular with the Sinhalese than the 'Ceylon Tamils', and some have been compulsorily repatriated. However, Tamils of one sort or another make up one fifth of the island's population. This now totals 14m, having more than tripled since the beginning of the century. It is likely to be well over 20m by the year 2000.

7c Nepal

0·14m km²

The 18th and 19th centuries saw the establishment of the nation of Nepal in its modern form, largely as a result of the activities of the Gurka clan. Before then we must think in terms of a collection of borderland valleys of which that of Katmandu was the most significant, inhabited by a borderline people, part Mongol and part Indian with Indian influence usually predominating. In

population terms there were perhaps 1m people by the first century AD, and 2m by 1500. Growth since 1800, when the population was 4m, has been faster, but not spectacular by Asian standards; numbers reached 5·5m in 1900 and 12·5m in 1975.

A 10 per cent addition to these figures takes care of the other Himalayan states, Sikkim (to the west of Nepal: area 0·01m km², current population 0·2m) and Bhutan (to the west of Sikkim: area 0·05m km², current population 1m).

Primary Sources

There are records of the Indian population being counted as far back as the middle of the 1st millennium BC *but the practice, apparently flourishing under the Guptas, fell into disuse later, and no records seem to survive. So one is left with the problem of applying multipliers to the surviving, not very reliable, records of villages, monasteries, armies and elephants. Local population records do survive from Moghul times onwards, but they haven't been thoroughly explored yet and present many difficulties as sources of general subcontinental estimates. Early European counts, both in India and Ceylon, are perhaps more useful, but even on these work is only just beginning.*

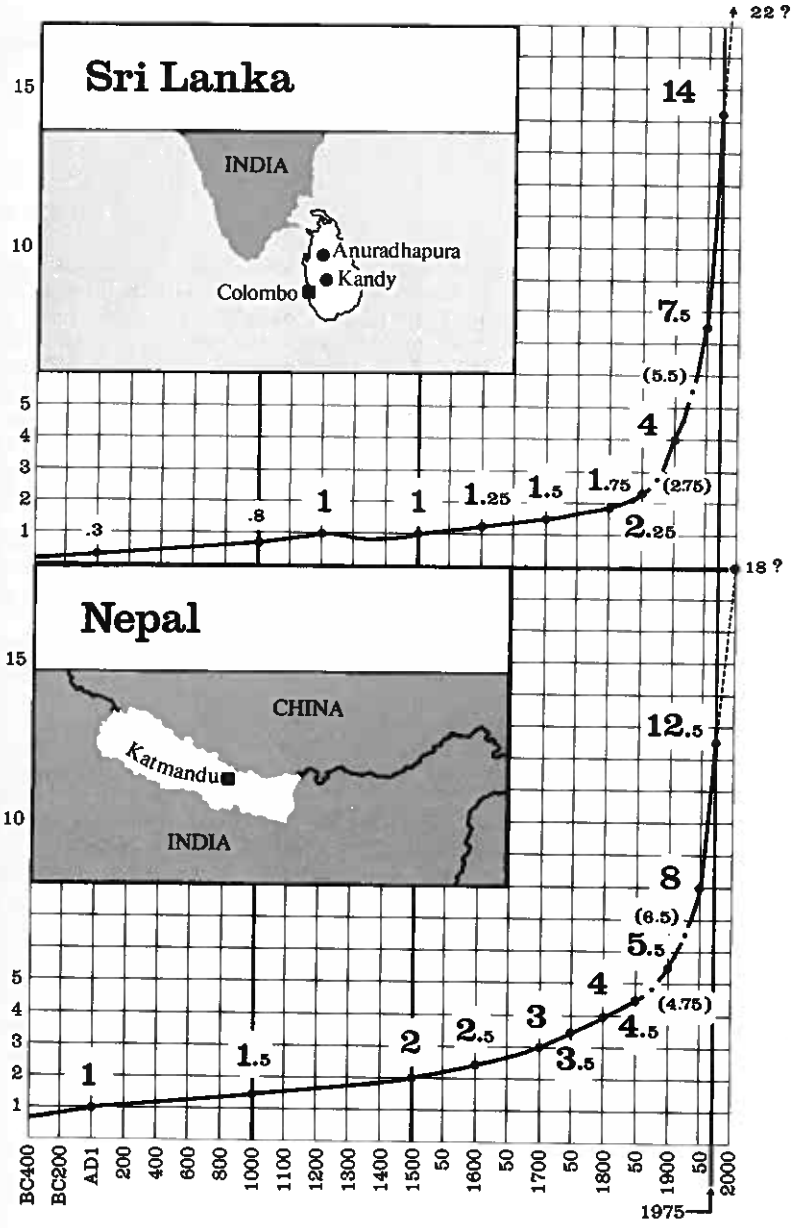
The first all-India census was taken between 1867 and 1872, followed in 1881 by the first in a regular decennial series. Coverage of both area and population can be regarded as substantially complete from 1901. India and the two halves of Pakistan continued the series after independence but the break-up between (West) Pakistan and Bangladesh caused their 1971 censuses to be postponed to 1972 and 1974 respectively. Sri Lanka has a decennial series from 1871 to 1931, which then proceeds irregularly – 1946, 1953, 1963 and 1971. Nepal has some partial 19th-century counts, then a series of increasingly accurate censuses at roughly decennial intervals from 1911.

Bibliography

*There are two general guides to the estimation of the population of the Indian subcontinent before the 20th century: the paper by Ajit das Gupta in * Glass and Revelle, and the section of * Durand dealing with India. The two most recent sets of estimates are those of J. M. Datta, for 1600 onwards, in the* Population Bulletin of India *1 (1960) and those by J. C. Russell in two articles in the* Journal of Indian History *47 (1969) and 50 (1973). There is reasonable agreement between most estimates back to 1600; before that date Russell gives a series that is generally lower than other estimates, but in line with the assumptions of this book.*

For the 19th and earlier parts of the 20th century, the basic source is Kingsley Davis, The Population of India and Pakistan *(1951), while a useful recent consideration is that of * das Gupta. For post-1947 population movements the * United Nations 1974 World Population Conference background paper on migration is useful, and there is an article by C. Jayawardena in the* Geographical Review *58 (1968) on Indians overseas.*

Sri Lanka is covered by Irene Taeuber in Population Index *15 (1949), and by N. K. Sarkar* Demography of Ceylon *(1957). There is little on Nepal apart from K. J. Krotki and H. N. Thakur in* Population Studies *25 (1), 1971, and the official statistics.*



Asia Areas 7b–c

ASIA AREA 8 South-East Asia

4·08m km²

8a Burma

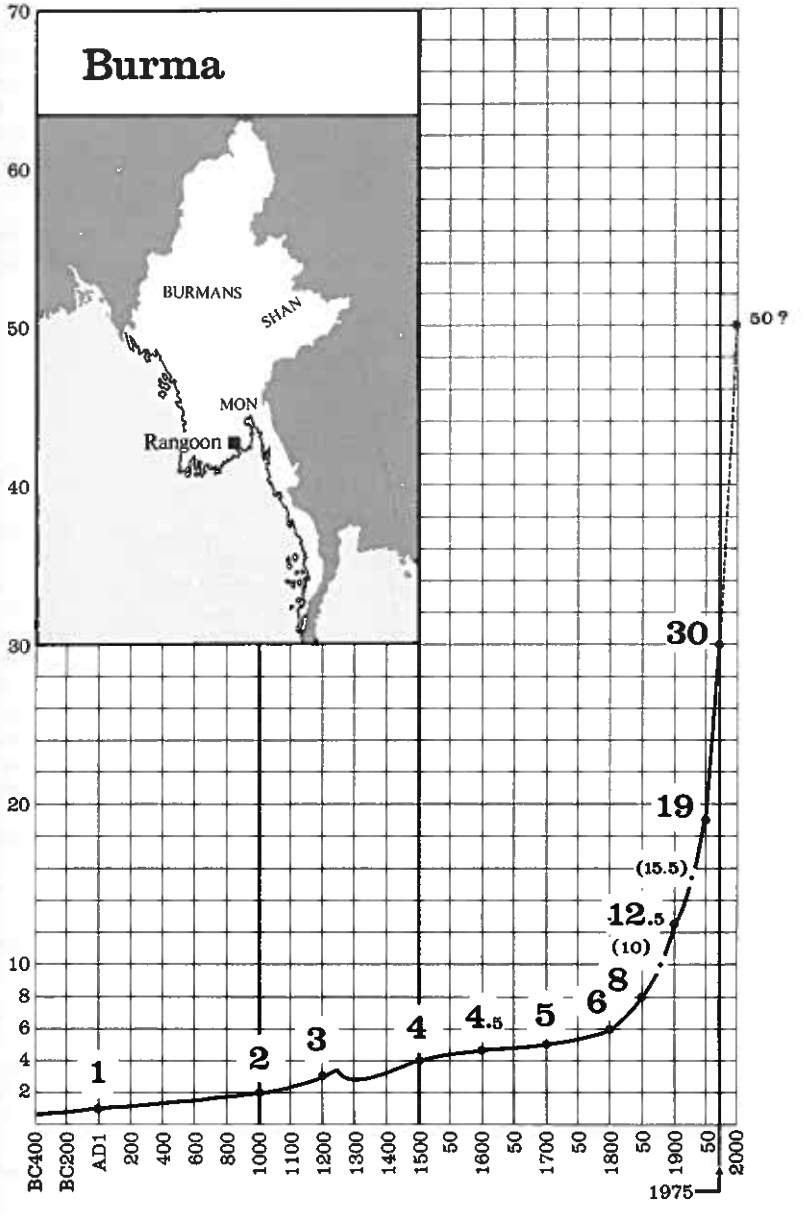
0·68m km²

The prehistory of South-East Asia is little known, and that of Burma is obscure even by Asian standards. Until the 2nd millennium BC the area of the modern nation was inhabited by a pre-agricultural population numbering 30,000 at the most: at this point the infiltration of agricultural techniques started the population graph on a rising trend so that by AD 1 numbers had risen to 1m. The pattern was one of fairly even distribution through the lowland parts of the country but with different races in north, south and east. In the south the people were Mons, members of the Mon–Khmer family of the South-East Asian fringe. In the north they were Burmans belonging to the quite different Tibeto-Burman group of the south-central Asian massif. In the east they were Shans, close relatives of the Thai.

Over the next millennium the overall population figure rose to 2m, the north established a preponderance over the whole country and the culture settled in an Indian and Buddhist mould. The introduction of wet-rice cultivation provided the basis for a further expansion in the population, which was now three quarters Burman. By the early modern period (*c.*1700) the King of Burma ruled 4m of the 5m people in the area of the modern state and his court had acquired the hectic splendour of a successful oriental despotism.

Friction with the British colonial administration in India brought about the downfall of this Burmese monarchy. Successive slices of the country were taken into British control between 1824 and 1885, and by 1900, when the population had reached 12·5m, all Burma was a tranquil province of the British Empire. The subsequent colonial period saw the annual rice production total multiply even faster than the people, so that Burma became an important rice-exporting nation. It also saw the creation of two immigrant communities, Indian and Chinese.

British control was only fleetingly reasserted after the Japanese conquest of Burma in the Second World War and since 1948 the Burmese have once again been independent people able to indulge to the full their traditional isolationism. The population has increased to 30m and now consumes all the rice it grows. Of the minorities the Chinese community has grown from 0·2m in 1950 to 0·5m today: the Indian community on the other hand has dwindled since the withdrawal of the British patronage on which it depended: it numbers 0·5m today as against 1m in 1941. The rest of the population is split 80–18 between Burmese and Shans, with Mons accounting for the odd 2%.



Asia Area 8a

Primary Sources and Bibliography

The bibliography of Burmese demography is best described as thin. The only pre-colonial item worth noting is an article by H. Burney in the Journal of the Statistical Society *(1842), 4 (4), which for its date is a remarkably good attempt to estimate the population of a non-European country. The basic primary source he used is a house count of 1783 – there was another in 1826 but of less reliability: the estimate with which he finally emerged was 4·2m for an area significantly smaller than that of the present nation.*

The colonial census pattern follows that of British India, i.e. decennial censuses from 1871 to 1941 with substantial corrections and adjustment needed for the 1871, 1881 and 1891 returns. The sole census since independence was taken in 1973.

8b Thailand

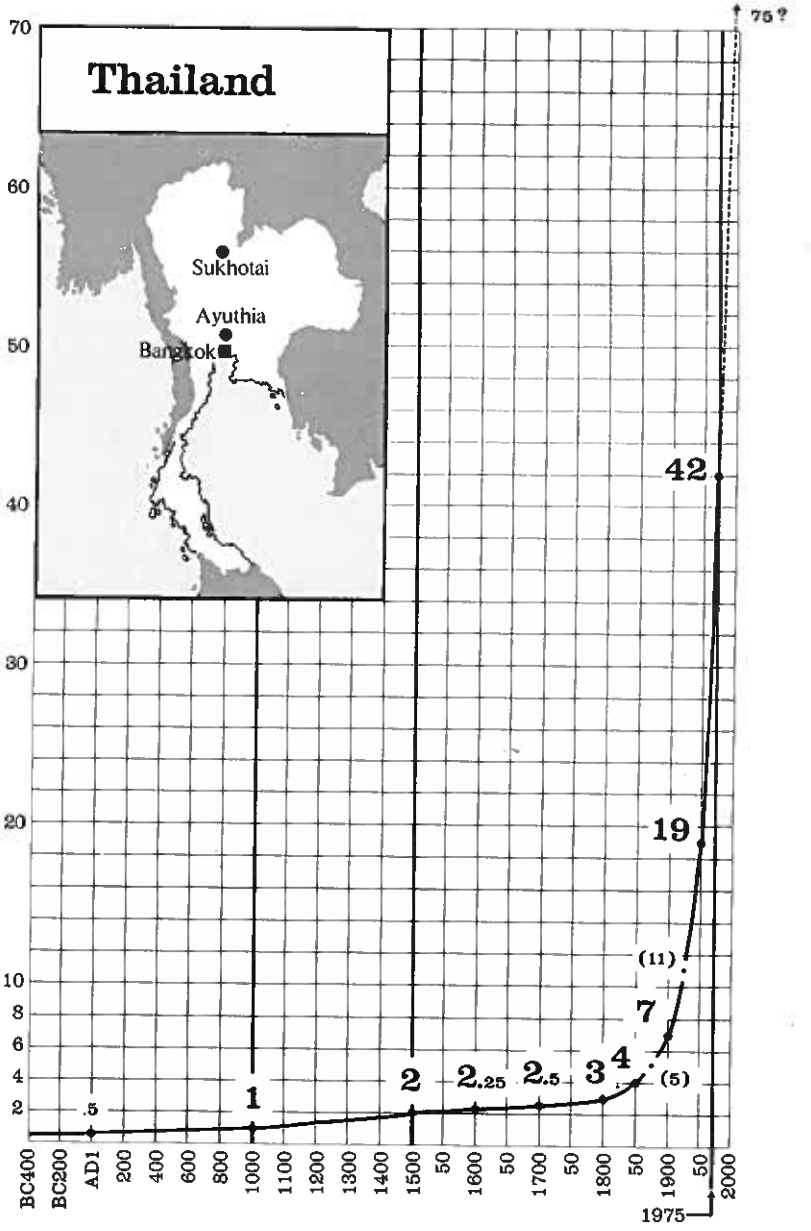
0·51m km²

Though little is known of the prehistory of Thailand – an important lacuna, for in this part of the world prehistory lasted till well on in the Christian era – the general pattern must have consisted of the slow transformation of an ancient hunting and fishing community into a food-producing one several orders of magnitude larger. Reasonable guesses at the sort of figures involved would be 25,000 in 5000 BC, 0·2m in 1000 BC and 0·5m in AD 1. By the 10th century AD, when the mists clinging to the early history of the country begin to clear, we can think in terms of a round million.

The Thai made up only half the population of Thailand at this time: the Mon were equally important, indeed preponderant in the south. This north–south polarity which is a recurrent theme in South-East Asian history has always been resolved in favour of the northerners, in this case the Thai. Their progress down the Menam valley, the axis of the country, is marked politically by the successive transfers of capital from Sukhotai (founded in the 13th century) to Ayuthia (in the next century) and Bangkok (in 1769).

In the early modern period Thai multiplication was far from spectacular: it took from 1500 to 1800 for total numbers to rise from 2m to 3m. The change to the modern pattern began in the 19th century, during which the augmentation was over 100%. The story is a familiar one, with wider contacts initiating a general economic and demographic advance: the unusual features are the preservation of political independence and the speed with which the agricultural base was expanded. Rice production consistently out-paced population growth, so that the country had become a major exporter of rice by the end of the century. The resulting prosperity attracted a stream of Chinese immigrants.

Since 1950 the Thai growth rate has been above 3% per annum: Thailand's 42m people could well have become 80m by the century's end. The Chinese minority, now just over 10%, has so far kept its identity in an otherwise homogeneous population.



Primary Sources and Bibliography

*The nearest thing to primary data before the 20th century are the estimates given by European travellers. Thai muster rolls, long since vanished, may lie behind the earliest of these – a figure of 1·9m adult males in 1688 – but if they do they are small loss for the figure is absurdly inflated and the rolls must have been assembled to impress rather than inform. Some of the 19th-century figures on the other hand are quite convincing: for instance Crawfurd's 1830 estimate of 2·73m (for a smaller area than the present) and Ingram's of 5m or 6m in 1850 (see * Fisher).*

The census series starts in 1910/11 and continues to the present with increasing accuracy. Adjustments to the published figures are considered (though not very clearly) by Ajit Das Gupta and others in Sankya, *Series B, 27 (1965).*

Thailand's demographic history from the 17th century on has been summarized by three writers: G. W. Skinner in Chinese Society in Thailand *(1957); L. Sternstein in* Pacific Viewpoint 6 *(May 1965); and R. Thomlinson in* Thailand's Population *(1971). Although they use very much the same sources, their conclusions, particularly on the pre-19th-century trends, are not always congruent.*

8c Indo-China

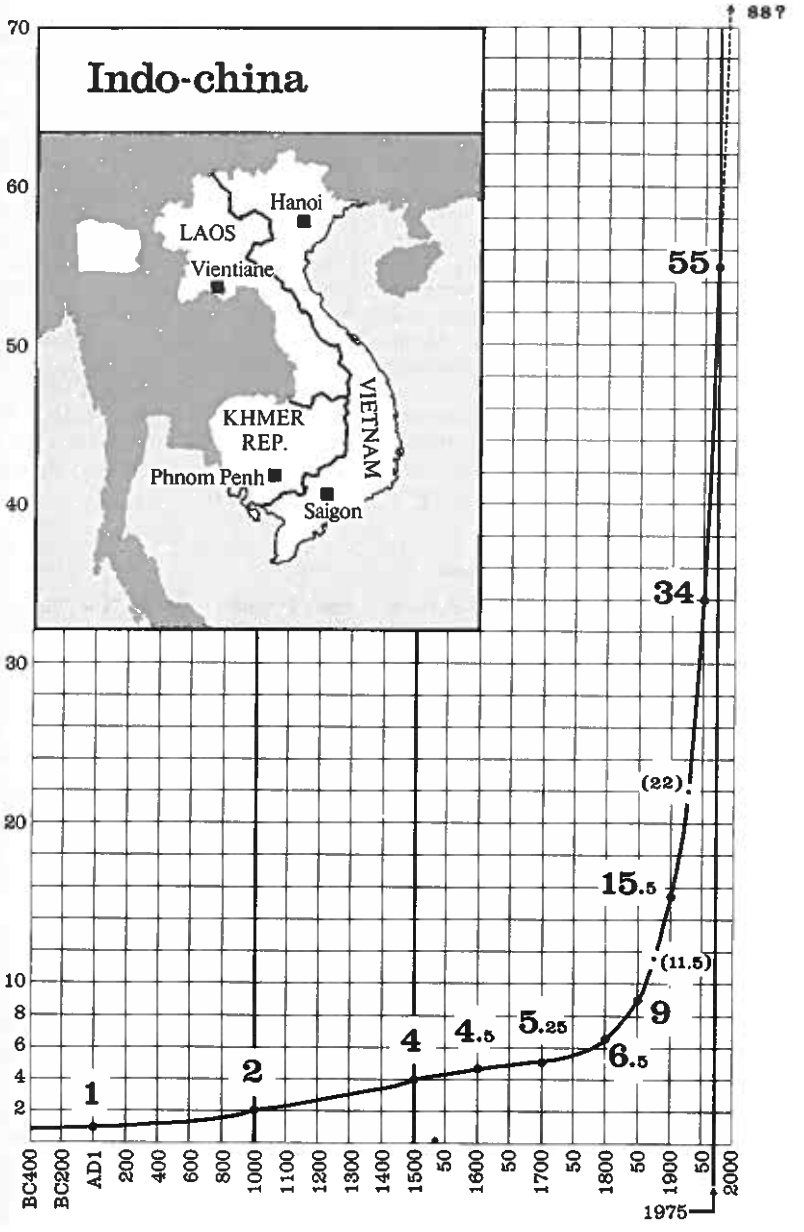
0·75m km²

8c-1	**Vietnam**	**0·33m km²**
8c-2	**Laos**	**0·24m km²**
8c-3	**The Khmer Republic**	**0·18m km²**

In the 3rd millennium BC the indigenous population of Indo-China, some 40,000 strong, was transformed into an expanding community by the acquisition of agriculture. By AD 1 this community had multiplied up to the million. It was already polarized both ethnically and culturally, the north being inhabited by the Viet, who were politically and socially under the influence of China, the south by the Khmer, whose culture derived from India. The history of the following 1200 years is essentially a matter of the changing balance between these two forces, with the Lao (who are a Thai people) playing a spectator's role in the underdeveloped hinterland.

At first the south predominated and direct or indirect Khmer rule spread over southern Thailand, southern Laos and south and central Vietnam. The grandiose ruins of Angkor Wat are a testimonial to the magnificence of this Khmer Empire at its peak: the name – it means 'City of Water' – is a reminder of the Khmer's development of an irrigating agriculture which kept the demographic centre of Indo-China firmly in their zone. Of the 2·5m Indo-Chinese alive in AD 1200, the majority lived in the Khmer sphere of influence.

After 1200 the balance tipped the other way: the Viets got stronger, the Khmers got relatively weaker. The Khmer's poor performance is symbolized by the decline of Angkor, which was eventually abandoned to the jungle:



Asia Area 8c

at the back of it seems to lie an agricultural failure the exact nature of which is obscure, but for which the Dry Zone Sinhalese civilization affords interesting parallels (see Asia Area 7b). By the early modern period European travellers were mentioning the Khmer Kingdom only in passing, as a Thai or Viet satellite: by the mid 19th century its 2m inhabitants had become for all practical purposes subjects of the Vietnamese emperor. The Vietnamese Empire in fact contained all the area's 9m people except for the 1m in the Laotian principalities, which were then an adjunct of Thailand.

At this point the French intervened. Their piecemeal annexation of the area (1862–93) brought Indo-China into being as a political unit. The rate of increase now became substantial, so that by the middle of the 20th century, when the colonial era was drawing to its bloody close, the number of Indo-Chinese had risen to 33·5m. And growth continued throughout the subsequent American–Vietnamese conflict, a remarkable tribute to mankind's ability to make love and war simultaneously. The special factor here was the spread of people and rice-growing into potentially fertile but previously under-utilized areas, a move that may well have been given added impetus by the destruction of the majority of towns and villages in the war zone. Today there are some 55m Indo-Chinese, of whom 44m live in Vietnam. 8m in the Khmer Republic and 3·25m in Laos.

Primary Sources and Bibliography

The only historical discussion which talks in terms of figures is that of Irene Taeuber in Population Index *11 (1945); her estimate of 4m for the Khmer empire at its height (i.e. including much of Thailand and Malaya) is probably of the right magnitude. The next estimate is Crawfurd's of 1830 – 5·2m excluding Laos (see * Fisher).*

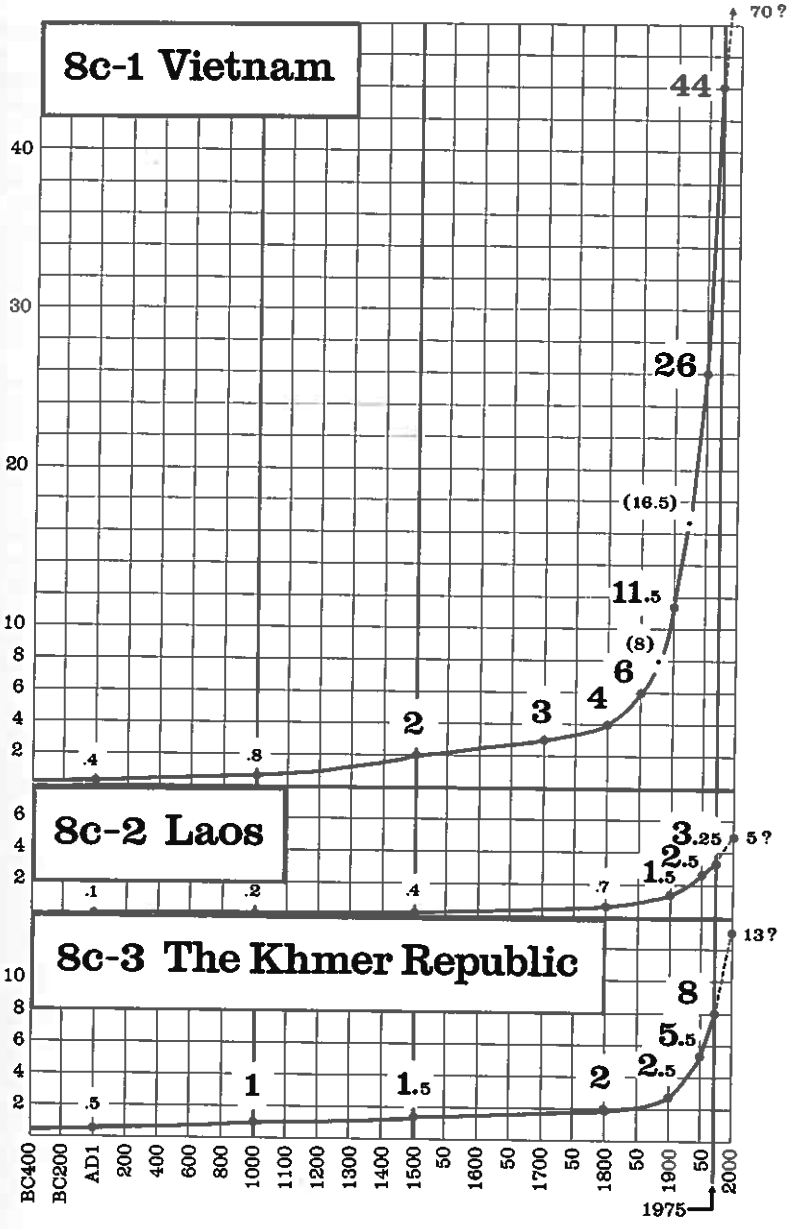
Primary data start with a French count in Cochin-China in 1876, followed by a quinquennial series of partial counts and estimates that only really become at all reliable in the inter-war period. The post-independence crop of censuses has been lamentably sparse – North Vietnam in 1960, Cambodia in 1962, and nothing at all as yet from South Vietnam and Laos.

8d The Malay Archipelago 1·84m km²

8d–1 Indonesia (less West New Guinea) 1·50m km²
8d–2 Malaysia and Singapore 0·34m km²

Man in this part of the world did not settle down to proper agriculture until after 2500 BC. The innovation is associated with a movement of Malay peoples from mainland South-East Asia into the archipelago: before this happened the population, a group of peoples of proto-Melanesian stock, cannot have numbered more than 100,000.

By AD 1 the Malay peasantry had



Asia Areas 8c–1 to 8c–3

multiplied up to about 2m. This population was concentrated on the southern tier of islands and in particular on Java, a state of affairs that has persisted ever since: its culture was forming in a Hindu mould as Indian traders probing the islands in their search for spices brought in their habits as well as their custom. The emergence of the Hindu Kingdom of Srivijaya, which through the early medieval period controlled or claimed to control most of Malaya and western Indonesia, marks the maturity of this initial phase in the area's history. Also introduced from India at this time was the technique of wet rice cultivation: this supported a further increase in the population, which reached 4m by AD 1000 and 8m by AD 1500.

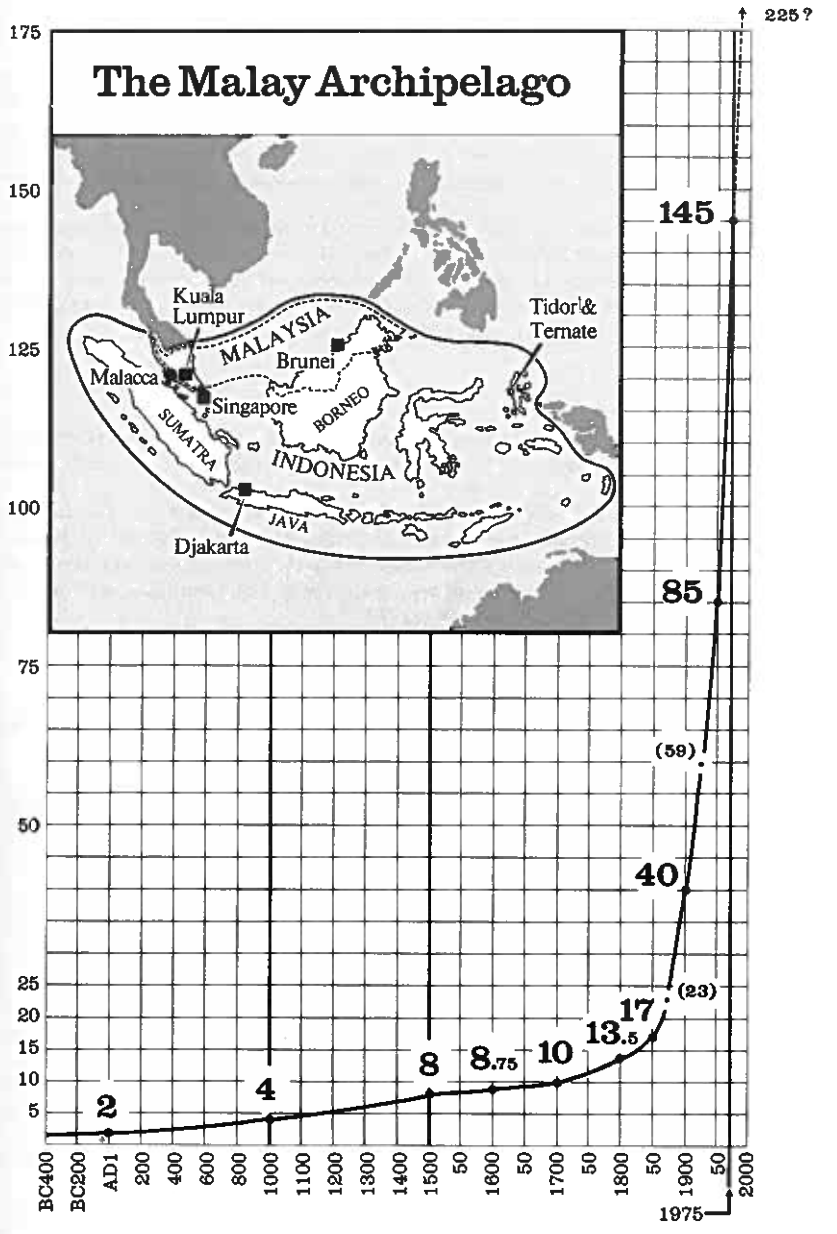
In Indonesia as in India Hindu culture was to be harshly challenged by Islam. From an enclave established at Malacca in the 14th century Moslem adventurers steadily spread eastwards; by the early 16th century they had created a string of coastal sultanates that stretched as far as the fabled spice islands of Tidor and Ternate. However, before these petty states could coalesce into an Indonesian empire, indeed while the area was still in a state of political disruption, the Europeans arrived and seized the imperial role.

The Europeans, of course, fought a great deal among themselves and it was only in the early 19th century that the imperial pattern of the area was finally laid out, with the Dutch in control of most of the archipelago (though not properly in some parts until 1900) and the British in possession of the Malay peninsula and the northern and northwestern parts of Borneo. Well before this division was finally agreed the demographic upsurge that coincides with the appearance of the Europeans was in full swing: the population of the area rose by no less than a third in the 18th century to reach a total of 13·5m. The exact machinery of this rise is unrevealed; although trade flourished under the Europeans – that was why they were there – it was largely traditional trade conducted in a traditional way, and therefore had little impact on the bulk of the population.

The 19th century brought further change. The population growth of the area accelerated, carrying the total from 13·5m to 40m; the colonial powers turned from trade to the exploitation of natural resources. Their methods were interestingly different. The Dutch enforced state-controlled production of coffee and spices by the inhabitants of Indonesia themselves. The British allowed a free-for-all in the production of tin and rubber which resulted in an influx of immigrants – from the archipelago and from China – which also supplied the region with its traders. The result is the present complex 145m population of the area: a predominantly Chinese city state of 2·5m in Singapore (where there was virtually nobody in 1800, and only 22,000 people in 1900); a multi-racial nation of 12·5m in Malaysia (46% Malay, 43% Chinese, 9% Indian); and a relatively uniform state of 130m in Indonesia, though one in which the split between the three quarters Moslem population and the Hindu and Christian minorities has caused great difficulties.

Brunei

Brunei is a sultanate in North Borneo which has held aloof from the Malaysian federation; it has a population of about 150,000 now, as against 20,000 at the beginning of the century.



Asia Area 8d

Primary Sources

The only pre-19th-century figure of any value is a contemporary Dutch suggestion that the Kingdom of Mataram, covering about 80% of Java, had 2·5m subjects in 1630 (quoted by B. Schrieke in Indonesian Sociological Studies, *Part 2 (1957)). The first estimates based on digect counts were produced in the early 19th century by Raffles (Java 4·8m in 1815) and Bleeker (Java 9·4m in 1845). Crawfurd's figures for Malaya and Indonesia in 1830 are 0·35m and 1·1m respectively (see * Fisher).*

From 1849 annual official estimates exist for Indonesia, based on quinquennial assessments. The first proper census in Dutch territory was taken in 1905: there were further censuses in 1920 and 1930 but of these only 1930 is really reliable. The Indonesians themselves have counted their population in 1961 and 1971. In the British area there were reliable censuses from 1901 on.

Bibliography

For Malaysia as a whole there is a most useful survey by T. G. McGee in Wan Gunguni (ed.), Malaysia: A Survey *(1964). For North Borneo in particular see* The Population of Borneo *by L. W. Jones (1966).*

The basic discussion of the sources and problems of Indonesian demographic history (both of which are many) is the book by Widjojo Nitisastro, Population Trends in Indonesia *(1970). For a less diffident approach to the dirty business of estimating total population one needs to turn to the brief discussion by * das Gupta, and to the article by B. Peper in* Population Studies *24 (1) 1970.*

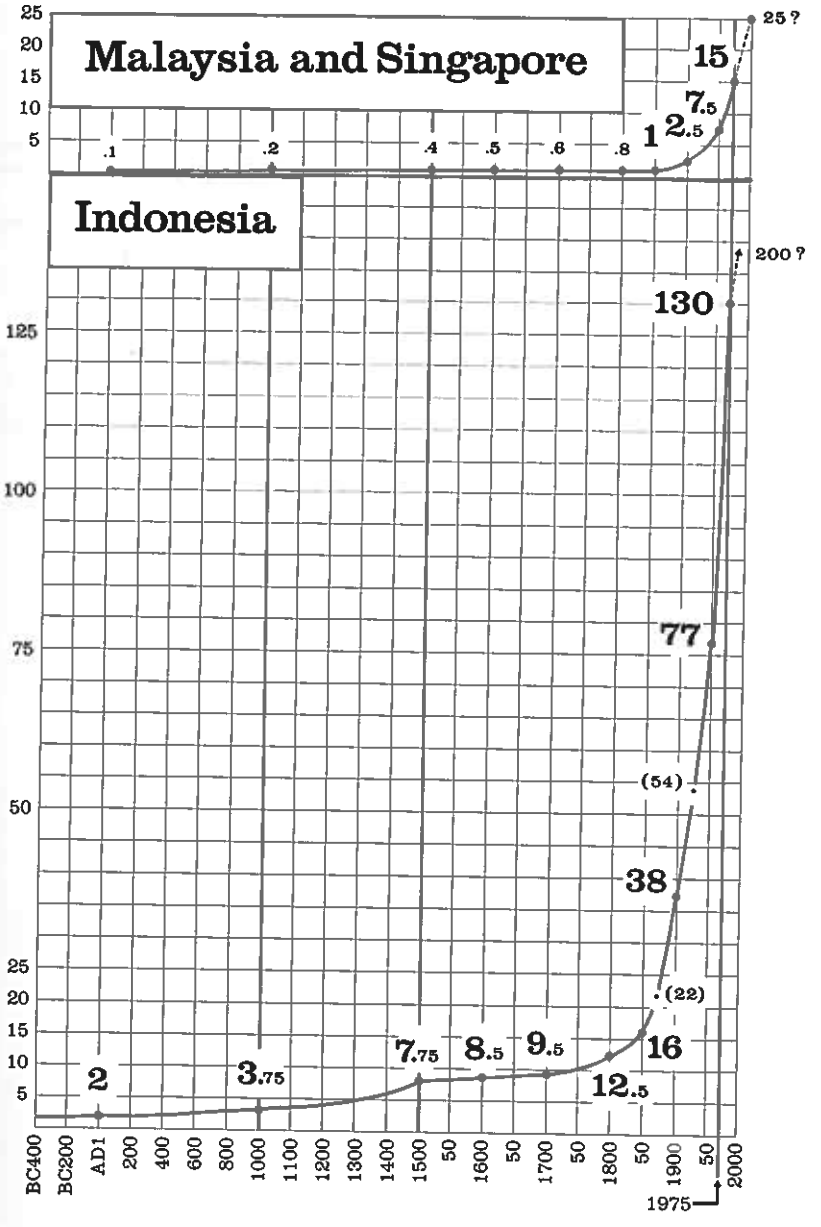
8e The Philippines

0·30m km²

The original inhabitants of the Philippines were the negritos, a race of pygmies who get their name from their superficially negroid features: there are currently about 10–20,000 of them and it is unlikely there were ever many more. The first Filipinos arrived from Indonesia around 2500 BC; more followed in the course of the centuries until by AD 1000 the newcomers had colonized all the important islands. At this stage the overall density was still very low, and the figure for total population no more than 0·1–0·2m in all.

Until the 16th century the Philippines remained unknown to the world at large: then the Filipinos suddenly found themselves being fought over by Spaniards from Mexico and Moslems – the Moros – from Borneo. (*The islands are named after the Spanish king of the time, Philip II of Armada fame. The Spanish are also responsible for calling the Moslems Moros, meaning Moors.*) The Moros arrived a little ahead of the Spanish, but, except in the case of the most southerly islands, Mindanao and Jolo, their hold was never more than tenuous: faced with the superior weaponry of the conquistadors they were soon forced to retreat to these strongholds, leaving the rest of the archipelago to the rule of Spain and the missionary activities of her priests.

During the course of the 16th century



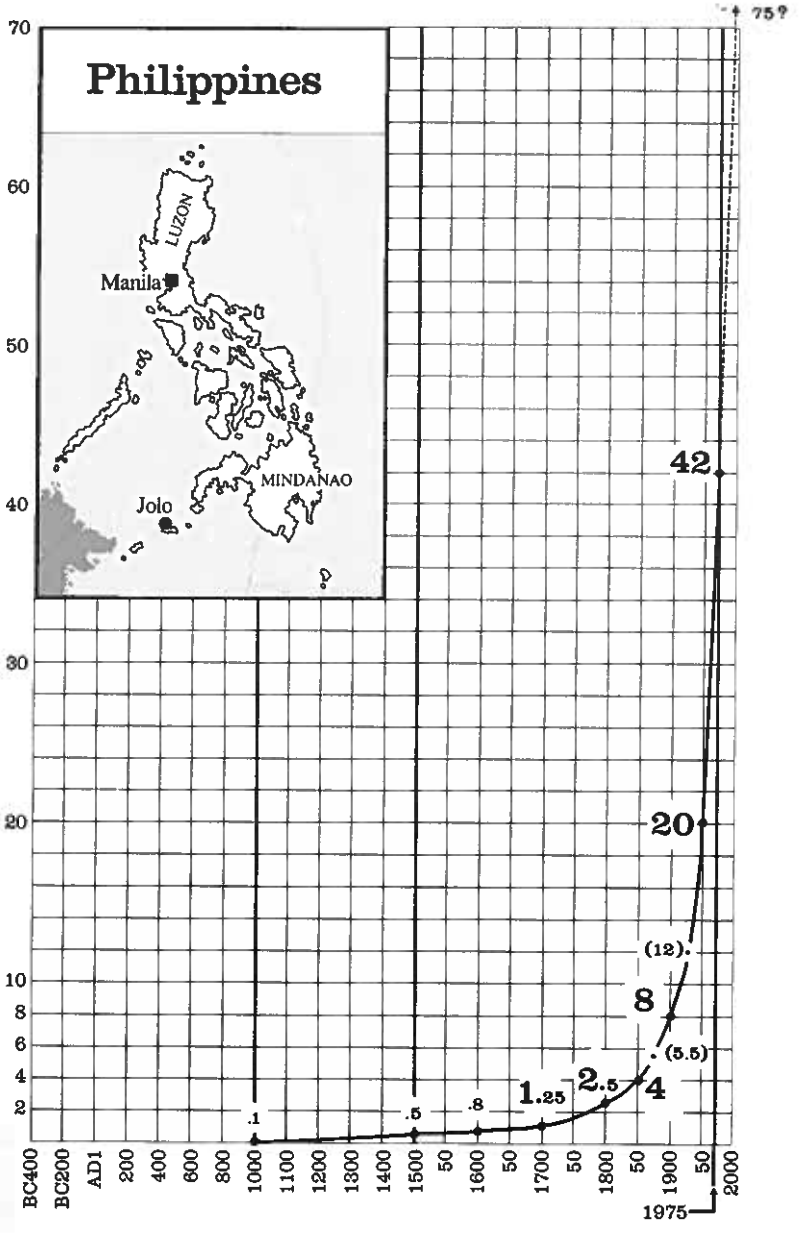
Asia Areas 8d–1 and 8d–2

the population of the Philippines passed through the 0·5–0·75m band and by 1800 steady growth of the order of 100% a century had brought the total to 2·5m. In the 19th century the pace quickened, the population doubling each fifty years: in the first half of the 20th century it more than doubled, reaching 20m in 1950. In the last twenty-five years the rate of growth has become truly hair-raising, the increase from 1950 (20m) to 1975 (42m) being over 100%.

Thanks to the long occupation by Spain (1565–1898) and the shorter occupation by the USA (1898–1945) the Filipinos are now overwhelmingly Christian (90%), indeed overwhelmingly Roman Catholic (80%). The Moros of Mindanao and Jolo constitute the major part of the remaining 10%.

Primary Sources and Bibliography

During the 19th century the Spanish produced reasonably reliable estimates of the population under their control, which amounted to about 90% of the whole. The US authorities instituted a proper census in 1903: five more have been held at irregular intervals since. For the historical data see Irene Taeuber's article on p. 97 of the 1960 issue of Population Index.



Asia Area 8e

Fig. 3.1 *Africa, subdiviston into areas*

1 THE MAGHREB
1a Morocco
1b Algeria
1c Tunisia
2 LIBYA
3 EGYPT
4 ETHIOPIA
5 SOMALIA
6 THE SUDAN
7 THE SAHEL STATES (Mauritania, Mali, Niger and Chad)
8 WEST AFRICA
8a Guinea [1]
8b Nigeria
9 EQUATORIA–ZAIRE–ANGOLA
9a Equatoria [2]
9b Zaire
9c Angola
10 EAST AFRICA
10a Uganda
10b Kenya
10c Tanzania
10d Rwanda and Burundi
11 SOUTH-CENTRAL AFRICA
11a Zambia
11b Rhodesia
11c Malawi
12 MOZAMBIQUE
13 SOUTHERN AFRICA
13a The Union of South Africa, Swaziland and Lesotho
13b Namibia and Botswana
14 THE ISLANDS OF THE WESTERN INDIAN OCEAN
14a Madagascar
14b The Comoros
14c Réunion
14d Mauritius

1. Senegal, Gambia, Guinea-Bissau, Guinea-Conakry, Sierra Leone, Liberia, Ivory Coast, Upper Volta, Ghana, Togo and Benin

2. Cameroon, Central African Republic, Equatorial Guinea, Gabon and Congo-Brazzaville

Part Three
Africa

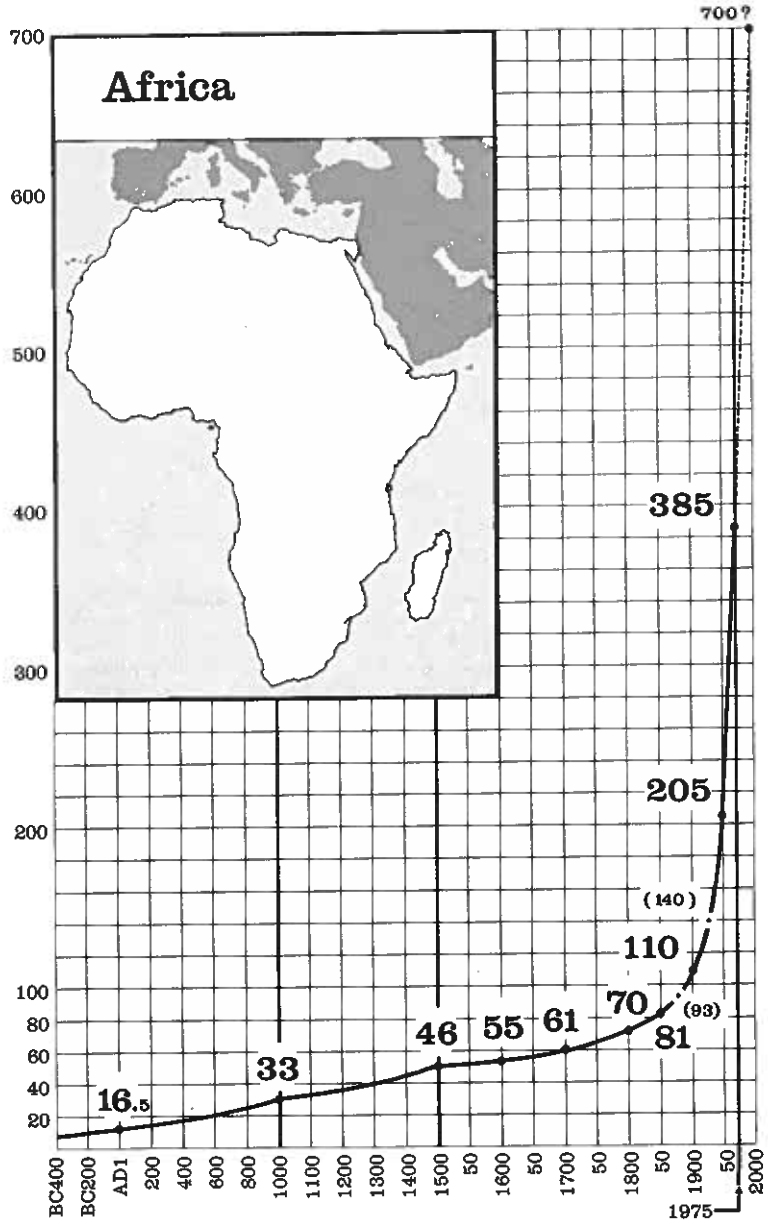


Fig. 3.2 *Africa, continental total*

AFRICA: OVERVIEW

30m km²
(of which about 9m km² is desert)

The north of Africa has always belonged to the Mediterranean world. Its inhabitants, the Berbers and Egyptians, are 'whites' and their history is part of the European–Near-Eastern culture complex. South of the Sahara lies what the Arabs call 'Bilad-as-Sudan', 'the land of the blacks', a quite different world, with a unique culture and ethnography. Until early modern times contacts between sub-Saharan Africa and the rest of the Old World were tenuous in the extreme: black Africa's history unfolded in its own way and in its own time.

Nowadays, 'black' is almost synonymous with 'Negro' but originally the sub-Saharan area was divided into four quite different black races – the Negroes, Nilo-Saharans, Pygmies and Bushmen. Geographically the division was roughly equal. The Negroes lived in the bush and forest country of the west, the Nilo-Saharans in the present-day Sudan and in the Sahel, the scrub zone south of the Sahara. The Pygmies lived in the tropical rain forest of the Zaire (Congo) basin and the Bushmen ranged across eastern and southern Africa. Besides these four 'black' peoples and the 'whites' of the north, Africa contained a fifth race in the Cushitic peoples of Ethiopia and the Horn of Africa. Members of the same 'Hamitic' linguistic division of the white race as the Berbers and Egyptians, they are more black than white to look at today and, as the geographical distinction between north and sub-Saharan Africa is less clear-cut in this part of Africa than elsewhere, it is reasonable to regard the Cushites as 'intermediate' in both the ethnic and the geographical sense. Altogether then we have five groups dividing the continent between them in the post-Glacial but pre-agricultural era. We can estimate their populations during that period as follows:

Berbers and Egyptians	100,000
Cushites	100,000
Nilo-Saharans	250,000
Negroes	250,000
Pygmies	200,000
Bushmen	350,000
	1,250,000

Sometime around the 7th millennium BC agriculture was introduced into Africa from the Near East. The introduction via the continent's land connection with the Near East meant that the first African country to experience the 'neolithic revolution' was Egypt and that it was along the strip of land watered by the lower Nile that African population densities first rose above the very low levels characteristic of the hunting and gathering stage of human development – in the range 0·01–0·1 per km² – to reach figures of 1 or more per km². In fact, relatively soon they were much higher than that, for Egypt has no reliable rainfall and agriculture there has to rely on irrigation, a style of cultivation that both requires and sustains large populations. Where contemporary neolithic societies in Europe took thousands of years to increase their overall densities from 1 or 2 per km² to 3 or 4 per km², the Egyptians had reached a density of 10 per km² of habitable terrain as early as the opening century of the 4th millennium BC and by 3000 BC were living at densities of around 20 per km². This level corresponds to a population of a million for the country as a whole and provides the demographic basis for the emergence of Egypt as a kingdom – the world's first political unit of significant size.

At this point in time – the beginning of the 3rd millennium BC – the demographic contrast between Egypt and the rest of Africa is about as striking as could be. In no other part of the continent is there any knowledge of agriculture at all. On the one hand we have a million Egyptians crowding the banks of the Nile, on the other family-size bands of hunters scattered across a vast landscape in a distribution so sparse that the total number amounts only to a million and a bit. Nearly half the population of Africa lives in Egypt, tills its fields and obeys Pharaoh.

For the next two thousand years Egypt continued to hold a cultural and demographic position way in advance of all the other African societies. By 1000 BC the total population of the continent had increased to more than 6·5m, but with 3m living along the lower Nile the Egyptian share remained near 40%. The important change in the population pattern was a relative strengthening of the Negro and Nilo-Saharan positions. The Negroes were making the first moves towards the development of a genuine agriculture and their success in this was marked by a rise in their numbers to a total of 1m. The Nilo-Saharans did even better, but then the pastoral way of life that was to be their characteristic mode of development being extensive rather than intensive, they approached their maxima of range and total numbers more rapidly than did the relatively sedentary Negroes. The losers were the Pygmies and Bushmen, who showed no advance on their mesolithic traditions and whose populations consequently remained static.

The middle centuries of the last millennium BC brought two new peoples to Africa: the Phoenicians (Lebanese) who colonized Tunisia and Tripolitania and the Greeks who settled in Cyrenaica. The arrival of the

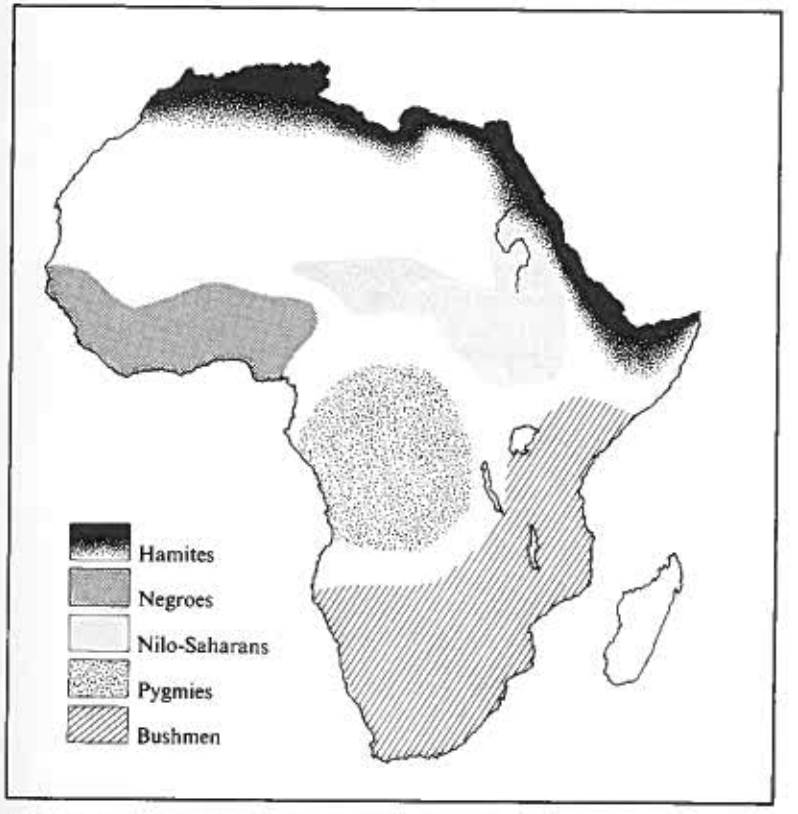


Fig. 3.3 *Africa in* 3000 BC

newcomers brought North Africa west of Egypt properly into Mediterranean society for the first time: their introduction of the sophisticated agricultural techniques evolved in the Near East and Greece led to a rapid rise in its population. By the 3rd century BC the neo-Phoenician capital of Carthage, near modern Tunis, had become one of the great cities of the classical world and a power able to contest with Rome for the hegemony of the western Mediterranean. Carthage didn't win – indeed she couldn't really expect to when the population of her empire was of the order of 1·5m (half in north Africa, half in Spain) as compared to the 5m of Roman Italy – but though the victorious Romans first vented their spite by levelling the defeated city they eventually refounded it, made it the capital of their province of Africa (meaning modern Tunisia) and carried the

original Carthaginians' civilizing mission through to completion. In AD 200 present-day Algeria and Tunisia contained a thriving peasantry, the nomadic way of life was restricted to the tribes of the desert fringe and the total population was of the order of 4m. Add 0·5m for Libya and 5m for Egypt, subtract 0·5m for the untamed nomads, and you have a peak figure of 9m for Rome's North African provinces. This amounts to nearly half the pan-African total of 20m.

The light of Mediterranean civilization never penetrated very far into Africa. Beyond the Roman frontier the only states that a classical geographer could have marked on his map were the Kingdoms of Axum (Eritrea) and Nubia (in the Sudan). The ruling élite of these two small areas had acquired a precarious literacy which enabled them to send the occasional embassy to the the imperial court and receive honorific letters and eventually Christian missionaries in return. The inhabitants of the rest of the continent were as unknown to contemporary science as they were unheeding of it.

This is not to say that there was nothing happening in black Africa. Far from it. The Negroes were on the move and one of Africa's most important transformations was under way. Of the 5 million Negroes alive in AD 200 nearly 2m were living outside the traditional Negro homeland – in the newly colonized territories of Equatoria, Zaire and East Africa. The migration had begun as a tentative infiltration eastward from Nigeria into the Cameroons early on in the last pre-Christian millennium; it gained momentum in the last pre-Christian centuries when the Negro van pushed eastward across the territories that now constitute the Central African Republic, northern Zaire and Uganda. Finally some time before AD 500 the Negroes reached the east coast of the continent. Possessors of an Iron Age technology and a productive agriculture, they outclassed the aborigines so completely that there was no significant opposition to their advance. The Pygmies withdrew into the depths of their forests, the Bushmen retreated southward. The racial landscape of sub-Saharan Africa became almost purely Negro – indeed because the expansion had been so rapid the whole newly acquired area was peopled by Negroes speaking languages of the same 'Bantu' type.

The Nilo-Saharans did contest the Negro advance and the fact that the northern limit of the Bantu-speaking peoples drops away southward as it traverses the continent from west to east reflects the pressure of Nilo-Saharan pastoralists. Their drive south from the Sudan, which seems to have begun at much the same time as the Negroes' eastward movement, succeeded best in East Africa, where the terrain favours the pastoral style. Famous cattle-herding tribes like the Masai of Kenya and the Tutsi of

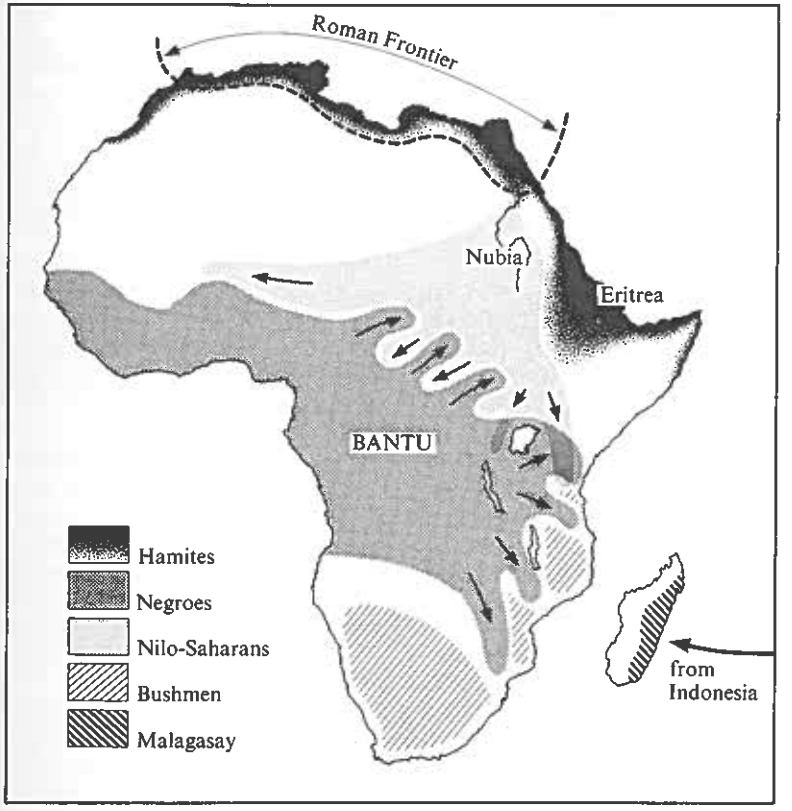


Fig. 3.4 *Africa in* AD 400

Rwanda and Burundi represent later eddies in this Nilo-Saharan cross-current which continued to bring new peoples into the area until the beginning of colonial times.

This is to run far ahead of ourselves. In the early 3rd century AD the Negro domination of sub-Saharan Africa was foreshadowed rather than achieved and, looking at the continent as a whole, the weight of population still lay north not south of the Sahara.

The military and economic crisis which shook the Roman world in the second half of the 3rd century AD marks the beginning of the end of this situation. The population of North Africa, like all other local populations within the Roman Empire, began to decline and the drop in numbers continued for more than four centuries. It bottomed out only when numbers

Fig. 3.5 *The slave trade in Africa in medieval times. By the end of the 15th century there were six slaving routes in operation, two directly across the Sahara, the others using the Nile, the Red Sea, and the Atlantic and Indian Ocean coasts. The earlier of the two trans-Saharan routes (1 and 2) seems to have been the western one. Far older than either was the Nile route (3) which by medieval times had several cross-connections with the Red Sea traffic (4). The east-coast route (5) which reached as far south as Mozambique, was probably the most profitable: from its northern terminus at Oman there was considerable re-export trade to Iran and India. The sixth route only came into use in the closing decades of the medieval period when the Portuguese sailed the west coast as far south as the Gulf of Guinea and started to ship slaves from there to Europe*

were down to two thirds of the peak figure (6m in AD 600 as against 9·5m in AD 200). During the same period the sub-Saharan population can be reckoned to have increased from something under 9m to something near 13m. The shift in the continent's centre of gravity that these figures indicate is striking: it matters little whether the figures for the Horn (1m in AD 200, 1·5m in AD 600) are added to the North African total (a procedure that can be justified culturally) or, as seems more sensible, kept in a separate category.

The Arab conquest of the 7th century AD opened a new and more cheerful chapter in North Africa's history. During much of the 8th century the Maghreb, Libya and Egypt were contented provinces of the caliphate and the moribund classical society of the region was transformed and invigorated by the preaching of Islam. Population figures rose again, edging just above the classical peak by the year 1000. This enabled North Africa to maintain its end of the North African : sub-Saharan ratio that was now fluctuating around the 1 : 2 level. But then Islam too lost impetus. The population totals for the Maghreb, Libya and Egypt slipped back to 8·5m and stayed there. This brought the North African : sub-Saharan ratio down to 1 : 3 (by 1200) and then 1 : 4 (by 1400). Islam had its successes of conquest and conversion – Somalia, the Sudan and much of the Sahel zone became Mohammedan during this period – but in the lands where it had been longer established it settled down to a rather uninspired provincial routine. The story of classical civilization appeared to be repeating itself.

*

The spread of Islam to lands south of the Sahara shows that the desert was no longer the barrier it had been earlier. Following the introduction of the camel in classical times the Berbers became steadily more confident in their journeyings: by the 13th century they were regularly making the journey from Sijilmasa on the south side of the Atlas to Timbuctoo on the Niger and back, and soon after they began to make use of a parallel route between Tripoli and Lake Chad. At the same time Arab seamen sailing the east coast were able to outflank the desert and establish a chain of trading stations that stretched as far south as Mozambique (Fig. 3.5). These routes – and the two ways known to the ancients, the Nile and Red Sea routes to Nubia and Eritrea – were all used by Arab slavers, and during the medieval period the traffic in black slaves, which had begun in a small, irregular way with the Egyptian conquest of Nubia in the 2nd millennium BC, became a relatively steady flow. The numbers involved were small: none of the five Arab routes shown in Fig. 3.5 can have a capacity of more than 1,000 a year or so and the actual average achieved must have been well below this – something of the order of 1,000 a year for all five

together. This is of no numerical significance in relation to a sub-Saharan population of 30m.

In the second half of the 15th century two things happened which were to lead to a transformation of the slave trade: the Portuguese opened up a west-coast route that put Europe in direct contact with black Africa, and Columbus discovered the New World. As colonization of the Americas proceeded, the demand for slave labour rose beyond anything experienced before, and as the native Amerindian populations melted away under the impact of defeat, disease and the savageries imposed on them, so the import of Negro slaves became the only way of meeting this demand. The number shipped from Africa across the Atlantic rose from a modest 1,000 a year at the beginning of the 16th century to an average of 5,000 a year by the century's end. And this was only a beginning. In the course of the 17th century the Dutch brought their business skills to bear on the slave trade, boosting the number carried per year to 30,000 by 1700. In the 18th century the British took the lead and the figures mounted again, finally levelling off at about 75,000 per annum in the period 1750–1800. The number of Negroes embarked for the 'middle passage' – the month-long voyage across the Atlantic which was made in conditions of such overcrowding and horror that a mortality of 15% was considered average – was near the 10m mark by the year 1800. Such had been the expansion of the trade that 8m out of the 10m had been shipped across in the course of the 18th century.

The demographic effects of the Atlantic slave trade have been much debated. Simple arithmetic shows that it is only in the 18th century that there is any case for it having an adverse effect on African population levels and that even then it can have hardly have done more than slow the rate of increase of a sub-Saharan total that was around 50m. It is in fact arguable that, in a society where numbers pressed so hard on resources and where mortality was so high, the losses could be so rapidly compensated for that the slave trade, even at its peak rate, can have had no effect on African numbers at all. Some have even gone further. Any trade, they say, is better than none and the introduction of manioc and maize to the continent in the 16th century so improved native diet that population growth actually accelerated during the heyday of the slave trade. It is very difficult to come to any positive conclusions, particularly as we have no knowledge at all of such factors as whether contact with Europe brought new diseases as well as new foods. The fair conclusion would seem to be that the Atlantic slave trade was of great importance to the demography of the Americas but of no lasting quantitative significance to Africa.

In the late 18th century European opinion moved against slavery: in the early 19th century the trade in slaves was prohibited and in the second half of the century the prohibition was made effective. The routes that stayed in

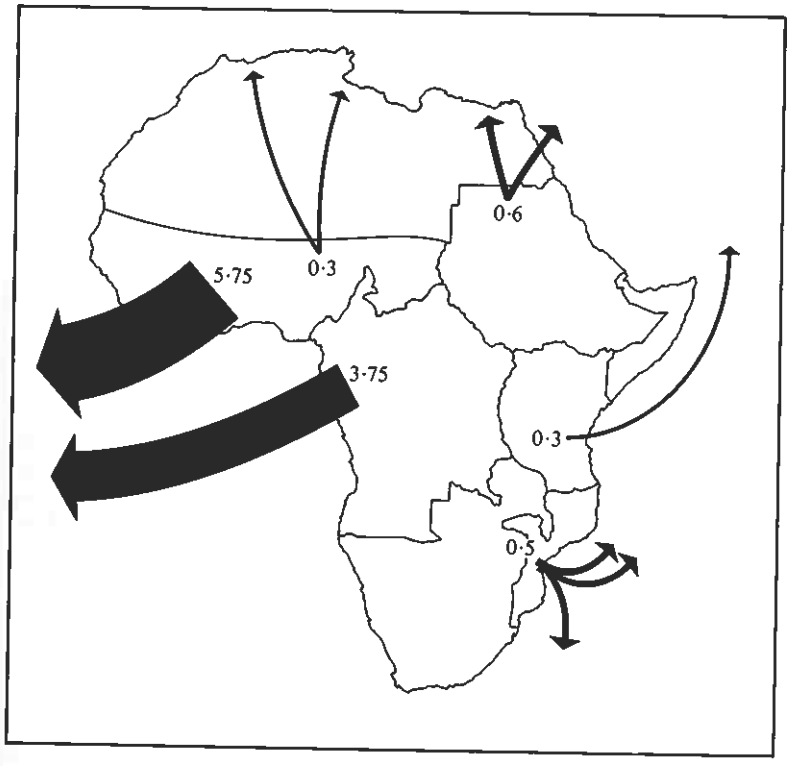


Fig. 3.6 *The slave trade in Africa* 1500–1810. *During this period Europeans took nearly 10m Negroes from sub-Saharan Africa, all but a few of them being shipped from the Atlantic coast to the Americas. The Arabs took just over 1m*

business longest were the ancient Arab ones across the Sahara and along the east coast, which actually expanded as the others shut own (Fig. 3.7). Rates of export of 20,000 a year were attained on some of these routes and the anti-slavery propagandists talked of areas of total depopulation throughout the eastern half of Africa. But this final phase of the slave trade was too short-lived to have any such effect: by the late 1870s the traffic had been reduced to insignificant levels everywhere and the Europeans were able to congratulate themselves on having eradicated a trade so self-evidently vile that it was difficult to remember that, a mere century before, they had been its most zealous practitioners.

The suppression of the slave trade was only one aspect of Europe's

increasing concern with Africa during the 19th century: the exploration of the interior and the establishment of protectorates and spheres of influence were more sinister signs of the same thing. Finally in a flurry of diplomatic and military activity known as 'the scramble for Africa' the Europeans moved in as masters. The British, the world's most accomplished imperialists, got the lion's share: by the end of Queen Victoria's reign (1901) 50m Africans – nearly half the continental total of 110m – had been added to the roll call of her subjects. By contrast her grandson the Kaiser obtained a mere 10m. And these he soon lost, for during the First World War the

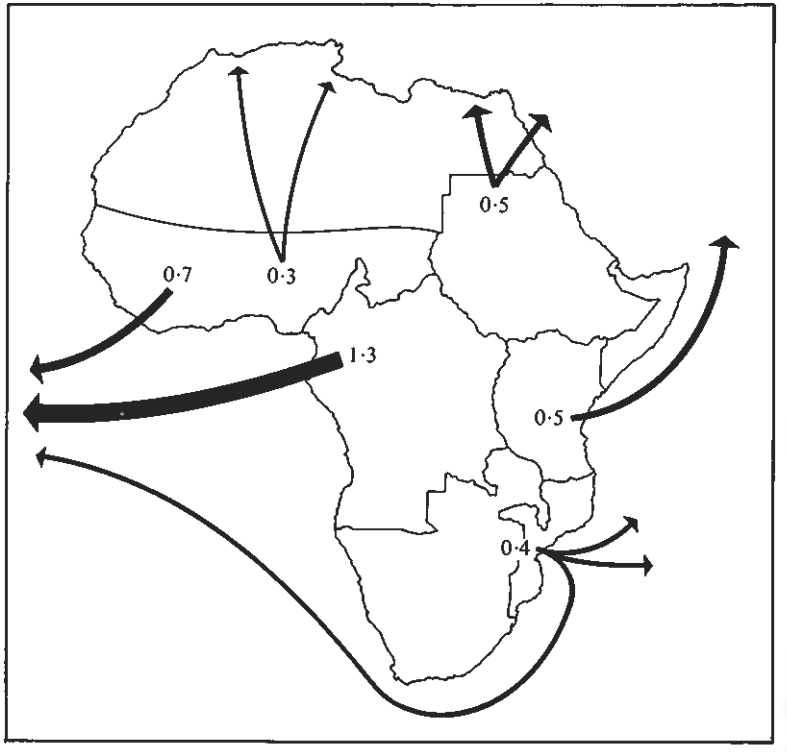


Fig. 3.7 *The slave trade in Africa* 1810–80. *The official outlawing of the slave trade at the beginning of the 19th century was far from being the end of the traffic. European slavers shipped another 2·35m black Africans from the continent between 1810 and the middle decades of the century when the closure of the Brazilian and Cuban markets finally put a stop to the Atlantic trade. The Arab slavers remained in business for another quarter of a century after that; they took about 1·35m slaves during the period as a whole*

British, French and Belgians divided Germany's African Empire between them. As a result the British share passed 50% and the French share rose from just under to just over 25%. The remainder of the continent's population was split between Belgium (9%), Portugal (6%) and Italy (1% rising to 6% with the conquest of Abyssinia in 1935).

Colonization was a noticeable but by no means dominating feature of the colonial era. Mussolini settled 100,000 Italians in Libya in an attempt to create an African province for his new Roman empire, but most of the inflow was much less organized than this. The foreign communities in Morocco, Tunisia and Egypt, for example, derived from the European countries with a Mediterranean coast rather than specifically from the occupying power. And though temporarily powerful these groups were always numerically small. The peak numbers of foreigners in Egypt amounted to only 0·2m, in Morocco to 0·5m and in Tunisia to 0·25m. These figures all shrank to near zero within a short time of the host country's achieving independence. Also eliminated, though only after a vicious struggle, was the one community that did build up to a respectable size – the French settlement in Algeria, which at its apogee in the 1950s was over a million strong.

Most of sub-Saharan Africa remained free of this sort of intrusion. A few British settled in east Africa during the heyday of imperial power but they nearly all left when the region became self-governing again. The Indians whom the British had brought in to run this sector of their empire mostly stayed. In the 1960s they numbered some 0·4m but Uganda expelled its contingent (0·1m) in 1972 and it seems only a matter of time before Kenya and Tanzania follow suit. British and Indians also moved into southern Africa, this time in much greater numbers. As southern Africa already contained a sizable Boer (Dutch) and Coloured (Dutch-Hottentot) population this became the one area south of the Sahara in which the population was not overwhelmingly black. At present there are 4·1m whites, 0·75m Asians, 2·3m coloured and 18m blacks in the Union of South Africa. Political power is 100% in the hands of the white community which ensures its immediate future. In the long run, however, it is difficult to see this monopoly being maintained and once it is lost the days of the white man in southern Africa must be numbered. The similar regime established by the 0·2m white settlers in Rhodesia appears in a very shaky state already.

If sub-Saharan Africa is likely to have solved its racial problems by becoming homogeneously black by the end of the century it is unlikely to have solved its other population problem – the present explosive rate of growth. The rate of increase has accelerated in this century from 25% in the first quarter to 45% in the second and 100% in the third. The corresponding figures for the absolute increase in numbers are 20m, 45m and 140m. If

the rate of increase is no more than maintained in the fourth quarter another 250m people will be added to the population of sub-Saharan Africa, a daunting prospect for an area that already faces terrible problems of poverty.

Not that black Africa is overpopulated in density terms. It could easily accommodate several times its present population, the more so as it is still at an early stage of urbanization. But the achievement of a better life for its people depends on per capita investment levels that are difficult enough to achieve at present and could prove impossible to realize while the rate of increase remains geometric.

The hope is that both here and elsewhere in Africa the rates begin to fall in the not too distant future and that the continent's population in the year 2000 is below rather than above the expected 700m.

AFRICA AREA 1 The Maghreb

3·1m km²
(0·5m km² productive)

The Maghreb – the 'West' – is the Arab word for the three states in the north-west corner of Africa – Morocco, Algeria and Tunisia. Only the 1m km² in the maritime provinces of the Maghreb are habitable: the interior 2m km² are desert supporting the scantiest of populations – currently less than one person per 2 km².

The individual figures for total area and productive area (roughly 60% of this being pasture and only 30% arable) are as follows:

1a	**Morocco**	**0·60m km²**	**(0·22m km² productive)**
1b	**Algeria**	**2·34m km²**	**(0·21m km² productive)**
	Northern departments	**0·34m km²**	
	Saharan departments	**2·00m km²**	
1c	**Tunisia**	**0·16m km²**	**(0·07m km² productive)**

In an ecological sense the only division of importance is between Morocco, the northern departments of Algeria and Tunisia on the one hand, and the Saharan departments of Algeria on the other.

The prehistoric Maghreb was a backwater. It had its share of palaeolithic hunters – a few thousand – and in neolithic times a scattering of Berber pastoralists and cultivators – a few hundred thousand – but it remained stuck at a simple neolithic level during the whole of the period when the other Mediterranean communities were evolving through the Bronze and Iron Ages. At the beginning of the last millennium BC, when Phoenician seamen from the Lebanon started to explore the North African coast, they found they were stepping from their boats into a Stone Age world.

At first they didn't step far. Though they planted colonies all along the Tunisian coast it was several centuries before they turned their attention to the interior, and only after the various colonies had accepted the leadership of the most successful of their number, Carthage, that they established direct control over the northern half of Tunisia. When the Romans overthrew Carthage in 146 BC this area became the nucleus of the Roman province of Africa.

At the time of the fall of Carthage there were perhaps 100,000 Phoenicians and 500,000 Berbers in Tunisia plus

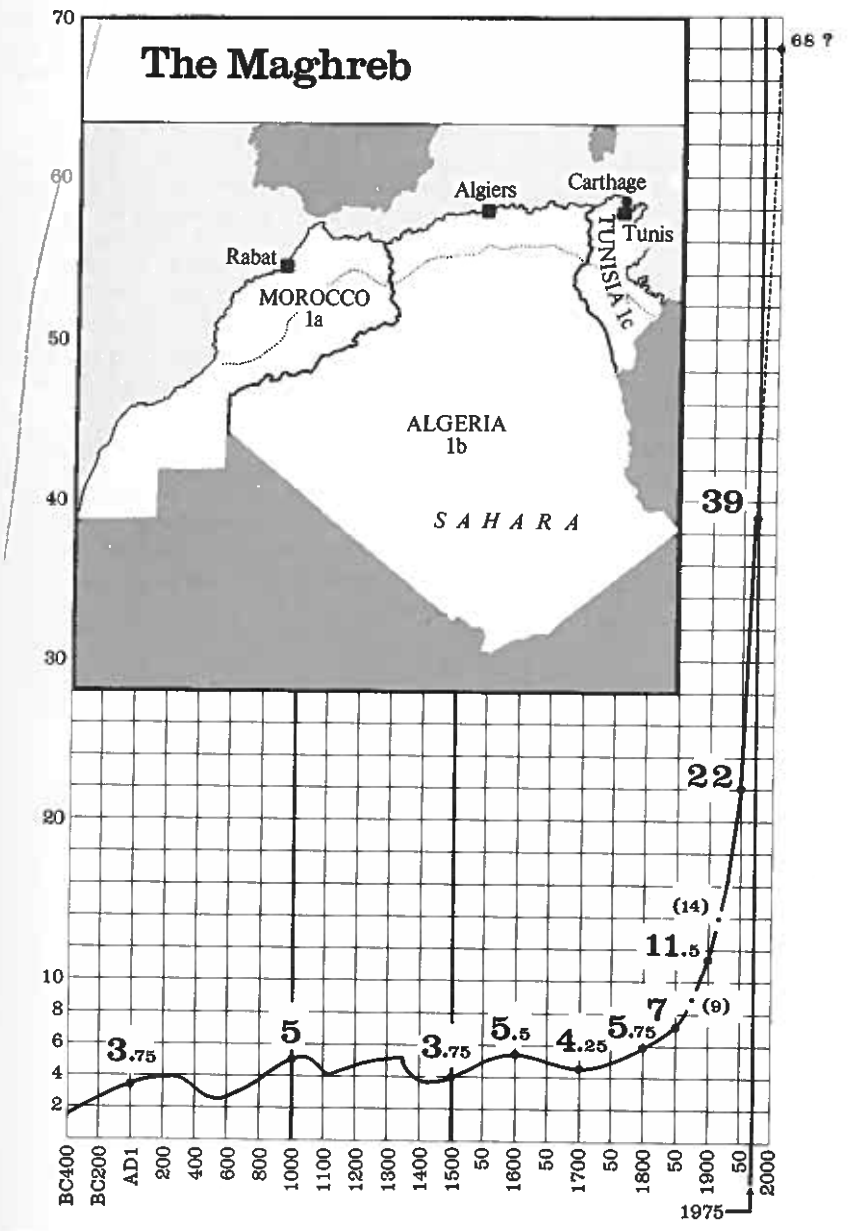
another 2·5m Berbers in the rest of North Africa. With the establishment of the *pax romana* numbers began to increase. Tunisia (the province of Africa) may well have had a population of 1m at the high point of the classical period in the early 3rd century AD. West Algeria (Numidia) was equally well settled by then, though east Algeria (Mauretania Caesarensis) had a lower density and the total for Algeria as a whole is unlikely to have been more than 2m. As for Morocco, its development had barely begun: only the northern part (Mauretania Tingitania) with half the area's populaton of 1m was under Roman rule.

The Roman period had started off with a significant shift from pastoralism to settled agriculture. In the troubled times before and after the fall of the Western Empire the pendulum swung back. The population of the area consequently fell sharply, perhaps below 3m. After the Arab conquest at the end of the 7th century there was a slow recovery. By AD 1000 the populations of Algeria and Tunisia had regained their classical level while that of Morocco had climbed well beyond its previous best. We can estimate the total for the Maghreb at around 5m, roughly distributed between Morocco, Algeria and Tunisia on a 2 : 2 : 1 formula.

For the next 800 years there was little change. The pendulum swung back towards pastoralism again in the middle of the 11th century with the invasion of the Hilali bedouin from Arabia. Recovery in the 13th century was offset by the Black Death in the 14th and the recovery from this disaster was completed only in the mid 16th century, just in time to be negated by the general Mediterranean economic recession of the mid 17th century. By 1800 the Maghreb had got stuck again: a medieval society in a modern world, stagnating in every sense. Population was around 6m, of which Tunisia had about 0·8m and Algeria and Morocco about 2·6m apiece.

Modern times began with the arrival of the French. In 1830 a French expeditionary force landed in Algeria and by 1857 the inhabited part of the country was under French control. A protectorate over Tunisia followed in 1881 and in 1912 a Franco-Spanish protectorate over Morocco. European imperialism had two important results – the build-up of a segregated population of European colonists and the creation of the conditions necessary for a demographic take-off.

The first was a temporary phenomenon. By 1900 there were about 0·75m colonists (0·65m in Algeria) and in 1950 there were nearly 1·75m (1m in Algeria), but by 1975 almost all had left and the few who did remain had been integrated. Also gone by 1975 (in this case to Israel) was Morocco's Jewish minority which had numbered 0·2m in 1925. The demographic revolution on the other hand has gathered speed since the European exodus. As is apparent from the graph the population of the Maghreb has a very high rate of growth indeed and on present performance numbers will be around 70m by the year 2000.



Africa Area 1

Primary Sources and Bibliography

*There is really nothing on which to base any calculations before the 19th century. * Beloch thought there were perhaps 3 or 4m people in the Maghreb by 200 BC and more than 5m in AD 1 (his actual figure is 6m but this includes Tripolitania). * Russell*

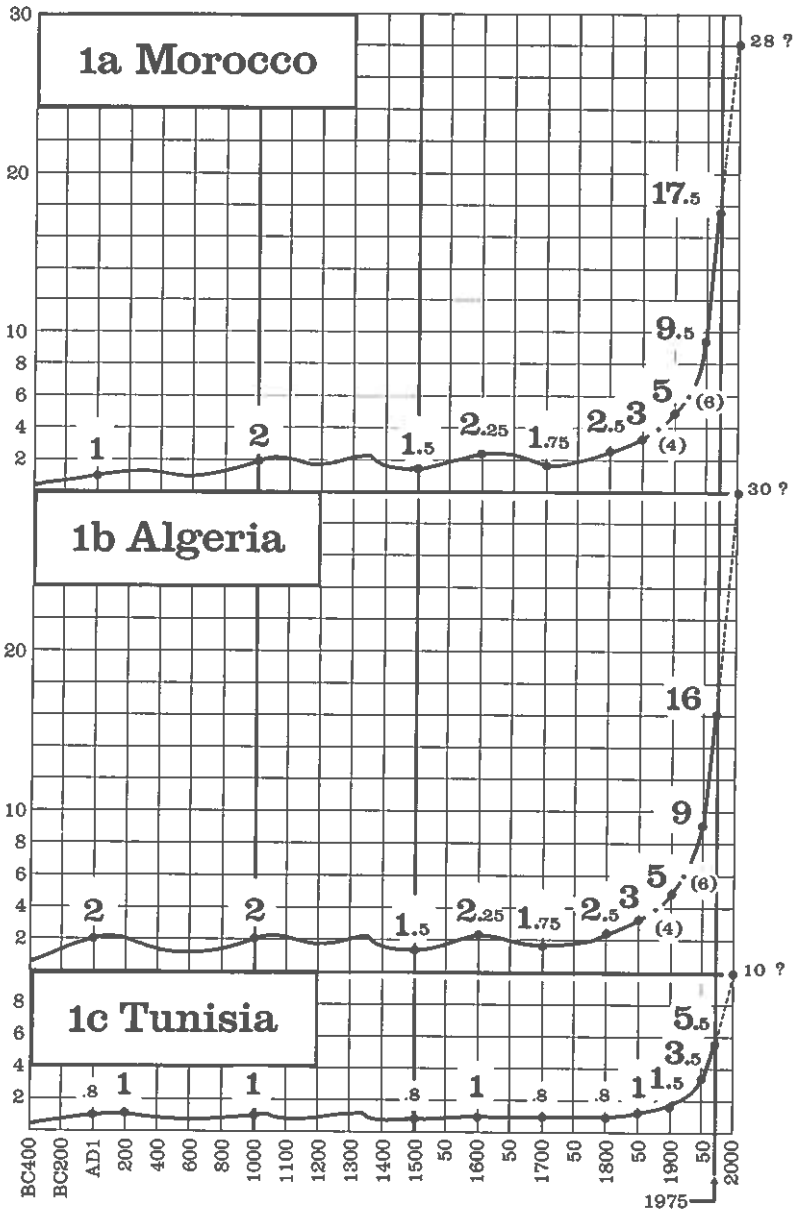
has suggested something over 4m in AD *1, which seems preferable, but he then goes on to propose a truly catastrophic drop to between 1m and 2m at the beginning of the Dark Ages and keeps his estimate at this level until* AD *1400. His figure for 1500, a more reasonable 3·5m, is accepted by* * *Braudel.*

Nineteenth-century and later data are available as follows:

Algeria. *The French instituted a quinquennial census in 1856. The series is complete to 1936, since when there have been censuses in 1948, 1954, 1960 and 1966. The 19th-century figures are certainly underestimates and need upward adjustment. The first figures for the Saharan departments (Algérie du Sud) were returned only in 1939 (0·6m). All the significant data are to be found in an article by D. Maison in* Population (*Paris, 1973, p. 1079) and most of them in K. Sutton's contribution to* * *Clarke and Fisher.*

Tunisia. *There are accurate Ottoman estimates available from 1844 onwards: a quinquennial census was instituted by the French in 1921 (decennial since 1936). The figures are in John Clarke's contribution to* * *Clarke and Fisher.*

Morocco. *Reliable estimates are restricted to this century. In the inter-war period the French started a quinquennial census in their zone (1921–36) and the Spanish made an estimate of the population in theirs (1930). Much the same situation obtained in the immediate post-war period (French-zone censuses in 1947 and 1951–2, Spanish-zone census in 1950). The first nationwide census was held in 1960 after Morocco had obtained her independence: a second followed in 1971.*



Africa Areas 1a–c

AFRICA AREA 2 Libya

1·76m km²
(0·04m km² productive)

Libya is a desert state where cultivation and animal husbandry are possible only in the two coastal strips known as Tripolitania and Cyrenaica. Up until the 6th century BC a few thousand Berbers constituted the entire population of this empty country: then Tripolitania was colonized by the Phoenicians and Cyrenaica by the Greeks. Tripolitania, as its name implies, counted three cities, and Cyrenaica, as is indicated by its alternative title of Pentapolis, five, but the Greek foundations were certainly smaller than the Phoenician and as Tripolitania contains two thirds of the country's productive land it probably contained a similar proportion of the population. By Roman times this means some 0·35m out of a total of 0·5m.

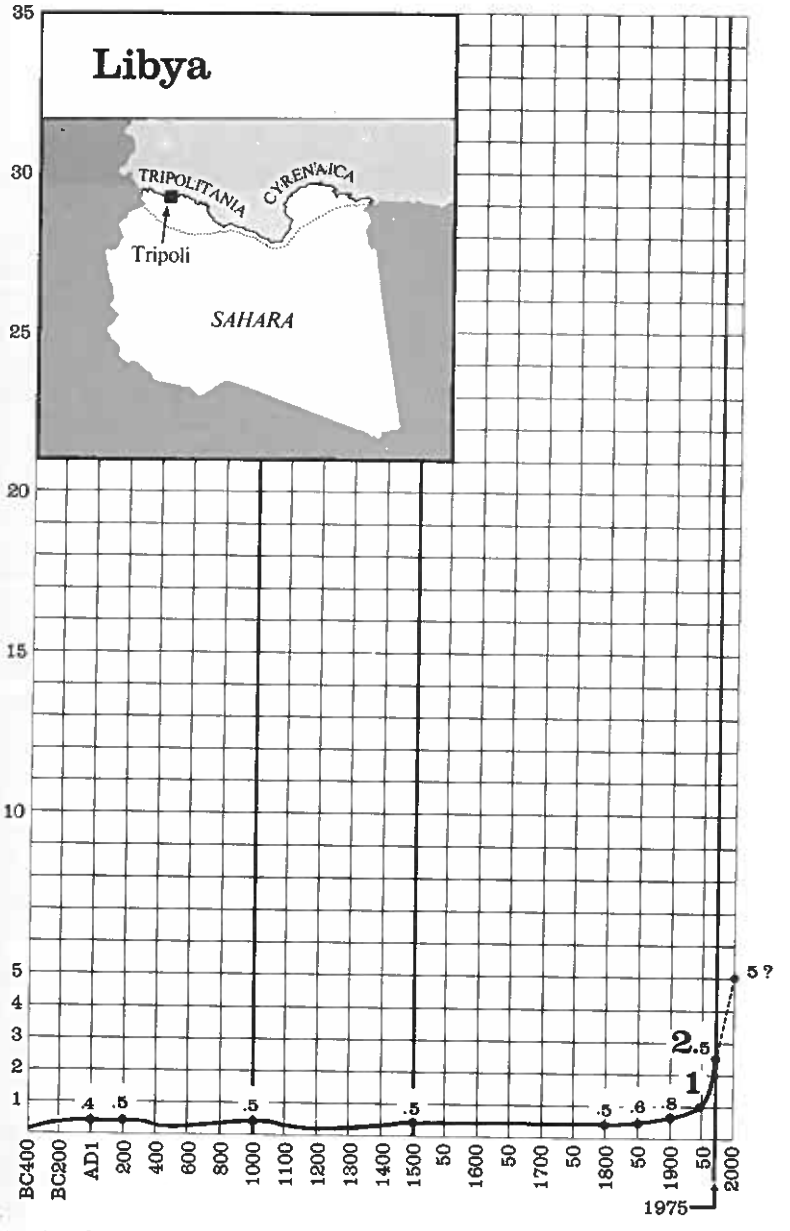
Population fell steeply with the decline in imperial fortunes in the 4th and 5th centuries and it did not recover until after the Muslim conquest of the 7th century AD. The first wave of Arabs brought a flush of prosperity to the region: Arabs move more readily by caravan than by ship and Libya benefited from the traffic between Egypt and the Maghreb. But the second wave of Arabs – the invasion of the Hilali bedouin – was entirely destructive: the economy dwindled to the simplest sort of goat herding and at its low point the population cannot have been more than 0·25m. During the rest of the premodern period there was a slow recovery, perhaps accelerating during the course of the 19th century towards a final figure of 0·75m.

The Italian occupation (1911–42) brought a colonization effort that at its peak added 100,000 people to the country's total. All these settlers were expelled after the liberation of the country during the Second World War. The newly independent country soon felt the full force of the population explosion and it has been fortunate to have the oil revenues to support a population that has more than doubled between 1950 (1m) and 1975 (2·5m).

Primary Sources and Bibliography

** Beloch's estimate of 0·5m for Cyrenaica seems far too high, implying as it does a total for Libya of at least 1·25m. * Russell's 0·2m Cyrenaicans has a more reasonable look to it. Of course, there are no real data to go on until modern times. By the end of the 19th century the Turks were producing estimates of around 1m, probably erring on the high side because the Italian enumerations of 1931 and 1936 turned up figures of only 0·7m and 0·75m. By 1950 the official estimates were back to 1m again. The first census was taken in 1954, the second in 1966 and the third in 1973.*

There are good discussions of the contemporary period in an article by C. L. Pan in Population Studies *1949 (p. 1) and in R. G. Hartley's contribution to * Clarke and Fisher.*



Africa Area 2

AFRICA AREA 3 Egypt

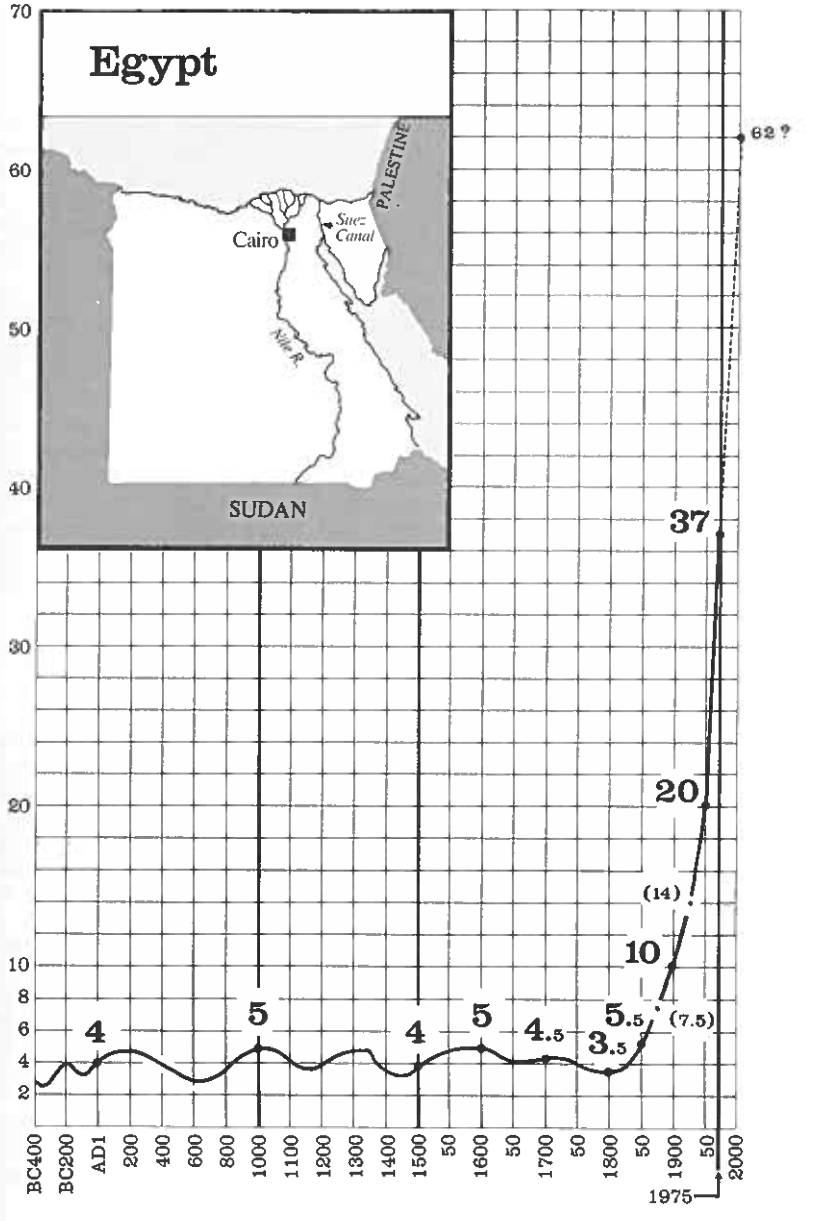
1·0m km²
(cultivated area 35,000 km²)

Egypt is a desert country of which a thin snake-like strip – less than 5% of the whole – is watered and brought to life by the Nile. The body of the snake is known as Upper Egypt: it has a width of only a few kilometres. The triangular head, Lower Egypt, is formed by the delta of the Nile: in its short length it contains as much productive land as all Upper Egypt.

One feature of the delta is an extensive spread of marshes. These must have provided a happy hunting ground for primitive man and because of them Lower Egypt probably supported the majority of the 25,000 inhabitants one can postulate for the country as a whole in late mesolithic times. With the arrival of the first farmers about 6000 BC the pendulum will have swung in favour of Upper Egypt. Here irrigation techniques could be practised in their most simple form and here the village-based economy that has characterized Egypt ever since will have achieved its first flowering. Population now grew steadily, reaching 100,000 in about 5000 BC and 250,000 in 4000 BC: it was on the million mark in 3000 BC when the Upper Egyptian King Menes conquered the delta and became Pharaoh of all Egypt.

Menes founded the first in the long succession of dynasties that ruled the Nile valley in the centuries before Christ. During the initial phase, known to scholarship as the Old Kingdom and lasting through most of the 3rd millennium BC, the population increased from 1m to 2m; during the Middle Kingdom (2100–1700 BC) from 2m to 2·5m. A new peak was reached in the New Kingdom or Empire period (1600–1200 BC) during which the Pharaohs conquered and held Palestine and part of the Sudan. In demographic terms these provinces were not very important: Nubia (the Sudanese province) contained at the most 100,000 people and Palestine no more than 250,000, figures that have to be compared with the 3m in Egypt proper. Internal development was now focused on the delta: the creation there of four new nomes (administrative districts) brings Upper and Lower Egypt into balance at twenty-two and twenty nomes respectively.

During the last millennium BC the irregular increase of the Egyptian peasantry slowed: in the first two centuries AD it ceased altogether. The available land was being exploited as fully as was possible with the available techniques, and at about 5m the population reached a maximum that was not exceeded until modern times. Plague, famine and war will, of course, have reduced the population below this level from time to time and during particularly bad spells – the economic collapse of the 4th century AD, the plagues of the 7th and 14th centuries and the stagnation in the last stage of Ottoman rule – the population must have been nearer 3m than 5m. But for something near 3,000 years the size of the Egyptian population remained within these relatively narrow limits. Christianity came and went; Islam came and stayed; the fellahin tilled the fields,



and the economy, like the pyramids, remained unchanging.

Egypt was shaken out of its medieval torpor by the arrival of Napoleon in 1799. In the first half of the 19th century numbers rose from 3·5m to 5·5m: in the second half the introduction of perennial irrigation, the entry into the world cotton market and the opening of the Suez Canal provided the economic basis for an even faster rate of increase, with the 10m mark being reached in 1900.

In the 20th century the story has been less satisfactory. In the first half the number of Egyptians exactly doubled (to 20m) but the Egyptian economy did not do so well: as a result living standards dropped. In the period 1950–75 both demographic and economic growth accelerated, but whereas the population gains were steady and the final figure 37m – impressive by any standard, the economic performance was more erratic. And though the increase in Arab oil revenues and the prospect of peaceful coexistence with Israel offer the hope of a better final quarter to the century, the absolute rate of increase – now running at over a million a year – is so high that it is difficult to be very optimistic. By the year 2000 the Egyptian government will have to provide food and jobs for a population that is unlikely to total less than 60m and could well be 10m more.

The Egyptians are a remarkably homogeneous people, the only important division being between Christians (10%) and Moslems (90%). The Christians are all of the native Coptic variety: the European community, which built up to a strength of 0·15m in the colonial era, is now down to nothing. To either side of the Nile, in the western and eastern deserts, there are a few bedouin: once they may have numbered 0·1m but today the total is certainly less than this.

Primary Sources

No country is easier to survey than Egypt, no people easier to count, and records that would be as purest gold to the historical demographer have certainly been compiled since the days of Menes. Unfortunately, nothing in the way of a total survives from the country's early days, except a tradition, recorded by various classical historians, that Pharaonic Egypt had a population of 7m. This figure is too high. Diodorus, quoting Hecataeus of Abdera, gives a figure of 3m for 300 BC *(Diodorus I 31; for the dispute about the exact text see * Beloch, p. 256) and it is exceedingly unlikely that the population had been significantly greater at any earlier date.*

There are no primary data for the medieval or early modern periods, the next figure worth discussion being the estimate of 2·5m produced by the French savants who came to Egypt with Napoleon in 1799. In 1848 the country held its first census: after allowing for considerable underenumeration the result was published as 4·5m. The correction needed in the case of the next (1882) census, a 12% addition to the raw total of 6·8m, was less substantial but it is only with the census of 1897, the first in the decennial series instituted by the British authorities, that we reach firm ground.

The decennial censuses were held on schedule up to 1957 but the census for that year had to be repeated in 1960 because of uncertainties introduced by the hostilities with Israel. There has only been one census since, held in 1966, so that there is some doubt as to the exact size of the present (1975) population.

Bibliography

There is an archaeologist's estimate of the population of predynastic Upper Egypt in an article by Karl Butzer in Science, *Vol. 132, p. 1616. For the Pharaonic period Sir Alan Gardiner* (Egypt of the Pharaohs *(1961), p. 28 n) and W. F. Albright* (Cambridge Ancient History, *3rd edn, Vol. 2, Part 2 (1975), p. 108) both suggest figures in the 4m–5m area, while * Beloch thinks of 5m as a peak first reached in Roman times. * Russell believes the troughs went as low as 2m in the Dark Ages, which seems unduly pessimistic. For the suggestion that the medieval population was around 3m see * Poliak: in favour of 4m are Janet L. Abu-Lughod* (Cairo *(1971)*, p. 51) *and H. A. R. Gibb and H. Bowen* (Islamic Society and the West *(1950), p. 209). The arguments for raising the French estimate of 2·5m for 1800 are given by Janet Abu-Lughod: for the 19th century as a whole we have used the growth rates suggested by Gabriel Baer in an article, 'Urbanisation in Egypt 1820–1907'* (*in* Beginnings of Modernization in the Middle East, *ed. W. R. Polk and R. L. Chambers (1968)) to calculate our figure for 1800 and 1850.*

AFRICA AREA 4 Ethiopia

1·2m km²
(10% arable,
20% pasture)

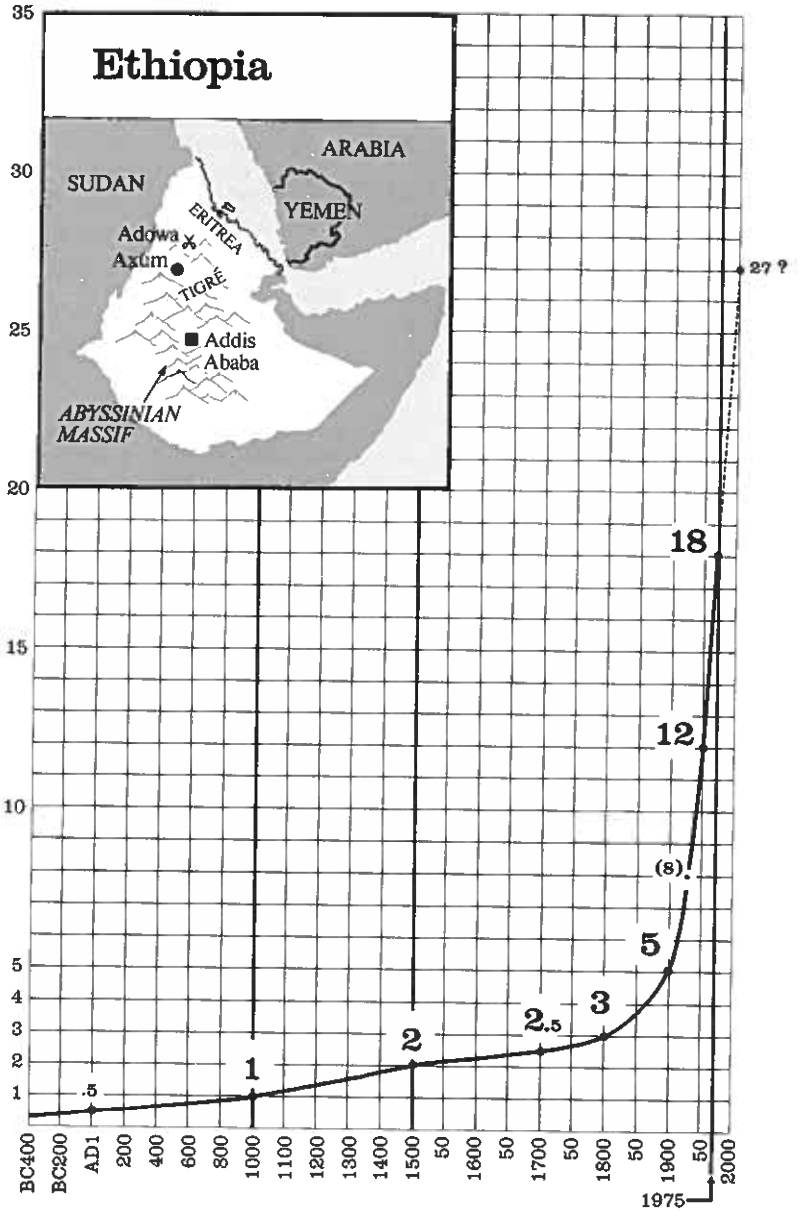
Herding and the rudiments of agriculture arrived in Ethiopia around 3000 BC: as a result the population gradually increased from its mesolithic level of under 0·1m to reach 0·2m by 1000 BC. The majority lived in the Abyssinian highlands, entirely cut off from the rest of the world: the few who eked out a living on the barren Red Sea coast – the district later known as Eritrea – saw the occasional Egyptian or Arab trader but otherwise passed their days in equal isolation.

Sometime before 500 BC, Semites from Arabia crossed the Red Sea and established themselves as an aristocracy in Eritrea and the neighbouring district of Tigré. By AD 1 the classical geographers had become aware of a 'King of Axum' ruling over this part of the world. This kingdom, which contained perhaps 0·25m out of the 0·5m Ethiopians of the time, gradually extended its frontiers until, by the 6th century AD, it was in control of most of the Abyssinian massif. The King of Axum was even powerful enough to send an expeditionary force to the Yemen to protect the Christians there from persecution.

This act indicates how fervently the Ethiopians had taken to Christianity since its first introduction 200 years earlier. It also exposed the Ethiopians to retaliation when their army in the Yemen was defeated and, more importantly, Arabia found a religion of its own in the teaching of the Prophet Mohammed. The expansion of the Arabs, in particular the conquest of Egypt in the middle years of the 7th century, cut Ethiopia off from the rest of Christendom: direct attacks over the next few hundred years detached Eritrea from Ethiopia and made it a province of the caliphate. The Ethiopians were sealed into their mountains and forgotten.

Ethiopia's Dark Age lasted until the Portuguese rounded the Cape of Good Hope on their way to India. They eagerly followed up stories of a Christian King of Abyssinia, hoping that he would turn out to be a useful ally in their struggles with the Moslems who dominated the area: indeed they hoped he would turn out to be Prester John, the fabled Christian Emperor of the Orient whose name made even the most powerful Moslem potentates quake with fear. Prester John, alas, didn't exist and the King of Abyssinia was no substitute. He controlled most of Ethiopia and more than half the area's 2m inhabitants but his armies were hopelessly outclassed by the local Moslems who had just obtained muskets from the Turks. He needed Portuguese help if he was to survive, and could give nothing in return.

Abyssinia did survive, though more because of the failure of impetus that characterized Moslem society in the early modern period than because of help rendered by fellow Christians. Indeed, as the Christians got closer



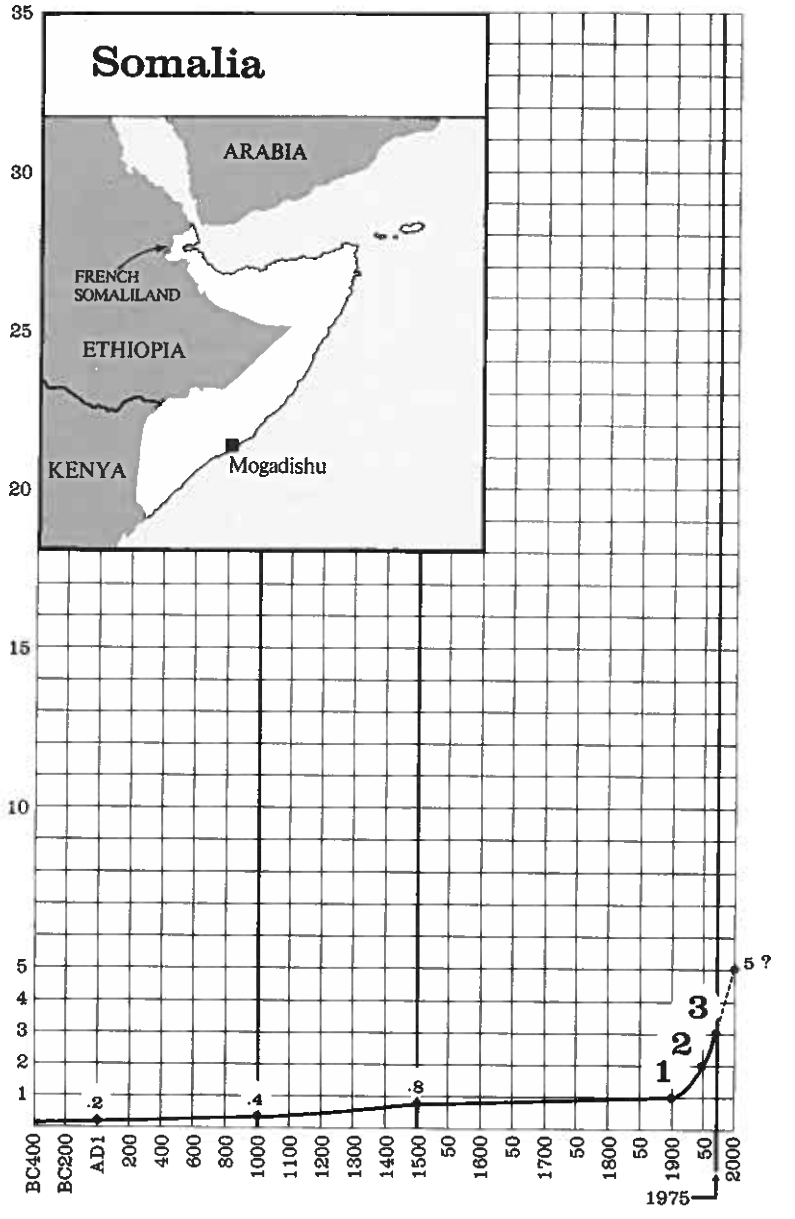
Africa Area 4

some of them turned out to be more of a menace than the Moslems. In the 1880s the Italians established a protectorate over Eritrea, in the 1890s they began to extend this into the highlands and though an Abyssinian victory at Adowa in 1896 postponed the issue for a generation (during which Ethiopia shared with Liberia the distinction of being Africa's only independent states), in 1935 they returned. This time, thanks to better generalship and a bit of mustard gas, they were successful. However, a mere six years later the British ejected them from the whole area, setting the scene for the eventual reunion of Eritrea and Ethiopia in what was originally a federation (1952) but turned out to be a full union (1962).

Since the war Ethiopia has experienced more than its share of the problems that beset Third World countries: famine stalks the southern provinces and civil war is endemic in the north. The 2m people in the predominantly Moslem province of Eritrea seem determined to recover their independence and most observers expect that, in the end, they will.

Primary Sources and Bibliography

During the colonial era the Italians made regular estimates of the population of Eritrea, the first in 1899, the last in 1939. Their occupation of Ethiopia was too brief for them to do more than guess at total numbers and no one so far has done any better. The general feeling is that the present official figures are far too high and that the total is under rather than over 20m. According to the government it is 28m.



Africa Area 5 (text overleaf)

AFRICA AREA 5 Somalia

0·64m km²

Somalia is a land of desert and near-desert inhabited by nomads. The ancestors of the present-day stock of Somali and Galla cattle-herders were in the area by the 3rd millennium BC and by AD 1 there will have been about 0·2m of them. There were still some Bushmen around and a few Bantu had infiltrated the extreme south, but neither of these peoples made a significant contribution to the population then or now.

In the 10th century Arab traders visiting the northern coasts introduced two elements that revolutionized Somali society: Islam and the horse. The Somali began to terrorize the Galla of the south, a process that ultimately resulted in many Galla moving westward to terrorize the Ethiopians. By the time the colonial powers began to show interest in this part of Africa the Somali dominated the coast as far south as the present-day frontier with Kenya.

The colonial episode began in 1889 with the division into Italian and British zones: it ended with the creation of an independent and united Somalia in 1960. During this period the population rose from something under a million to the present total of 3m.

French Somaliland, currently known as 'the French territory of the Afars and Issas', has a population of 100,000 now as against 50,000 at the beginning of the century.

Primary Sources and Bibliography

The earliest data are the estimates made in the colonial period of which the best are based on the local surveys carried out by the Italians in their sector in 1931 (1m) and 1953 (1·25m). The first census was held in 1975.

AFRICA AREA 6 Sudan

2·5m km²
(0·24m km² pasture,
0·06m km² arable)

Around 4000 BC the Sudanese made the transition from food gathering to pastoralism and, in the limited areas where cultivation is feasible, agriculture. Population quickly rose past the 100,000 level, reached 250,000 in 3000 BC and 0·5m by 2000 BC. By 1500 BC, when the armies of the Egyptian pharaohs began to probe the Nile above the second cataract, there were nearly a million people in the area of the modern Sudanese state. Of this area the Egyptians conquered only the Nile province as far south as the fourth cataract, a strip that they called Cush and we call Nubia. It will have contained something over 10% of the country's population, i.e. around 100,000 people.

The collapse of the Egyptian Empire in 1000 BC left the Nubians free to create a kingdom of their own and expand its frontiers. By the 6th century BC they had conquered and organized the whole of the central Sudan and brought about a third of the Sudanese under their rule. With the total number of Sudanese now approaching 1·5m this meant that the Kingdom of Meroe, as the new state was known, had a population of some 0·5m. It lasted till the 4th century AD, when it broke up into three successor states, all of which became officially Christian over the next 100 years. Christian missionaries even had some success in the hitherto uncharted west, the present-day provinces of Darfur and Kordofan. However the whole region was soon cut off from Mediterranean Christendom by the Moslem conquest of Egypt. By AD 1000 the Sudan was still Christian where it wasn't pagan, but not many people outside the Sudan knew it.

Today Christianity is completely forgotten, Islam being the religion of 75% of Sudanese (the rest remaining pagan) and Arabic the language of more than 50%. The Mohammedan conquest began with the conversion of the nomads of the north-eastern desert in the 12th century. In the next century Nubia was overrun, followed by the Khartoum area in the 14th century. What had once been a neglected outpost of Christendom now became a neglected corner of Islam, with only the fact that Egypt and Arabia looked her way for slaves keeping the Sudan in the picture at all. The slaves, who had come from the general population during the conquest of the country, were now obtained by raids into the Negro south and Abyssinia: the number exported slowly rose from 1,000 a year in the 16th century to a maximum of 10,000 a year in the 19th century.

The Sudan's isolation was finally ended by the armies of a new pharaoh of Egypt, the Khedive Mohammed Ali. His Western-equipped soldiers made short work of the black sultanates of the central Sudan: they even penetrated beyond the Mohammedan area and added a new province – entirely Negro and pagan – on the south. But Egyptian rule

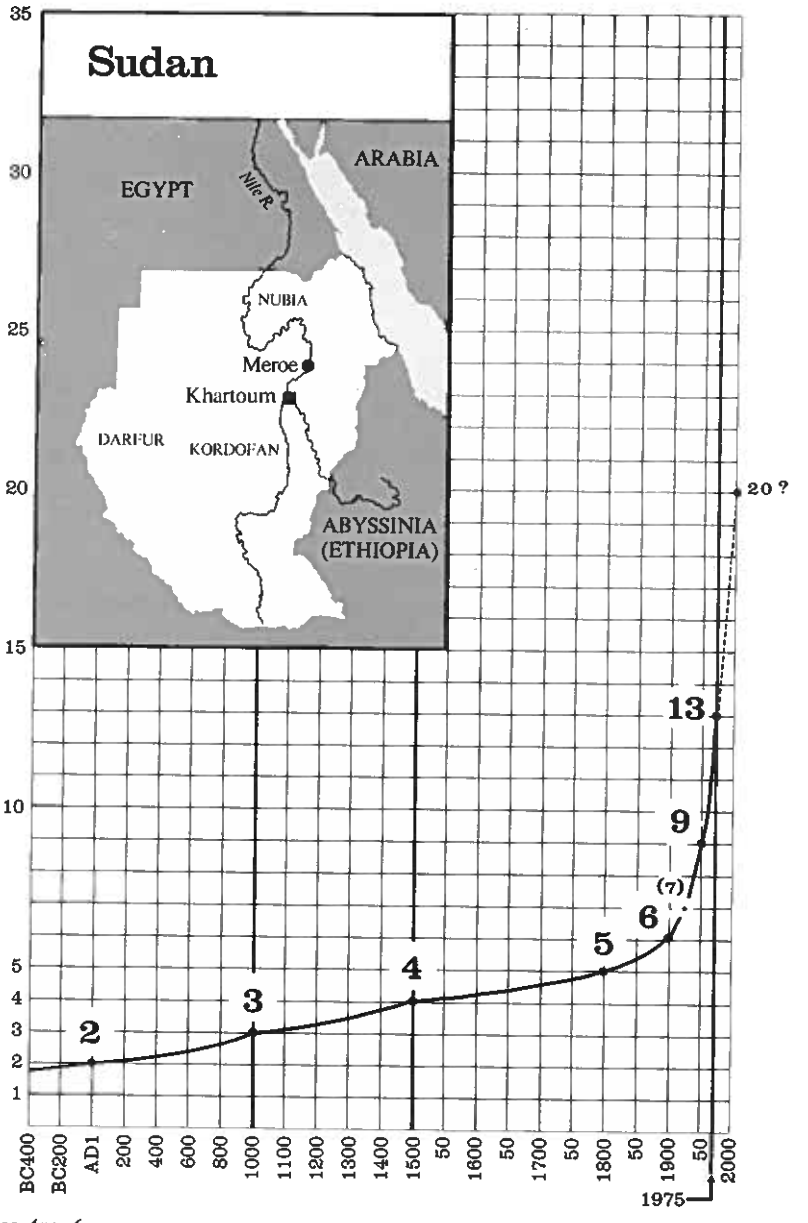
became increasingly unpopular as the years passed and the appearance of a native messiah in the person of the Mahdi put an end to the dream of a single empire for the Nile valley. From 1881 to 1898 the Mahdi and his successors ruled the Sudan as an independent state; then the British appeared and imposed colonial rule. There is no basis to the British claim that Mahdist atrocities had reduced the population of the Sudan to a fraction of its former figure: it was probably holding steady at about 6m.

The Sudan prospered under British rule. By the middle of this century the population had increased by 50% to 9m. Since then the rate of growth has quickened: the population now numbers 13m and the figure is likely to increase to about 20m by the end of the century.

Primary Sources and Bibliography

The first reliable estimates of the Sudanese population are those published by the British authorities during the first half of this century. Their general correctness was confirmed by a sample census taken on the eve of independence in 1955/6, which provided a figure of 10·26m. By the early seventies extrapolations from this isolated survey were getting very shaky – just how shaky being revealed by a comparison of the official population estimate for 1973 (17m) with the result of a new count taken in that year (12·4m). It's a reminder of the fragility of African statistics.

For the first count see The Population of the Sudan, *a publication of the Philosophical Society of the Sudan (1958): only preliminary figures are available as yet for the second. For the slave trade in this area see Y. F. Hasan,* The Arabs and the Sudan *(1967), J. R. Gray,* A History of the Southern Sudan 1839–89 *(1961) and R. S. O'Fahey and J. L. Spaulding,* Kingdom of the Sudan *(1974).*



Africa Area 6

AFRICA AREA 7 The Sahel States, Mauritania, Mali, Niger and Chad

5·0m km²

The Sahel is the zone immediately south of the Sahara; it has enough rainfall to support pastoralism but not enough for crops. The states that are geographically centred on this zone – from east to west they are Mauritania, Mali, Niger and Chad – overlap the zones to the north and south so they include large slices of Sahara and smaller slices of agricultural land. As population densities are near zero in the Sahara, low in the Sahel and high in the agricultural area, the demographic centres of gravity of all the Sahel states are near their southern borders.

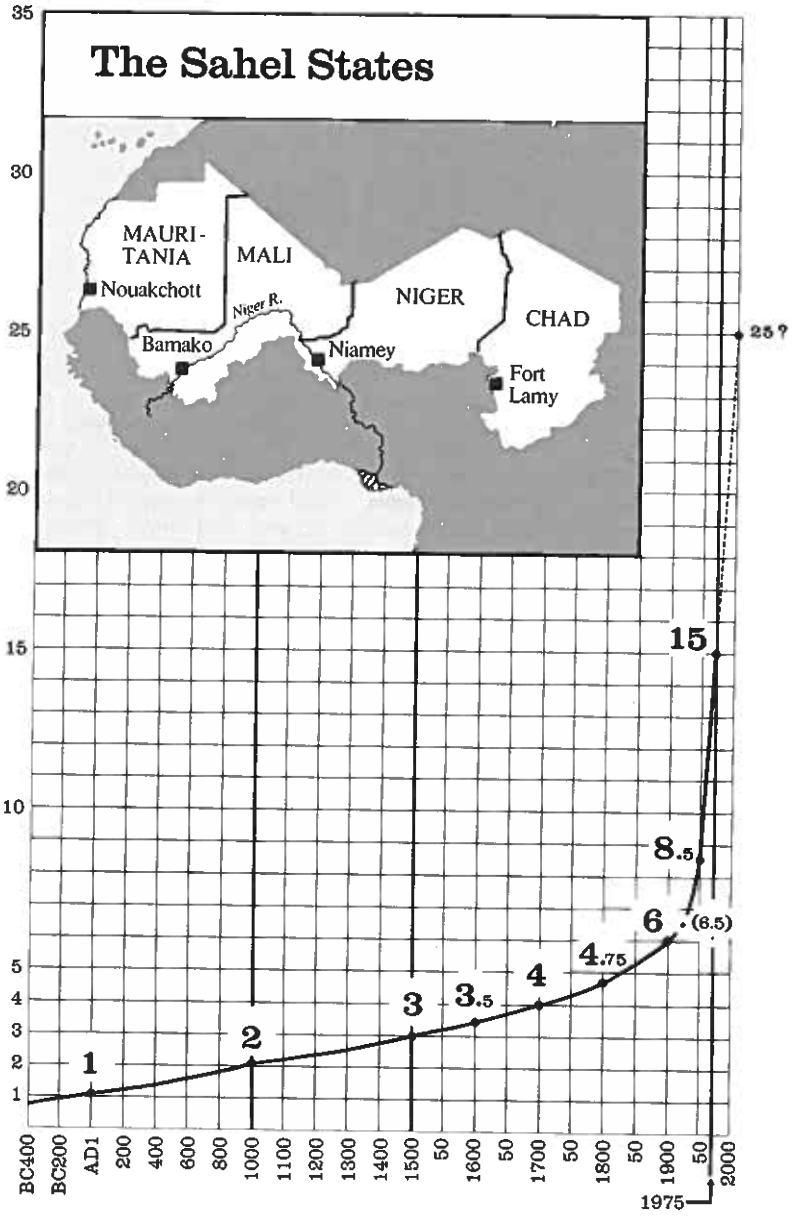
The actual distribution of territory between the different states is as follows:

7a	Mauritania	1·15m km²	(of which about 80% is desert)
7b	Mali	1·25m km²	
7c	Niger	1·30m km²	(of which about 40% is desert)
7d	Chad	1·30m km²	

Taking the area as a whole, a half is desert and a third is rather poor pasture: the remaining sixth lies within the zone of potential agriculture, though only a fraction of it is so used.

Before the introduction of agriculture and animal husbandry the population of the area of the present-day Sahel states is unlikely to have exceeded 50,000: once pastoralism and agriculture had become well established the population can hardly have been less than half a million. The chronology of the transition is as yet totally obscure, but there is no reason to postulate anything above the 50,000 line before 3000 BC or place the achievement of the half million later than 1000 BC. From this latter point a low rate of increase is all that is needed to bring the total to 1m by AD 1 and 2m by AD 1000.

From the Arab historians of the Maghreb we get a reasonably clear picture of the Sahel area over the next few centuries. There was a thin scattering of Berber tribes across the Sahara, a much more numerous but still low-density population of ethnically mixed pastoralists in the Sahel and a relatively high-density concentration of Negro cultivators along the middle Niger where this river arcs northward through the Sahel. In the south, in the agricultural zone, were similar high density settlements of purely Negro cultivators. The middle Niger was the political centre of the region and the departure



Africa Area 7

point for the caravans that now plied regularly across the Sahara.

On their northward journey these caravans carried two commodities, gold and slaves. All the gold and probably most of the slaves came from lands to the south of the Sahel states, but even if the slaves were Sahelians the number despatched was too small to have a direct effect on the area's population figures. At most we are talking of one or two thousand a year and that would not be a significant drain on a population in excess of 2m. A more important effect of the caravan traffic was the conversion of the nomads of the Sahara and Sahel to Islam. The new religion did not penetrate further south, the Negro cultivators of the agricultural zone remaining obstinately pagan. The effect is still visible today: Mauritania is 80% pastoral and 90% Moslem; Chad, at the other extreme, is only 10% pastoral and 40% Moslem.

Population growth in the Sahel states in the late medieval and early modern periods was slow and unsteady. When Ibn Battuta visited the area in the 14th century it may have held 3m people. Nothing much changed in the next six centuries and when the French moved in in the early 1900s they found a society which had slowly increased in numbers – to about 6m – but had otherwise preserved its medieval structure.

The French brought the benefits of colonialism – peace and an orderly administration – and by 1950 the fruits of their policies were apparent in an increase in numbers to 8·5m. By 1960, when the French provinces were transformed into the sovereign states of today, the Sahelians were in the throes of the sort of population explosion that is characteristic of the Third World, and it was predicted that by 1975 their population would be 16m or more. In the event the severe drought that struck the Sahel in the early 1970s has prevented the population reaching this level. Leaving apart the raised mortality directly due to the famine there has been a steady movement of people southward, away from the Sahel and into the agricultural zone. Best estimates are that the 1975 population is about 15m (Mauritania 1·25m, Mali 5·5m, Niger 4·5m, Chad 3·75m).

The drought of the early 1970s has been disastrous in itself: the fear is that it marks the beginning of a phase of desiccation which will shift the whole Sahel zone to the south. There is no need to stress how catastrophic this would be for the Sahel states as presently defined, nor how such a change in climate would alter the long-term demographic outlook.

Primary Sources and Bibliography

The French authorities began making population estimates shortly after they moved into the area in the early 20th century. These estimates, often misleadingly referred to as censuses, are published in the standard handbooks. The independent governments that took over in 1960 have done some small-scale sample counts (Mauritania – 1964/5, Mali – 1960/61, Niger – 1959/60, and Chad – 1963/4) but none have as yet attempted a full enumeration.

AFRICA AREA 8 West Africa

2·6m km²

8a Guinea (meaning all West Africa bar Nigeria) 1·68m km²

8b Nigeria 0·92m km²

West Africa is the cradle of the Negro race. From the 100,000 people who lived in the area in mesolithic times derive the 225m Negroes of present-day Africa plus the 100m strong Negro and part-Negro populations of the New World. The only other black race of importance, the Nilo-Saharan peoples centred on the Sudan, number at most 30m, an order of magnitude less.

The numerical expansion of the Negroes begins with their development of a neolithic technology. The dating is currently obscure, but the 3rd millennium BC would be a generally accepted starting point, with a subsequent slow rise in the population of West Africa to the million by 1000 BC. Fresh impetus was given by the arrival of iron-working techniques, *c.*250 BC: these provided the basis for a rather faster upswing which carried the total to 3m by AD 1. The real rate of growth was actually higher than this, for towards the end of this period the Negroes of Nigeria began to push out eastwards into the Cameroons. This expansion, which ultimately created the Bantu world of central, eastern and southern Africa, has its *fons et origo* in Early Iron Age West Africa.

Iron working probably came to West Africa from the Maghreb, via the Berbers of the Sahara. Certainly a trans-Saharan traffic grew up in the course of the 1st millennium AD, with the Maghreb contributing textiles and other manufactures, West Africa, gold and slaves. By AD 1000 as many as a thousand slaves a year may have been despatched to the Maghreb, by AD 1500 as many as 2,000. These figures are of little demographic significance for the West African population total, which reached 7m by AD 1000 and 11m by 1500. The highest rate of despatch postulated amounts to less than 0·02% per annum.

A new outlet for the slave trade appeared in the second half of the 15th century when Portuguese seamen finally mastered the geography of the West African coast. Over the next hundred years this sea route was a Portuguese monopoly which supplied black slaves to Europe, the Atlantic islands and the New World. The slave trade with Europe was barely significant, never reaching a higher rate than 1,000 a year and petering out completely in the mid 16th century. The Atlantic islands imported slaves at about twice this rate until the end of the 16th century when, in their case too, the trade fell off to almost nothing. The New World was a different matter: the economy of the European colonies established there was soon dependent on labour-intensive plantations which needed a steady input of new slaves just to stay in business. Their demand was measured in the tens of thousands and the Portuguese never came near satisfying it. Their failure opened the way for the Dutch to move in.

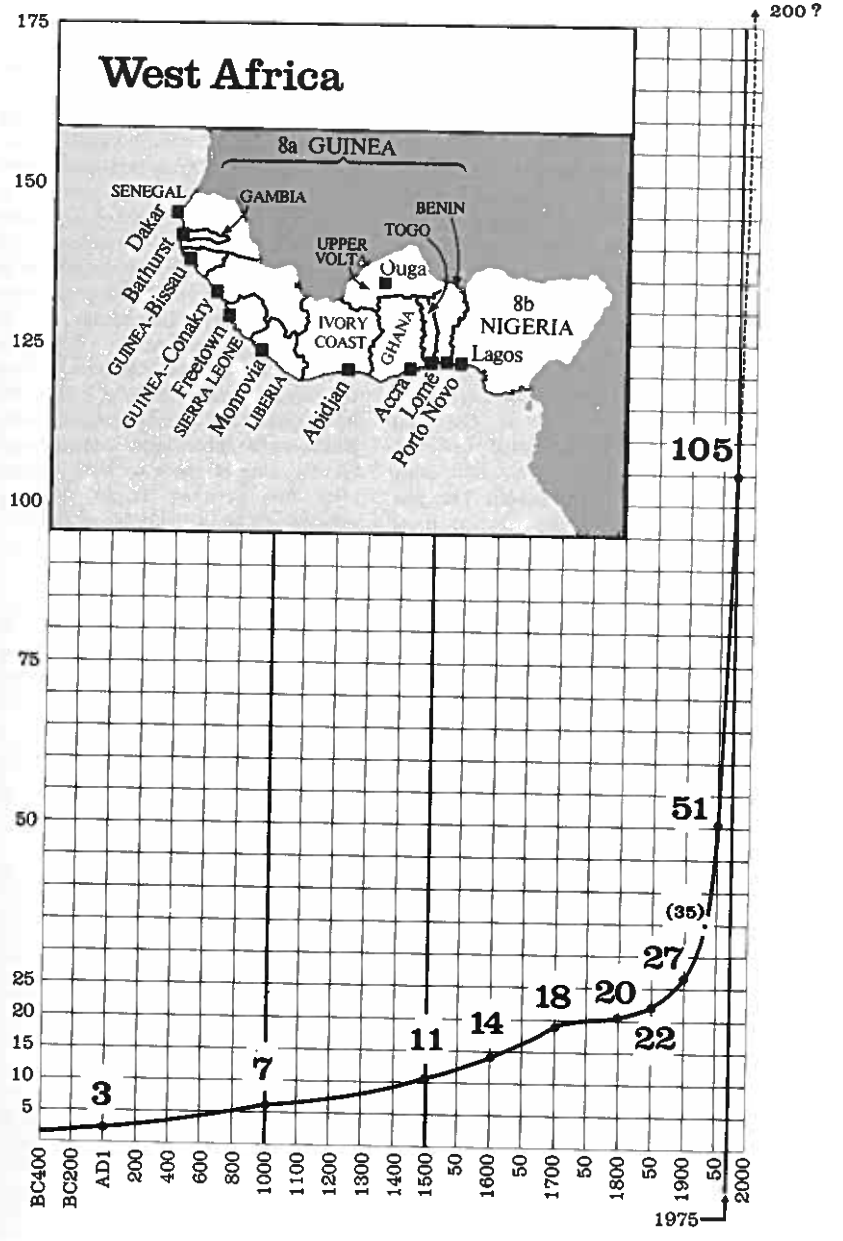
The Dutch revolutionized the Atlantic slave trade. They raised the annual rate of shipment from Africa as a whole

from 5,000 in 1600 to 25,000 by 1675. Even that was not enough: the British took over from the Dutch and raised the rate again. By 1785 75,000 Negroes were being loaded onto the vessels of the Atlantic slavers every year. Of these 45,000 (60%) were West Africans. As the total West African population had now increased to about 19m this figure corresponds to an annual levy of 0·25%.

The effect of the slave trade on West African numbers has been much debated. Some have talked of depopulation, others have denied any significant effect. Putting it at its simplest, a reasonable natural growth rate for West Africa's population at this time would be 0·35% per annum (equivalent to a doubling of the population every 200 years) so there is no reason to believe that even the maximum uptake did more than cause a slowing-down in the rate of expansion. Other factors obviously have their influence and complicate the issue: slavery encouraged warfare between the maritime African states that supplied the slaves and the Africans of the interior who were the raw material; slavery removed from African society young adults just entering on their reproductive period. On the other hand three men were taken for every woman and the practice of polygamy could have gone a long way towards compensating for this sort of loss. And, unpleasant though the idea is, the slave trade did bring a certain amount of material prosperity to the successful slaver states, the Ashanti of the Gold Coast for example, as well as leading to the introduction of new food crops such as manioc and maize, that resulted in an overall improvement in native diet. On the whole it seems best to take the figures at their face value and accept that the West African population never stopped growing but that at the peak of the trade, in the later 18th century, the rate of increase was sharply cut back.

Towards the end of the 18th century the brutality inherent in slavery and slaving began to trouble the European conscience: the British, who had made the most money out of the trade, became the first important nation to outlaw it and by the early 19th century they were actually spending money on suppressing it. This was the making of Freetown, which had been founded in 1792 as a haven for slaves that had been liberated in England and become destitute as a result. There were never more than a few hundred of these and it was only in the period after the Napoleonic wars when the Royal Navy's anti-slavery squadron started operations in the Gulf of Guinea, and Freetown was designated the official landing place for all Negroes found in the holds of intercepted slavers, that the settlement began to grow. Some 60,000 liberated slaves were put ashore there between 1819 and 1859; Freetown burgeoned, eventually becoming the capital of the British colony of Sierra Leone.

For fifty years after its official abolition the slave trade was far from dead. Something like two thirds of a million West Africans were forcibly taken from their homeland in the period 1810–60 and the Royal Navy's interception rate never bettered 10%. But in the end official government policies prevailed and there was even an attempt to get some movement in the reverse direction, resettling blacks from America in Guinea. Needless to say, the effort was never more than token and though it is the foundation myth of Liberia that its inhabitants are descended from liberated American slaves, no more than 10,000 ex-American Negroes ever set foot there. The only group with a reasonable claim to be descended from them are the 20,000 'Americo-Liberians' who run the country today and now, as always,



Africa Area 8

keep the 1·75m 'natives' at arm's length.

The colonial period in West African history is comparatively brief. The slave trade had been run from a series of forts on the coast, with nobody making any attempt to exert administrative control over the interior. The European 'scramble for Africa' in the period 1890–1910 completely changed this picture, the whole area, bar Liberia, being divided between Britain, France, Germany and Portugal. The Portuguese holding was limited to the area of Guinea-Bissau, the German was taken over by the French and British during the First World War. In the final division the French ended up with nearly half the territory but little more than a quarter of the people. This was because the main British slice was in the east, where they ruled the block of densely populated territory that constitutes present-day Nigeria.

Population growth certainly accelerated during the colonial period, with the West African total rising from 27m in 1900 to 35m in 1925 and 51m by 1950. It has accelerated again since independence and the rate of increase is now so high that the population can be expected at least to double in the next twenty-five years. This means that by the year 2000 West Africa will contain about 200m people and Nigeria, already the most populous state in Africa, will have some 120m inhabitants. The other states, as the table shows, are too small for any one of them to have reached even 20m by then though their aggregate will be of the order of 80m.

Cape Verde Islands

The Cape Verde islands, a dozen islands with a total surface area of 4,000 km², lie 400 miles to the west of Cape Verde, itself the westernmost point of Africa (see Fig. 3.1). They were discovered by the Portuguese in 1456 and settled by them from 1462 on. The population, mostly consisting of African slaves, reached 10,000 by 1580, 20,000 by 1700 and 60,000 by 1800. In the first half of this century it seemed to have levelled off at 0·15m, but since 1950 it has doubled to the present total of 0·3m. Africans account for more than 95% of this.

Primary Sources and Bibliography

*The earliest quantitative data for West Africa derive from the slave trade. The subject has recently been thoroughly resurveyed by * Curtin, whose work is an essential basis for any discussion of the subject. The effect of the trade is put into its quantitative context by J. D. Fage in his contribution to* The Population Factor in African Studies *(ed. R. P. Moss and R. J. A. R. Rathbone, 1975). Otherwise there is very little indeed for the pre-colonial period. For the British section what there is is collected in * Kuczynski's first volume.*

From 1900 on, all the official handbooks give population figures. Up to the Second World War these are only educated guesses, for the actual head counts were still restricted to a few coastal areas and the totals were based on nothing more than the local administrators' ideas of how many people lived in their areas. The first proper census was held in 1948 in Ghana, at that time known as the Gold Coast. Following this there was a good count in Guinea-Bissau in 1950, a partial count in Nigeria in 1952–3 and good counts in Liberia in 1962 and in Gambia and Sierra Leone in 1963.

ESTIMATED POPULATIONS FOR THE PRESENT-DAY STATES OF WEST AFRICA 1925–75

	Area 000 km²	*Colonial status, first half of 20th c.*	*Population (millions) 1925*	*1950*	*1975*	*Population projection for the year 2000 (millions)*
Senegal	196	Fr.	1·6	2·0	4·5	9·0
Gambia	10	Br.	0·2	0·3	0·5	1·0
Guinea-Bissau	36	Port.	0·4	0·5	0·6	0·8
Guinea-Conakry	246	Fr.	2·0	2·2	4·5	9·0
Sierra Leone	72	Br.	1·7	1·9	2·9	6·0
Liberia	111	Independent	0·7	1·0	1·8	3·6
Ivory Coast	322	Fr.	2·0	3·0	6·7	11·0
Upper Volta	274	Fr.	2·5	3·1	5·8	11·0
Ghana	239	Br.	2·5	4·5	9·8	18·0
Togo	57	Fr.	0·8	1·0	2·2	5·0
Benin	113	Fr.	1·0	1·5	3·0	6·0
Total Area 8a GUINEA	1,676		15·5	21	42	80
8b NIGERIA	924	Br.	19·5	30	63	120
Total area 8 WEST AFRICA	2,600		35	51	105	200

On the whole, allowing for a reasonable rate of growth, these counts have confirmed pre-war estimates. The Liberians turned out to have been exaggerating more than somewhat (1962 estimate 2·5m: census return 1·016m) but to those with experience of the Liberian administration – often referred to as Africa's best argument for colonialism – this was not an entire surprise. The real shocker was Nigeria's second count,

held after the country gained its independence in 1962, for this showed such a large population increase that either the 1952–3 figures or the new ones had to be wrong. Because the political incentive to return inflated figures was clear – Nigeria's federal constitution means that the power, the glory and the other good things in government are distributed to the individual states in proportion to their population – it was generally assumed that the new figures were too high. A recount was ordered for the next year but now everyone was in on the game and the 1963 return showed a large further increase. And so it has gone on: the last census in the series, in 1973, yielded a figure of 79m as against the UN's estimate, already on the high side because it was based on the 1963 returns, of 59m. For a sympathetic account of this situation see the article by R. M. Prothero in the Geographical Magazine *entitled 'Nigeria Loses Count' (1974).*

The current situation is that Gambia (second census 1973), Sierra Leone, Liberia, Ghana (repeat censuses 1960 and 1970), Guinea-Bissau (repeat censuses 1960 and 1970) and Togo and Ivory Coast (first censuses 1970 and 1975 respectively) have established their population figures with reasonable certainty: that Senegal, Guinea-Conakry, Upper Volta and Benin have taken sample censuses (in the period 1955–61, as did Ivory Coast) which have established the order of magnitude of their populations and that no one knows what the population of Nigeria is to within 10m.

AFRICA AREA 9

Equatoria, Zaire and Angola

5·35m km²

9a	**Equatoria**	**1·75m km²**
9b	**Zaire**	**2·35m km²**
9c	**Angola**	**1·25m km²**

The basin of the Zaire – the Congo as it used to be called – is the homeland of the Pygmies. This is an ancient race of mankind which has probably had the same range for many thousands of years – ever since the last Ice Age at the very least. There are about 200,000 Pygmies today: when they were the sole inhabitants of the area there may have been a few more but there is no reason to believe that these simple hunting folk ever numbered more than a quarter of a million. We can take 0·2m as the level around which the population fluctuated during the period 10,000 to 1,000 BC.

Between 1000 BC and AD 1 two new peoples started to infiltrate the area. One group came from the Sudan in the north-east, where a pastorally based style of life had been evolved by the Nilo-Saharan tribes: this movement never got further than the northern fringe of the area, the only part suitable for pastoralism, and even in this restricted territory the density of population remained low. All in all the total addition to the population as a result of the arrival of the Nilo-Saharans is unlikely to have exceeded 100,000.

Much more important was the invasion of the Bantu. From Nigeria, where they had evolved their agricultural system, the Bantu percolated through the Cameroon highlands into the north of the Zaire basin. Working their way eastward they soon occupied the whole zone between the Nilo-Saharan territory in the extreme north and the rain-forest where the Pygmies had found their final refuge. By AD 1, when this phase was complete and the van of the Bantu advance had passed into East Africa, the population of the area as a whole was over a million.

The early centuries of the Christian era saw the Bantu – now possessors of iron tools – penetrating the rain-forest and completing their conquest of Area 9. Population totals mounted steadily if unspectacularly: a rate of increase of 0·14% per annum, equivalent to a doubling of the total every 500 years, is sufficient to transform the million of AD 1 into the 8m we can reasonably postulate for AD 1500. After this date there will have been a slight acceleration, for the Portuguese discovery of the Equatoria–Zaire–Angola coastline (1472–86) was quickly followed by regular contact between this part of Africa and the rest of the world. By 1900 the population had reached 15m – this despite the fact that the contact had turned out to be almost exclusively a matter of removing as many of the natives as possible and selling them as slaves in the New World.

The slave trade in this area was primarily a Portuguese venture, with Brazil as its major market. Up to 1810 it was overshadowed by the West African sector and contributed only 4 out of every 10 slaves shipped across the Atlantic – roughly speaking 130,000 out of 330,000 in the 16th century, 630,000 out of 1·5m in the 17th century and 3m

out of 7·5m in the 18th century. After the official abolition of the slave trade in the early 19th century the south Atlantic route came into its own. Plying between complaisant Portuguese officialdom in Angola and eager plantation owners in Brazil, the contraband slavers of the south Atlantic shipped 1·3m of the 2m slaves taken from Africa between 1810 and 1870.

Impressive though these figures are they probably had little effect on the growth rate of the native population. The natural increase was probably of the order of 20–30,000 a year and it was only during the boom years of the late 18th century that the number of people removed by the slave traders exceeded 20,000. Even then there was almost certainly sufficient reproductive slack available to make up the loss. As the slavers took three males for every female, polygamy was one obvious way of making good: the new food crops introduced from the Americas made the task easier.

The colonial period begins in the late 19th century. Germany took over the Cameroons, the French the rest of Equatoria (bar the Spanish enclave of Rio Muni) and the Belgians Zaire. The Portuguese contented themselves with occupying the hinterland of their long-established settlements on the Angolan coast. The First World War saw the French expel the Germans from the Cameroons: the aftermath of the Second World War saw the French leaving Equatoria (1960), the Belgians leaving Zaire (1960) and the Portuguese leaving Angola (1975). Only Angola had acquired a significant number of white settlers and the Portuguese community there, 0·5m strong at its peak in the early 1970s, dwindled rapidly as the country moved towards independence.

During the first half of the 20th century the population of Area 9 grew from 15m to 22m: in the period between 1950 and 1975 it put on another 18m to reach 40m. If things go on at this rate the figure will be 70m or more by the year 2000.

ESTIMATED POPULATIONS OF EQUATORIA, ZAIRE AND ANGOLA 1900–1975

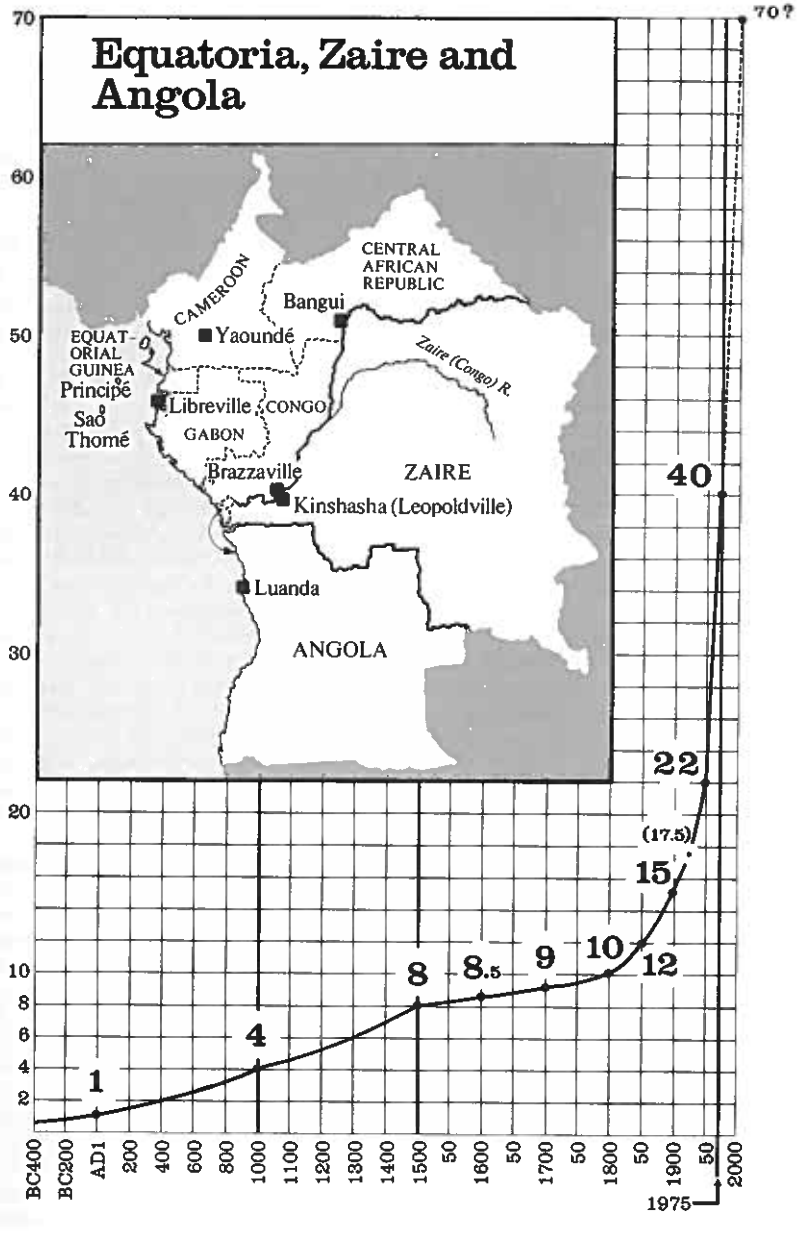
		1900	*1925*	*1950*	*1975*
9a	Equatoria	4	5	6	10
9b	Zaire	8	9	12	24
9c	Angola	3	3·5	4	6
		15	17·5	22	40

The present-day division of Equatoria is into five states whose areas and 1975 populations are as follows: Cameroon 0·48m km², pop. 6·3m; Central African Republic 0·63m km², pop. 1·7m; Equatorial Guinea 0·03m km², pop. 0·3m; Gabon 0·26m km², pop. 0·5m; and Congo 0·34m km², pop. 1·3m.

There are two offshore islands, Sao Thomé and Principé (combined area 1,000 km²). They were uninhabited when the Portuguese discovered them at the end of the 15th century: by 1800 they had a population of 12,000 which had grown to 40,000 by 1900. Today the figure is 75,000.

Primary Sources and Bibliography

There have been country-wide counts in Equatorial Guinea (1950 and 1960), Congo (1974) and Angola (decennially since 1940), but only sample counts in the Cameroons (1960/61), the Central African Republic (1959/60), Gabon (1960/61) and Zaire (1955/8).



AFRICA AREA 10 East Africa

1·72m km²

10a	**Uganda**	**0·21m km²**
10b	**Kenya**	**0·57m km²**
10c	**Tanzania**	**0·89m km²**
10d	**Rwanda and Burundi**	**0·05m km²**

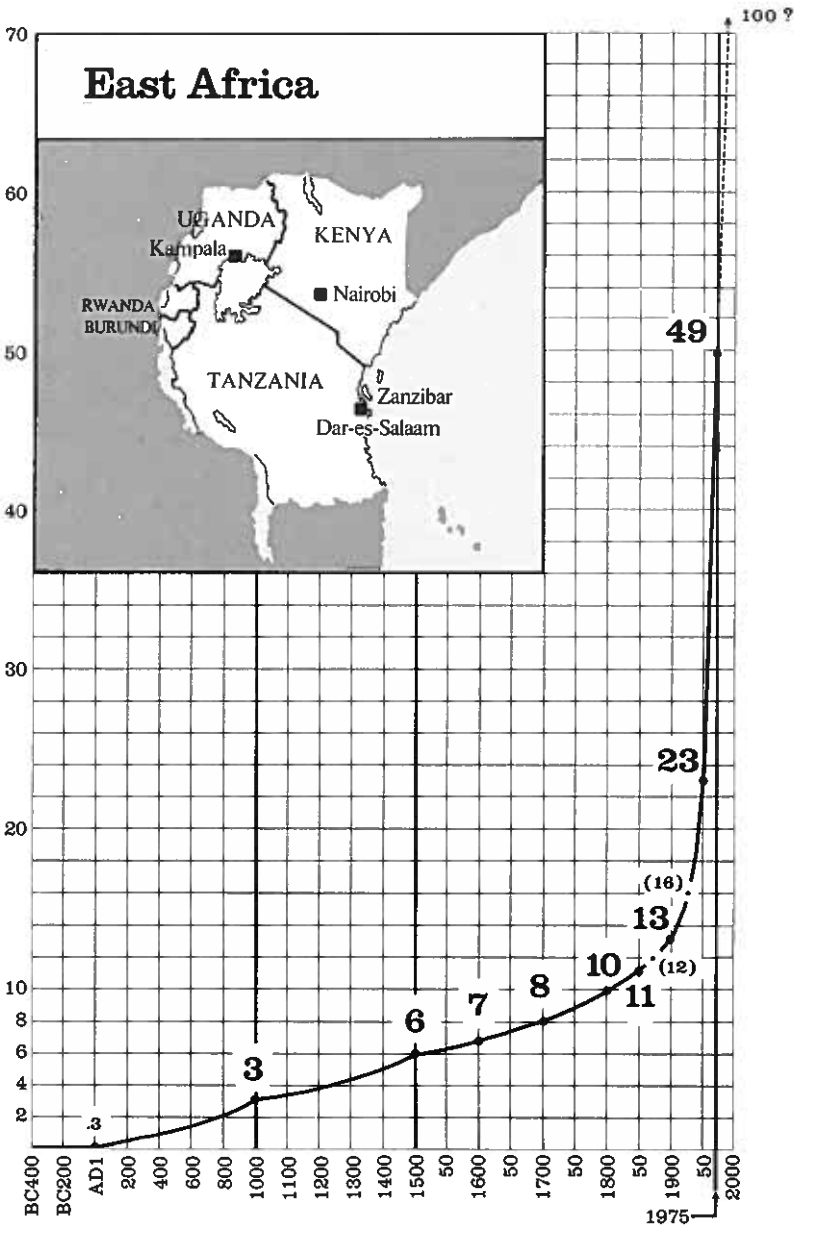
Bushmen were the sole inhabitants of East Africa until well on in the last millennium BC. Their culture was that of Stone Age hunters and gatherers, their numbers meagre, certainly no more than 100,000 in all. This remained the total population of the region as late as 500 BC, when the first groups of cattle-herders moved in from the north.

The various tribes of cattle-drivers, who were of Cushite or Nilo-Saharan stock, didn't have the pastures of East Africa to themselves for long. By AD 1 advance parties of Bantu were crossing the present-day Zaire–Uganda frontier and settling on the shores of the eastern lakes. As agriculturalists, the Bantu naturally lived at higher densities than the pastoralists and by the time they had spread over the whole area – which took till about AD 500 – they comfortably outnumbered them. The total population will have been over the million mark by then: by AD 1000 it will have further increased to 3m.

East Africa's isolation from the rest of the world had ceased to be absolute by this time. Arab seamen, shopping for ivory and slaves, began regular visits during the 10th century and by the 14th century there was a string of small trading posts along the coast. Their effect was strictly limited: the slaves exported amounted to a few hundred annually, perhaps as many as a thousand in an exceptional year, but even the higher figure is of no significance in relation to overall population figures of 4m or 5m.

Towards the end of the 18th century the Arabs did step up the scale of their operations. By the 1780s the export rate had risen to 2,000 a year, by the early 1800s it was more than 3,000. To get this number of captives the slavers had to send marauding expeditions into the interior. At the peak of the trade, in the 1850s and 60s, these raids regularly reached across the whole width of East Africa and some 20,000 people were being taken to the coast for sale every year. Double this figure to allow for the loss of life caused by the raids and the total is probably big enough to stunt the growth of the area's population, even though this was now more than 10m. Even so the effect was momentary. In 1873 the British, full of the moral fervour that marks reformed sinners, forced the local Arabs to give up the trade and Zanzibar, the last great slave mart in the world, shut up shop.

The British action heralded the beginning of East Africa's colonial era. Initially the 13m people that the area contained in 1900 were divided between the British (6·7m: 3m in present-day Uganda, 3·5m in present-day Kenya and 0·2m in the Zanzibar islands) and the Germans (6·3m: 3·8m in Tanganyika and 2·5m in Rwanda and Burundi). After the First World War the British took over Tanganyika and the Belgians Rwanda and Burundi. Population growth was rapid in all parts and by the early 1960s, when the east African states of today achieved their independence,



Africa Area 10

their numbers were double or more than double what they had been at the beginning of the century. They have continued to grow at an accelerating rate since, so the area seems likely to contain something like 100m people by the year 2000.

Most East Africans are Bantu, the proportion varying from 70% in Uganda and Kenya to 90% in Rwanda and Burundi and 95% in Tanzania. East African society, however, is less harmonious than these figures suggest. For several centuries the Bantu peasantry of Burundi have been ruled by the Nilo-Saharan Tutsi even though they outnumber their masters by nearly ten to one. Until a spectacularly bloody uprising in 1962 the same was true in Rwanda. In Uganda there is considerable religious tension between Moslems (5% of the population) and Christians (60%) and this is a potential source of trouble everywhere in East Africa, which has a large number of Christians (48%) and a smaller but increasing percentage of Moslems (12%).

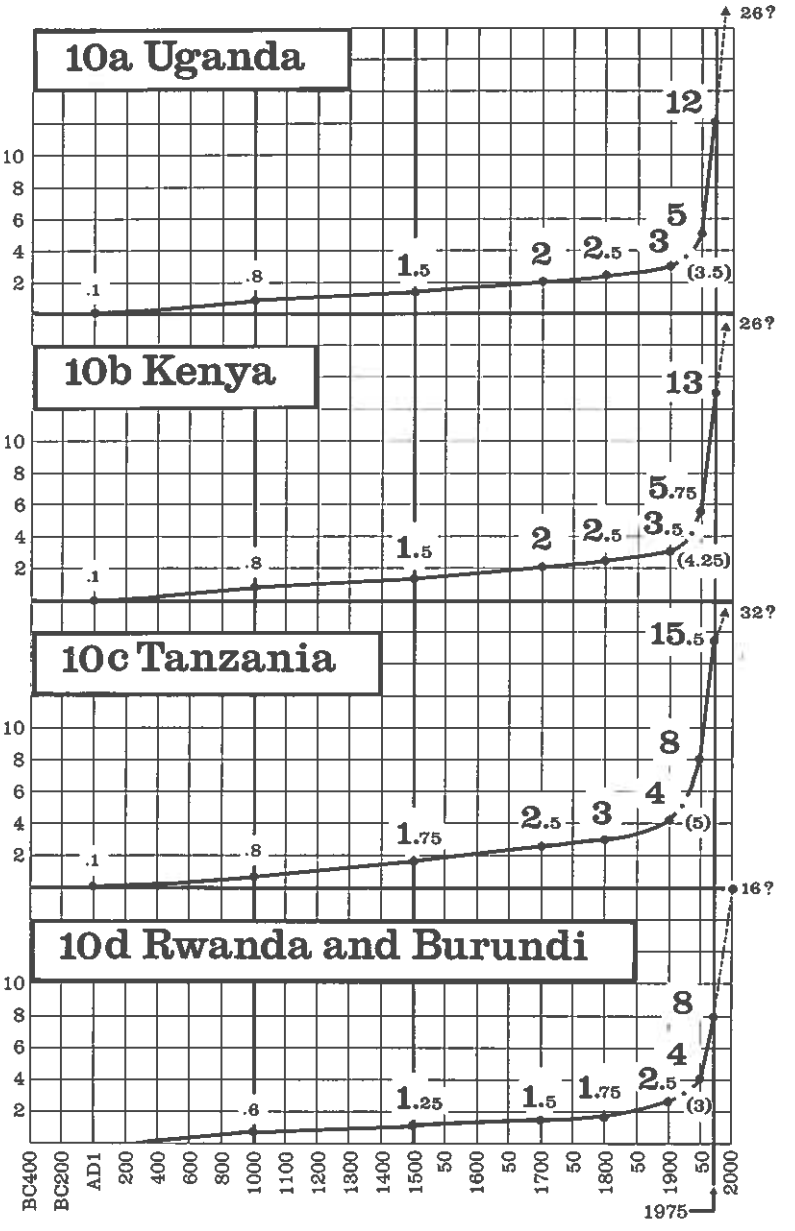
Alien minorities include 0·12m Arabs (mostly in Zanzibar), 0·1m Somali (in northern Kenya) and 0·3m Indians (in Tanzania and Kenya). The Indians, originally brought in by the British to run the railways, have established themselves as the most successful – and unpopular – of these groups. At one time there were another 0·1m in Uganda but in 1972 they were expelled en masse and without warning: most of them ended up in Britain.

Primary Sources

The first estimates of the population of East Africa were made in the years immediately following the Anglo-German occupation of the area. By the beginning of the First World War the estimates were reasonably well grounded in administrative experience and there had actually been a count in Zanzibar (1910). The first count on the mainland was carried out in Uganda in 1931. The first census in the area was a simultaneous joint effort by the administrations of Uganda, Kenya, Tanganyika and Zanzibar in 1948. The second round was held in sequence in Tanganyika (1957), Zanzibar (1958), Uganda (1959) and Kenya (1962) and a third in Tanzania (1967) and Uganda and Kenya (1969). In Rwanda and Burundi there have been only sample counts.

Bibliography

East Africa, Its People and Resources (*ed. W. T. W. Morgan, 1972*) *has a chapter on demography by J. G. C. Blacker which gives all the data for Uganda, Kenya and Tanzania. For an excellent account of the Ugandan and Kenyan populations in this century see* An Economic History of Kenya and Uganda *by R. M. A. van Zwanenberg and Anne King (1975). For Rwanda and Burundi see the report by the UN Department of Social Affairs, Population Division (Pop. Studies No. 15),.* The Population of Ruanda-Urundi (*1953*).



Africa Areas 10a–d

AFRICA AREA 11 South-Central Africa

1·26m km²

11a	**Zambia**	**0·75m km²**
11b	**Rhodesia**	**0·39m km²**
11c	**Malawi**	**0·12m km²**

The aborigines of south-central Africa, the Bushmen, never numbered more than 75,000 and it was only with the arrival of the first Bantu in the 3rd century AD that the total for the area rose to the 100,000 mark. Even then population growth remained astonishingly slow: there could hardly have been more than 0·5m people in AD 1000 or 1m in AD 1500 because there were only 2m in 1900. This is a remarkably poor performance for an agricultural people in a virgin and not inhospitable land.

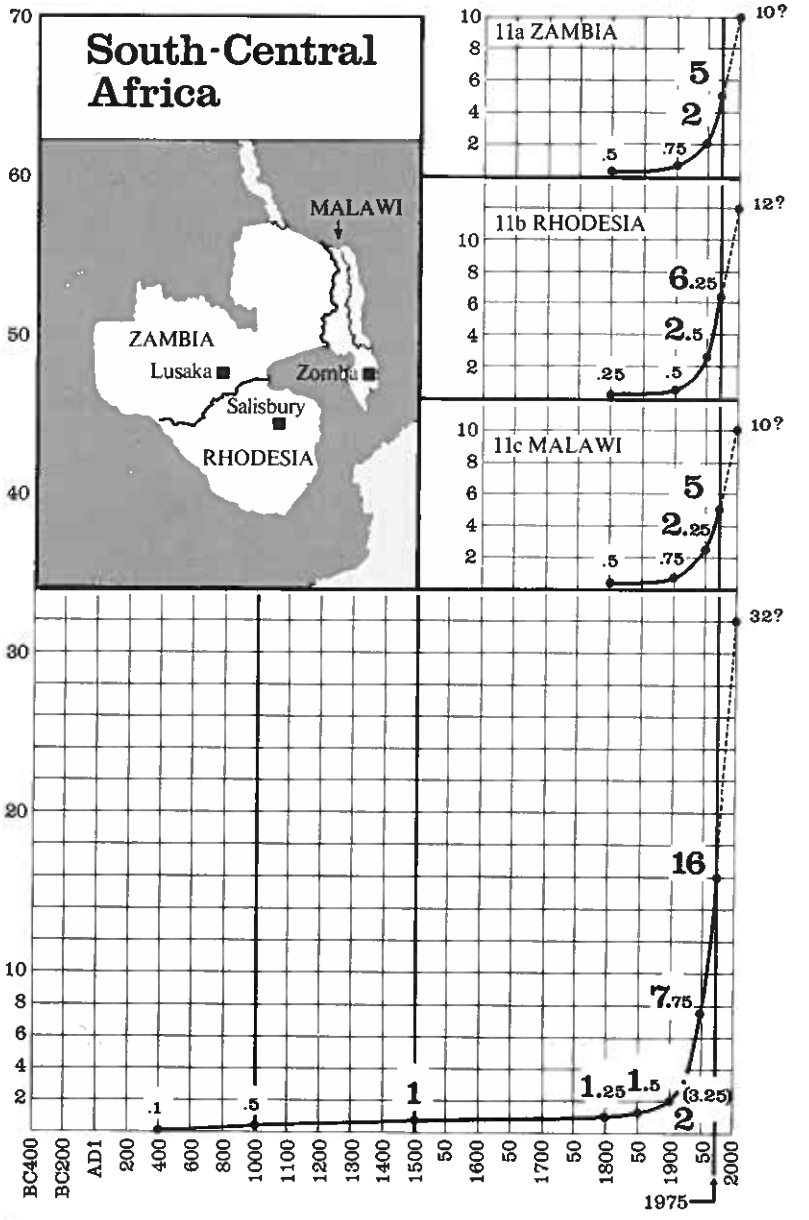
In the 1890s the British established a protectorate over the whole of south-central Africa. They divided it into three colonial units which they called Northern Rhodesia, Southern Rhodesia and Nyasaland and which are now known as Zambia, Rhodesia and Malawi. Malawi, the southernmost segment of the Rift Valley, had the high population density that has long characterized this strip of territory: though its area is less than 10% of the whole it contained well over a third of the area's population in 1900. The remaining two thirds of the 2m total was spread fairly evenly across Rhodesia and Zambia. As Zambia is by far the larger of the two this meant that it had 0·75m people to Rhodesia's 0·5m.

During the 20th century the population of the area has grown rapidly, indeed its rate of growth has steadily accelerated. The increase is slowest in Malawi, which has the most limited resources – so much so that at any one time 0·25m of its adult males are working in the mines of Zambia and South Africa. Even so, Malawi's population has quadrupled in the last fifty years to reach 5m today. Rhodesia, from being the least populous, has become, at 6·1m, the most populous. It is also unique in that sufficient British settled there in the colonial period to create a white settler problem. By 1965 there were 0·23m of them, enough to seize control of the country and – so far – hang on to it. However, their chances of continuing to do so for much longer must be rated as slim: they constitute less than 5% of the population and even this low percentage is declining.

Trouble in Rhodesia has made difficulties for Zambia: conversely the resolution of the Rhodesian problem would ease Zambia's political and economic situation. With more resources than most African states – specifically the mines of the copper belt – and with not too many people – currently only 4·9m – this is an African country with better prospects than most.

Primary Sources and Bibliography

The various estimates and counts made by the British colonial authorities during the period 1901–56 are given in Table 1 of the introduction to the report on the 1956 census of all three territories (published in Salisbury, Rhodesia, in 1960). Since then there have been censuses in Zambia in 1963 and 1969, in Rhodesia in 1962 and 1969 and in Malawi in 1966.



Africa Area 11

AFRICA AREA 12 Mozambique

0·78m km²

Mozambique's original inhabitants were Bushmen, about 50,000 of them. They were displaced by Bantu, who entered the area from the north and west in the 4th and 5th centuries AD. By AD 1000 the Bantu had multiplied up to a third of a million and the Bushmen had vanished: Mozambique has been a Bantu country ever since. The name, however, is Arabic: it comes from the first point of contact with the outside world, the trading post established by the Arabs of Zanzibar in the 13th century.

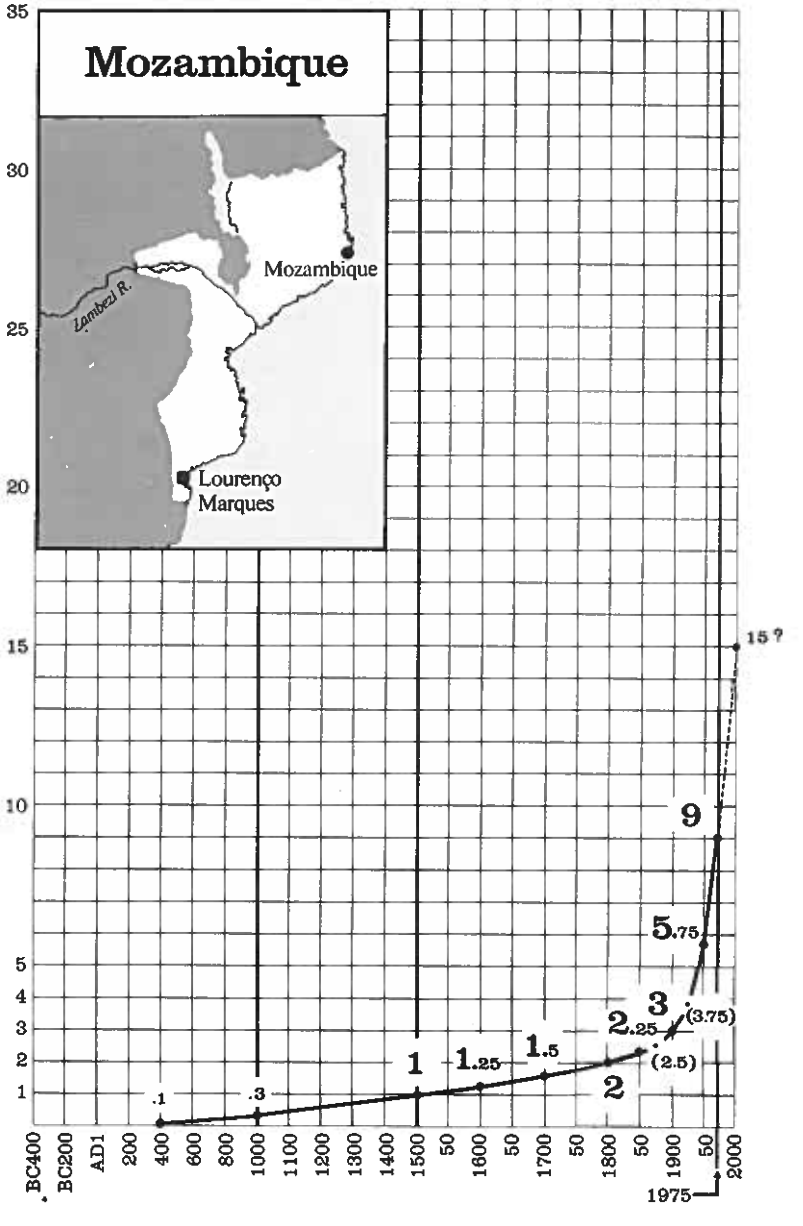
The Portuguese replaced the Arabs in Mozambique town and indeed as masters of the whole coast in the early 16th century. Most of the Bantu – there were about 1m of them by this time – were quite unaffected by the change, though the Portuguese did attempt to establish some sort of control of the interior, particularly along the line of the Zambesi. They were hoping to find gold, but didn't. Nor did they do very well out of the slave trade. Mozambique was off the main slaving routes and its contribution to the Atlantic traffic initially amounted to only about $2\frac{1}{2}\%$ – equivalent to an export rate of 100 or so a year in the 16th century and no more than 600 a year even in the 17th century.

In the 18th century there was a sharp acceleration in the local traffic in slaves: the French had settled nearby Réunion and Mauritius and naturally looked to Mozambique to meet their needs in this department. By the end of the century the total annual shipment of slaves from Mozambique had reached 10,000. And there it stayed, even after the official abolition of the traffic in 1810. The British Navy's small anti-slavery squadron was fully occupied off West Africa, so the Portuguese in Mozambique were able to supply their compatriots in Brazil without interference from anyone. Mozambique's slice of the shrinking Atlantic traffic rose tenfold, to a quarter. Between 1810 and 1860 (when the anti-slaving laws were finally made effective) 0·5m slaves were shipped from Mozambique for a cumulative total of 0·9m.

The late-19th-century 'scramble for Africa' by the European powers forced the Portuguese to define the frontiers of Mozambique and establish control over the hinterland. As elsewhere in the continent the imposition of an effective administration was followed by a marked upturn in the rate of population growth: in the first half of the century numbers increased from 3m to 5·75m and today on the eve of independence the total is 9m. All are black; the 150,000 Portuguese settlers all got out as soon as the handover of power was announced.

Primary Sources

The first in what has become a decennial series of counts was taken in 1940: the quality of these has gradually improved and it is fair to regard the 1970 count as a census. Before 1940 we have to rely on official estimates: these are only of any value within this century.



AFRICA AREA 13 Southern Africa

2·67m km²

13a The Union of South Africa, Swaziland and Lesotho

1·27m km²

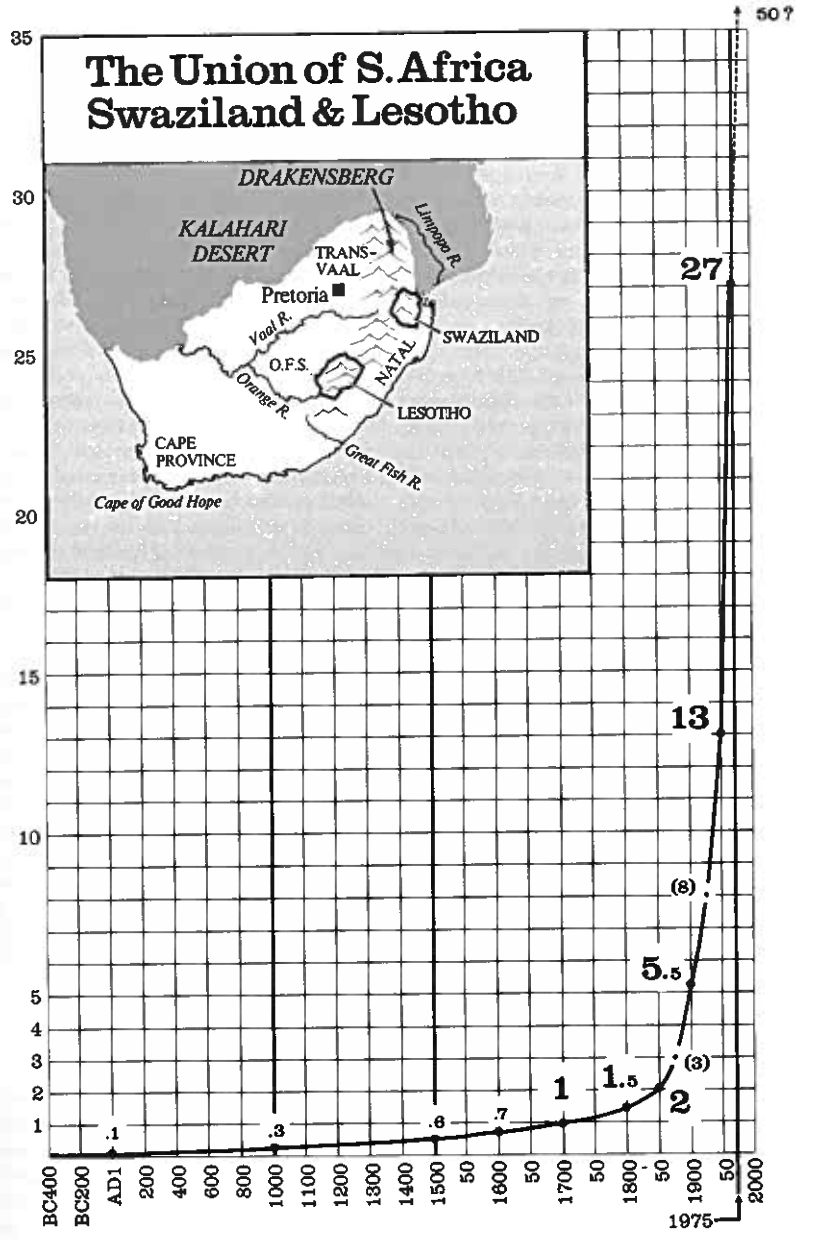
13a-1	**The Union**	**1·22m km²**
13a-2	**Swaziland**	**0·02m km²**
13a-3	**Lesotho**	**0·03m km²**

Bushmen, about 75,000 of them, had the south of Africa to themselves until the first Bantu cultivators crossed the Limpopo around AD 500. By AD 1000, when the total population had risen to 300,000, Bantu outnumbered Bushmen and the disproportion was increasing.

The line of the Bantu advance is marked by the Drakensberg, the mountain range that forms southern Africa's backbone. Running parallel to the east coast the Drakensberg catches sufficient rainfall to change a naturally arid climate into one favourable to agriculture. This was what the Bantu needed and the eastern half of the country soon became their preserve: the western half was left to the Bushmen and an intermediate group, the Hottentots, who were Bushmen who had learnt how to herd cattle.

In 1487 Bartholomew Diaz discovered the Cape of Good Hope: in 1652 the first ninety European colonists were put ashore there by the Dutch East India Company which wanted to establish a revictualling station for its merchant ships. By 1700 the Cape Colony had grown to 1,250 Europeans plus an equal number of Africans, either 'coloureds' (the local European-Hottentot mixture) or imported Bantu slaves. At this time the remainder of the western half of the country contained some 50,000 Bushmen and Hottentots. The density of settlement in the eastern half was of a quite different order: there were now no less than a million Bantu living in the folds of the Drakensberg, cultivating its valleys and spilling on to the veld.

The 18th century was not a time of great change in southern Africa: the Dutch multiplied up to 22,000 and increased their slaves in proportion, to 25,000. The number of Bushmen and Hottentots slowly fell to 25,000: the number of Bantu slowly rose to 1·5m. By contrast the 19th century was an era of dramatic upheaval. In the course of the Napoleonic wars the British took over the Cape and when the war ended



Africa Area 13a

British immigrants started to pour in. The Cape Dutch – the Boers – didn't like this at all: they didn't like British laws, they didn't like British people. In the 1830s some 12,000 of them trekked off to the north and, beyond the area of British control, established what eventually became the two Boer republics of the Orange Free State and the Transvaal. The British also expanded: in the 1840s they set up the colony of Natal on the east coast and they advanced the frontier of the Cape Colony across the Great Fish River, the traditional limit of the Bantu zone. Nearly 2 million Bantu found themselves being pushed back into the Drakensberg by the Boers on the west and the English on the south. At mid-century there were 100,000 whites in the Cape, 5,000 in Natal and 30,000 in the Boer republics: the number of blacks had risen to 1·85m.

The pace of change accelerated in the second half of the century. Attracted by the discovery of diamonds (1867) and gold (1886), European immigrants came in in larger numbers than ever, a total of half a million (70% British) arriving between 1850 and 1900. This brought the white population to more than a million and made it for the first time a respectable proportion – roughly a fifth – of the whole. Besides its 1·2m whites and 3·75m Bantu, southern Africa at this time – the end of the 19th century – also contained 0·4m Cape coloureds and 0·1m Indians, mostly indentured labourers. The Bushman and Hottentot populations had dwindled into extinction.

The Boer War (1899–1902) which ended with the British incorporating the Orange Free State and Transvaal in the Union of South Africa no longer appears the watershed it seemed at the time. The British Empire has vanished, the Boers (who constitute 60% of the white population) are in complete control and it is their ideas that have determined the Union's distinctive social structure, in particular its policy of apartheid (separation of the races). This means that the Union is run by and for its 4·1m whites, with the 2·3m Cape coloureds, 0·75m Indians and 18m blacks, who together constitute more than 80% of its population, having no say and little status in the land of their birth. Theoretically the 1·5m Bantu in the decolonized and independent enclaves of Swaziland and Lesotho are a lot better off but they are as close-pinioned by poverty as the Bantu of the Union are by the South African police.

The different reproduction rates of the races of southern African communities suggest that the present political structure can hardly be maintained beyond the end of this century. By then there will be 5·5m whites as against 4·5m Cape coloureds, 1·5m Asians and 36m Bantu (not counting another 3m in Swaziland and Lesotho) and the non-white majority will have increased to near 90%.

Primary Sources and Bibliography

The records of the Cape Colony are as full as anyone could wish but of course apply only to the frontiers of the time. The result is that though we know the history of the white population from 1652 to the present in adequate detail (see the article by R. Ross in Population Studies *29 (2) 1975), total population figures become directly available only with the Union census series that begins in 1904. We can, however, get a fair idea of the population in the second half of the 19th century by using the 'censuses' of the separate provinces plus a bit of back extrapolation for the Bantu areas that still retained their independence. These provincial 'censuses' were held in the following years:*

Cape	1865, 1875, 1891
Natal	1867, 1875, 1891
Orange Free State	1880, 1890
Transvaal	1890 (whites), 1892 (others)

In all cases proper census procedure was limited to the white population and the number of natives was either obtained by indirect means such as hut counts, or by administrative estimates.

Union censuses have been held in 1904, 1911, 1921, 1936, 1946, 1951, 1960 and 1970.

During the years 1800 to 1850 population figures can only be informed guesses. In general the evidence suggests that the Bantu peoples were multiplying rapidly, certainly rapidly enough to more than make up for any losses involved in the creation of the Zulu state in the 1820s. In fact our figure of 1·5m for 1800 can be taken as a high estimate more likely to need revising down than up. This is a point worth making, for very high figures for the beginning of the century – up to 5m – have been proposed as part of a theory that in 1800 the Bantu were thickly settled in the Orange Free State and Transvaal areas and that this population was later annihilated by marauding tribes pushed out of the Drakensberg by the Zulu king Shaka. It is all most improbable and seems to be politically inspired, a counterblast to Boer propaganda about the Orange Free State and Transvaal being without any Bantu at all when the trekkers moved in. Neither of the extreme views is really tenable. It is likely that there were about half a million Bantu in the area of the Boer republics during the early 19th century (nearly all of them in the Transvaal) and that the number was increasing. it is not reasonable to believe that there had ever been as many as 2·5m or less than 0·1m.

Presumably because it is such a political hot potato nobody has attempted a synthesis of the population data for the 19th century. The figures for the two enclaves of Lesotho and Swaziland are given in * *Kuczynski, Vol. 2.*

13b Namibia and Botswana 1·400m km²

13b-1 Namibia (South-West Africa) 0·825m km²

13b-2 Botswana (Bechuanaland) 0·575m km²

Although Namibia and Botswana lie north of the Union of South Africa's Cape Province they constitute the real terminus of the continent. Here, particularly in the Kalahari Desert of southern Botswana, the Bushmen have found their last refuge. Today there are about 50,000 of them (30,000 in Botswana, 20,000 in Namibia), the only survivors of a population that once

numbered a third of a million and roamed freely across the whole of eastern and southern Africa.

The Bantu moved into the area from the north and north-east in the period AD 500–1500: the movement was on a very small scale, for when the colonial period began in the 1880s there were only about a quarter of a million Bantu in Namibia (German-controlled) and Botswana (British-controlled) together. The 20th century has seen a rapid increase in numbers. Namibia's population has risen from 0·2m to 0·9m and Botswana's from 0·12m to 0·66m (see table).

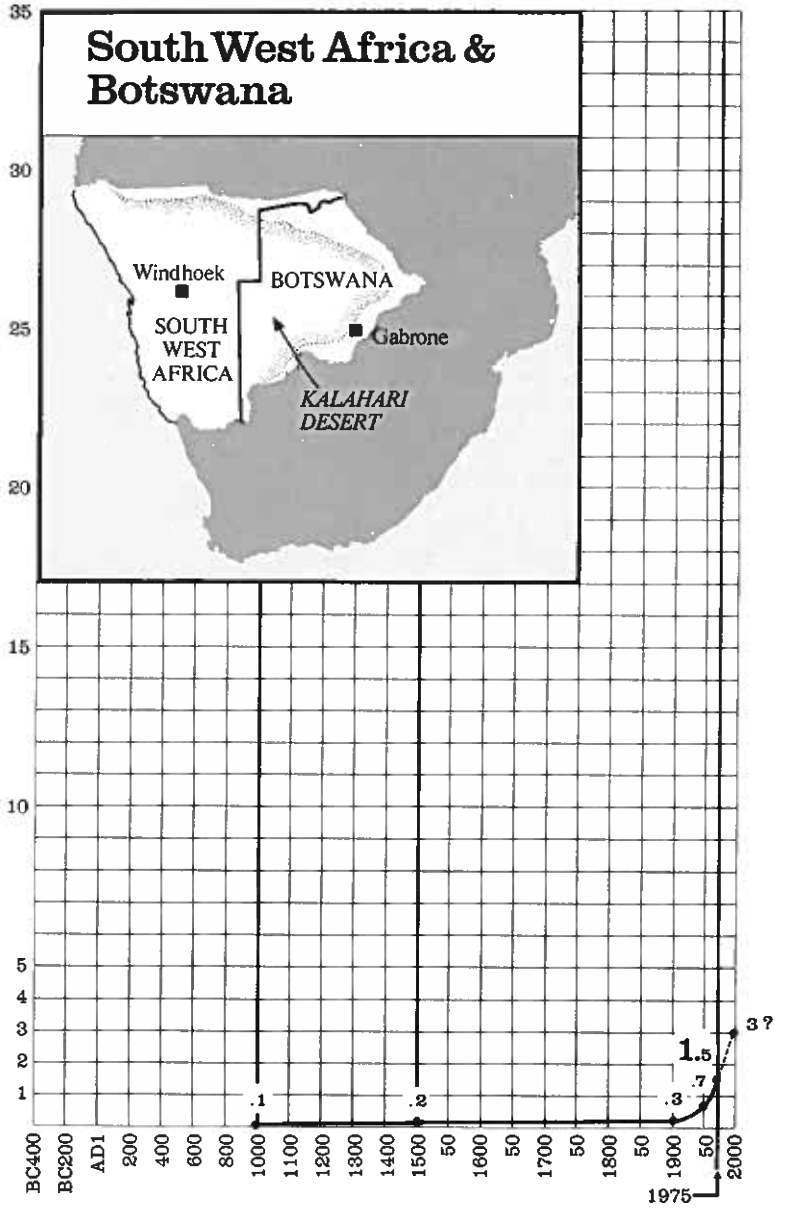
ESTIMATED POPULATIONS OF NAMIBIA AND BOTSWANA 1900–1975

	1900	*1925*	*1950*	*1975*
Namibia	0·200	0·250	0·400	0·890
Botswana	0·120	0·175	0·310	0·660
TOTAL	0·320	0·425	0·710	1·550

Primary Sources and Bibliography

Estimates of Namibia's population were published by the Germans from 1900 on. In 1915 the administration of the country was taken over by the Union of South Africa, since when the estimates have gradually been supplemented by counts in each of the Union's census years. By 1951 the proportion counted reached 50% and the figures can now be regarded as entirely reliable.

*Estimates of Botswana's population were published by the British from 1904 on: there were counts in 1936 and 1946 and censuses have been taken in 1956, 1964 and 1970. See * Kuczynski, Vol. 2.*



Africa Area 13b

AFRICA AREA 14 The Islands of the Western Indian Ocean

0·6m km²

14a Madagascar

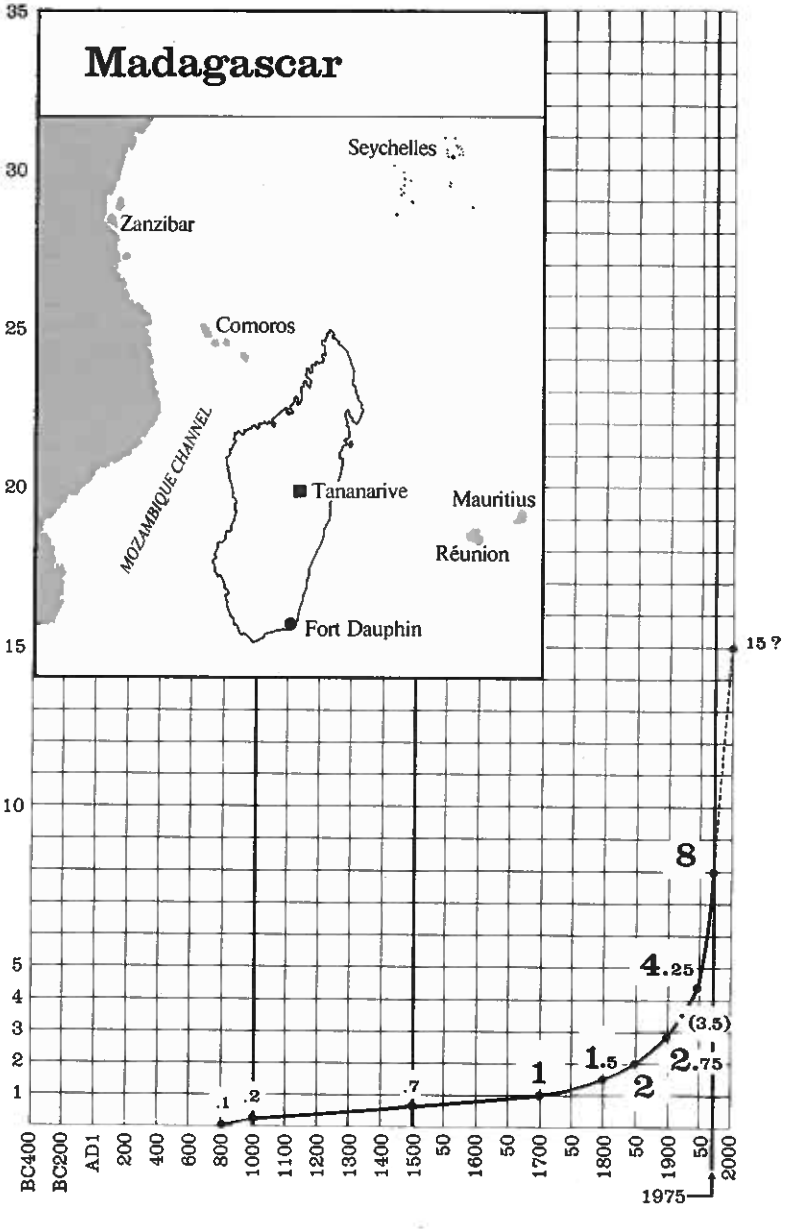
0·59m km²

The island of Madagascar received its first colonists at the beginning of the Christian era. They came not from Africa but from Indonesia and the voyage across the 3,000 miles of Indian Ocean that separate the two must have been either totally accidental or of the 'blind migration' type usually associated with Polynesians rather than Indonesians. Intended or not, the colonization of Madagascar was successful: by the end of the 1st millennium the island contained some 0·2m Malagasy, all descended from the few boatloads of Indonesians who had arrived over the previous ten centuries. No one in Indonesia, indeed no one anywhere, knew of the colony's existence.

The era of total isolation ended in the 14th century, when the Arabs trading along Africa's east coast finally got this far south. The Arabs introduced two new elements into the island's ethnography – themselves and their Negro slaves – yet neither the newcomers nor their commerce really prospered. Malagasy society was too unsophisticated to generate much in the way of demand, there were no natural resources of significance and slaves were more readily obtained from the mainland. Even the Portuguese, who in 1500 became the first Europeans to reconnoitre the island, could find nothing to detain them. The Malagasy – 0·7m of them by this time – were left to their own devices until the coming of the French.

The first French move was made in 1643 when Fort Dauphin was established on the south-east corner of the island. The hope was that East Indiamen would find it useful as a re-victualling station. However, it soon became clear that the nearby island of Réunion was far better suited for this function. Fort Dauphin was abandoned and the French connection was reduced to visits by slavers operating from Réunion and, later, Mauritius. About a third of the slave population of Réunion and Mauritius apparently came from Madagascar, which means that the island's rate of export in the 18th century will have been around 500–1,000 a year. This is of no numerical significance in relation to a population that must now have been over a million and anyhow it is likely that many, maybe most, of the slaves exported from Madagascar had been brought over from the mainland of Africa in the first place. Probably the most significant effect of the slave trade on the island's population was the appearance of a definite Bantu element as a result of escapes and emancipations at the slaving ports.

France resumed official contact with Madagascar in the 1880s: this time she came to stay. In 1895 a French expeditionary force landed on the island and reduced the Malagasy – who at this



Africa Area 14a

time numbered about 2·75m – to colonial status. During the subsequent period the conventional wisdom was that Madagascar was underpopulated: there was even talk of recolonizing the island with more prolific peoples from Africa or Asia. Actually the Malagasy were reproducing at a perfectly respectable rate and, by the time the French left in 1960, there were 5m of them. Now, in common with most underdeveloped countries, an accelerating rate of population increase is a factor threatening future prosperity, for the current population of 8m is likely to have multiplied up to 15m by the end of the century.

Primary Sources

The first population estimate produced by the French administration was based on a census of taxpayers in 1900: later estimates were based on greater administrative experience but on equally indirect data. The situation has improved a bit lately: in 1966 a sample census was taken which is estimated to have covered about 12% of the island's population. However, there has been no true census to date.

14b The Comoro Islands

2,170 km²

The Comoros, which lie in the Mozambique channel between Africa and Madagascar, were probably uninhabited when discovered in the 14th century by Arab seamen from Zanzibar. Gradually they collected a population of Negro and Malagasy underdogs ruled by a few Arab overdogs. Annexed by the French in the 19th century, they were estimated to have a population of 80,000 in 1900. Today the figure is thought to be about 300,000.

14c Réunion

2,511 km²

Previously uninhabited, Réunion was colonized by the French in 1665. The intention was to provide a revictualling station for their East Indiamen. Population grew from 1,000 in 1700 to 15,000 (two thirds of them slaves) in 1750 and 65,000 (three quarters of them slaves) in 1800. Following the abolition of slavery in 1848 indentured labourers from India, Indo-China and China were brought in to work the sugar plantations which had become – and still remain – the island's economic raison d'être. By 1900 the population was 175,000; today it is over half a million.

14d Mauritius

1,865 km²

The Dutch planted a colony on Mauritius in 1638. It never prospered and the few hundred souls there were evacuated in 1710 when the success of the Cape Colony made its revictualling function superfluous. A few years later the island was settled by Frenchmen from nearby Réunion: they successfully developed the island's present sugar plantation economy. In 1750 the island's population was 10,000; by 1800 it had grown to 60,000. Nearly 50,000 of the 60,000 were slaves whose origins lay in Madagascar or Mozambique.

In 1810 the British took Mauritius. They prohibited first the slave trade, then slavery, introducing Indian coolies instead – 300,000 of them between 1834 and 1910. As a result the island's population zoomed from 176,000 in 1850 to 370,000 in 1900 and 500,000 (two thirds Indian) in 1950. The present figure is 900,000.

POPULATIONS OF THE SMALLER ISLANDS OF THE WESTERN INDIAN OCEAN

Populations in thousands, to the nearest 10,000

	1500	*1600*	*1700*	*1750*	*1800*	*1850*	*1900*	*1925*	*1950*	*1975*
COMOROS	10	20	30	40	50	60	80	120	160	300
RÉUNION				20	70	120	180	190	260	500
MAURITIUS				10	60	180	370	390	500	900
SEYCHELLES							20	30	40	60

The Seychelles, a group of ninety-two islands and islets in the Indian Ocean with a total area of 400 km², were colonized by the French in the 1770s and annexed by the British in 1810. They then contained a few hundred colonists and a few thousand Negro slaves. By 1900 the population had grown to 20,000, today it is about 55,000.

Primary Sources and Bibliography

The precolonial population of the Comoros could be a subject for controversy if anyone was interested; there are no data bearing directly on the subject and numbers have to be inferred from general considerations and back projections from the first French estimates. By contrast the material on Réunion and Mauritius is all one could wish; counts were made right from the start and there is no doubt about the size of the population of either at any time. For a simple tabulation of the figures for Réunion and Mauritius (and the Seychelles) see the statistical appendix in Auguste Toussaint Histoire des Iles Mascareignes *(1972). We have been unable to find anything on the Comoros beyond the material in the standard handbooks.*

Fig. 4.1 *The Americas, subdivision by area*

1 CANADA
2 THE CONTINENTAL USA
3 MEXICO
4 CENTRAL AMERICA
5 THE CARIBBEAN ISLANDS
6 COLOMBIA, VENEZUELA and the GUYANAS
7 BRAZIL
8 ECUADOR, PERU, BOLIVIA and PARAGUAY
9 ARGENTINA, CHILE and URUGUAY

Part Four
The Americas

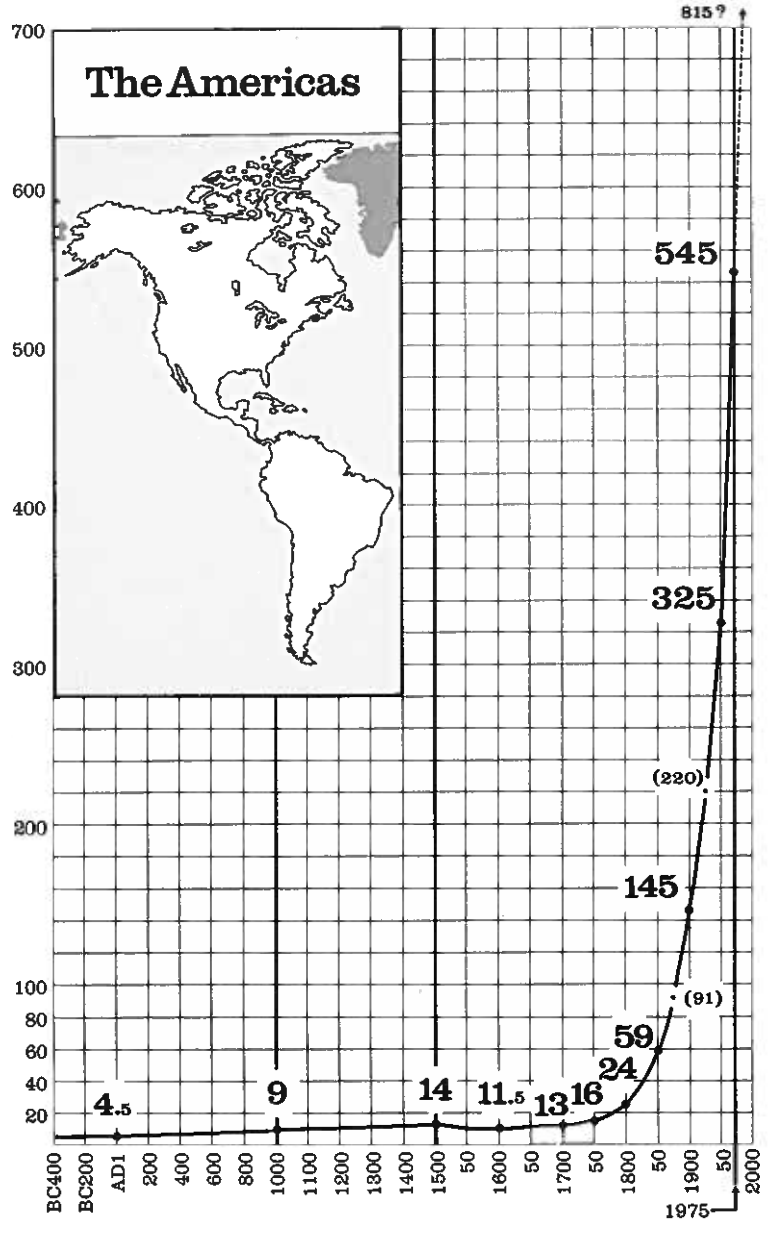


Fig. 4.2 *The Americas, continental total*

THE AMERICAS: OVERVIEW

40m km²

The land bridge between north-east Asia and north-west America, currently submerged under the Bering Strait, is the starting point for the population history of the American continent. Before the last Ice Age began no man had ever crossed it and there was no such thing as an American. By the time the Ice Age was over and the land bridge finally disappeared beneath the waves it had served its purpose: the last of the habitable continents had received its inoculum of *Homo sapiens*.

The land bridge emerged in the Ice Age because the immense quantities of water locked up in the ice caps meant that the level of the sea was lower than today. But one of these same ice caps usually blocked the Alaskan end of the land bridge so that there were actually only three periods during the 60,000-year span of the last Ice Age when the bridge could be used to enter America. According to geologists these occurred in 35–30,000 BC, 25–20,000 BC and, comparatively briefly, around 10,000 BC. Despite many claims to the contrary there is no convincing case for any settlement in America earlier than 10,000 BC, so it looks very much as though it was during the third period that the successful colonization was made. The credit should probably go to a band of Siberian mammoth-hunters prepared to follow their mammoth – and their hunches – further than most.

Whether or not they were the first men ever to set foot on the continent, these Americans of the 10th millennium BC were quite certainly the first to be fruitful and multiply. During the next ten centuries their numbers rocketed from less than 10,000 to more than 100,000 and they began to penetrate into every corner of the land mass. They also killed off most of the big game: of the various elephants, camels, horses, ground sloths and bison that they preyed on, all bar one species of bison became extinct over the next few millennia. It was from necessity as much as invention that a new life style evolved during this period, the more varied pattern of small game hunting, fishing and general foraging that is labelled mesolithic. By the 6th millennium BC this was the way of life of nearly all the 0·25m people living in the New World, only a few thousand on the Great Plains following the bison and the upper palaeolithic tradition.

The changeover from palaeolithic to mesolithic was soon followed by

another, much more important development. People living off the edible fruits and roots of the American tropics discovered that a bit of attention to the right plants at the right time resulted in a big improvement in the food supply. Knowledge filtered out to the tribes living in the tropical–temperate borderlands and they in their turn tried their hand at cultivating the local grasses. The end result was the appearance of two societies practising true agriculture, one on the northern tropical–temperate border, in meso-America (Mexico and Central America), one on the southern tropical–temperate border, in Peru. The New World had achieved its 'neolithic revolution'. The pay-off in demographic terms was continuing growth – to 4·5m by AD 1, 9m by AD 1000 and 14m by 1492.

The end of the 15th century marks the end of this road. By then both Mexico and Peru had reached a cultural stage equivalent to the Near East of 2000 BC, and as Fig. 4.3 shows they had achieved comparable population densities. This means that the Aztec Empire, the final hair-raisingly cruel expression of meso-American society, had 3m or 4m subjects and the Inca Empire, its more benevolent Peruvian equivalent, much the same number. Beyond or between these two – along the eastern seaboard of the USA, in the Caribbean, in south Mexico and central America, in Venezuela and Colombia, were various predominantly or semi-agricultural tribes which together added another 5m or 6m to the continental total. Beyond these were the food-gatherers living in the immense and empty landscape of the western USA and Canada, in the Brazilian jungles and the desolate wastes of the southern Argentine. Altogether, counting every little group from the Eskimo of the Arctic fringe to the Yahgan of Tierra del Fuego, there may have been a million of them.

This world, its people and its achievements, were now to be mauled, degraded and largely destroyed by a handful of ruthless adventurers from across the Atlantic.

*

The first impact of the Europeans was deadly. Within a century of Columbus reaching the Antilles the population of the Americas had been reduced by a fifth. Allowing for the fact that considerable areas and populations remained (as yet) unaffected by the invasion – for example the million natives north of the Rio Grande – this translates into an average drop of about a quarter in the occupied zone with some really catastrophic declines in particular places.

It is easy but entirely wrong to blame the Spaniards for this demographic disaster. Their combination of brutality, cupidity and religiosity make them popular scapegoats, but they probably killed no more people in the course of their conquest of the continent than the Aztecs had in their wars of the preceding quarter century. The killers, in truth, were not men

but microbes. Smallpox and measles were unknown in pre-Columban America and Amerindians had no resistance to them. In the course of the 16th century repeated epidemics of these diseases swept through the native population cutting it back again and again until, towards the end of the period, a new equilibrium was established. The new level was usually about three quarters of the pre-Columban figure, though it could be better or worse than this.

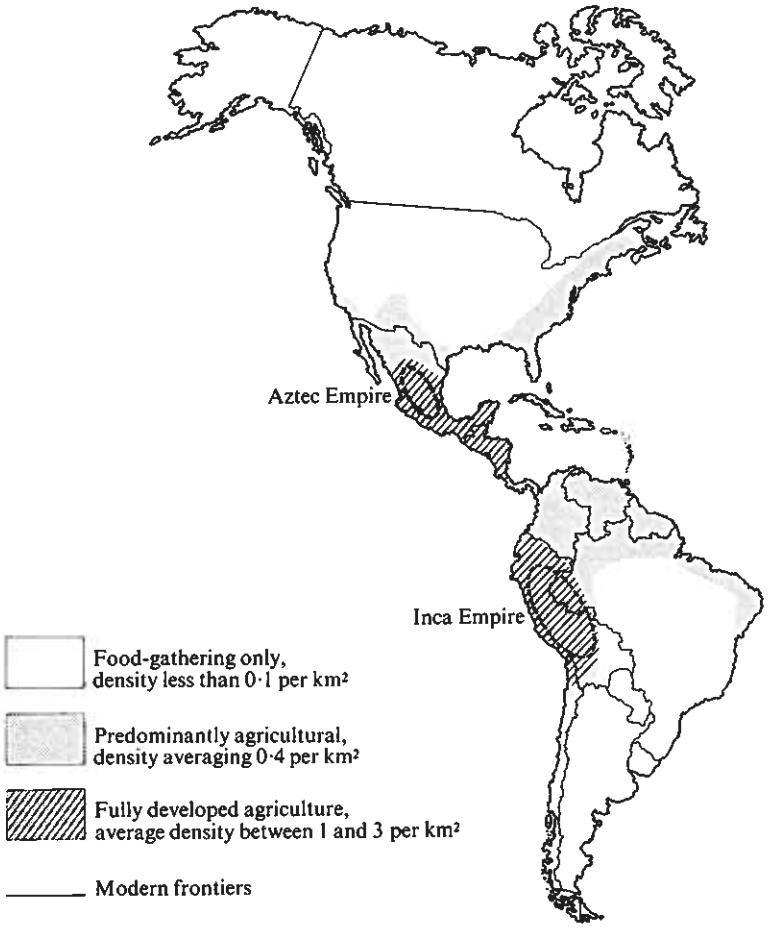


Fig. 4.3 *The Americas, agricultural development and population densities in* AD 1500

One area that fared much, much worse was the Caribbean. This was largely because the individual populations of the islands were relatively small and completely isolated. They were quickly reduced to the low absolute levels from which recovery is difficult. Here the Spaniards' policy of rounding up the natives and working them to exhaustion may have been a significant additional factor, causing the epidemics to spread faster and kill more, cutting the time available for adaptation and so reducing the time to extinction. For extinction is the fate that overtook the natives of the Caribbean. By the middle of the 17th century they were a vanished race: a community 300,000 strong had been simply wiped out.

In terms of absolute numbers the mortality on the mainland was far greater, the drop there being of the order of 2·5m. However, though the loss was terrible, the size of the populations involved protected them from annihilation and the continuance of the native stock in most areas was never in any doubt. The two vice-royalties which constituted the Spanish-American Empire were erected on the same demographic foundations as the Aztec and Inca Empires: indeed it is no exaggeration to say that the structure of post-Columban America in its first hundred years was entirely determined by the pre-Columban population map.

The Spaniards and their diseases did not take long to penetrate to the mainland centres of population. In 1518 Cortez broke through to the Aztec capital Tenochtitlan: the next year, as smallpox raged among the defenders, he stormed the city house by house. Tenochtitlan became Mexico City, the Aztec Empire became the nucleus of the Vice-royalty of New Spain. The Inca Empire lasted until 1532, when Pizarro reached its northern frontier. This time the microbes had outmarched the men: the whole Andean zone had been ravaged by smallpox several years earlier and its population was already falling when Pizarro moved in for the kill. His overthrow of the Incas cleared the way for the creation of the Vice-royalty of Peru. Both vice-royalties expanded their frontiers to include the contiguous settled areas, until by the end of the 16th century they contained between them some 9m subjects. As the continental total had now fallen to 11·5m, this amounted to nearly 80% of the population of the Americas.

At this point the Spanish advance came to a halt. The remaining areas were too thinly populated to support an administration and their exclusion seemed no blemish on the Iberian claim to ownership of the entire continent. But though the other European powers were prepared to recognize that Spain ruled all she occupied they would not concede that her sovereignty extended over the rest. In the first half of the 17th century the British, French and Dutch all established settlements in the New World in defiance of Spanish prohibition. The second phase in America's colonial era had begun.

*

The rule of Spain in the Americas was the rule of an élite: by 1600 some 0·25m Spaniards – the successors and descendants of perhaps 0·1m trans-atlantic migrants – were established as a master race over 9m natives. The 30,000 Portuguese in Brazil formed a similar ruling class, though in their case, because natives were thin on the ground in this part of the Americas, most of the lower orders consisted of specially imported African slaves.

A quite different concept lay behind the north European colonial effort of the next half-century. New France, Nova Scotia, New England and New Netherlands were exactly what their names implied – all-white communities, living by their own labour and intended to grow into replicas of the mother countries.

It is instructive to look at present-day America to see how the different colonial concepts have fared. As Fig. 4.4 shows, the Amerindian contribution is effectively restricted to the meso-American–Andean strip which formed the demographic backbone of pre-Columban America and of the Spanish Empire. The rule of Spain was, in every sense, conservative. The rest of the continent has been restocked from Europe or Africa. It is with these movements – the migration from Europe and the slave trade – that we are now concerned.

The slave trade first. This grew naturally out of Portugal's 15th-century interest in African exploration. The slave trade was one means of financing the voyages, particularly as slaves proved to be an ideal labour force for the sugar plantations Portuguese entrepreneurs set up in Madeira and the Azores during this period. After its discovery, Brazil turned out to be an even better place for growing sugar and ultimately the Caribbean islands proved best of all. At this point the trade ceased to be purely Portuguese. For though the British and French initially founded all-white settlements in the Caribbean (when they were able to wrest suitable islands from Spain) these colonies were, as originally conceived, an economic failure. Only when the Brazilian system of sugar growing was introduced did they start to flourish.

The change came around 1650. The earlier settlements contained about 50,000 colonists by then (as many as the colonies in North America) and only a few thousand blacks. Now the British, French and Dutch began to bring in African slaves on a big scale. By the end of the century there were something like 300,000 of them in the Caribbean (relatively few in the islands that remained to Spain) as against 200,000 Europeans (at least half of whom were in the Spanish sector). Rapid though this growth may seem it was completely outclassed by the staggering expansion that took place in the 18th century, during which some 2·75m slaves were landed and sold in the Caribbean markets. This was the high point, though the 19th century added, legally or illegally, another 0·75m, which brought the total input for the area during the period 1500–1850 to 4m. Disease, brutality and an

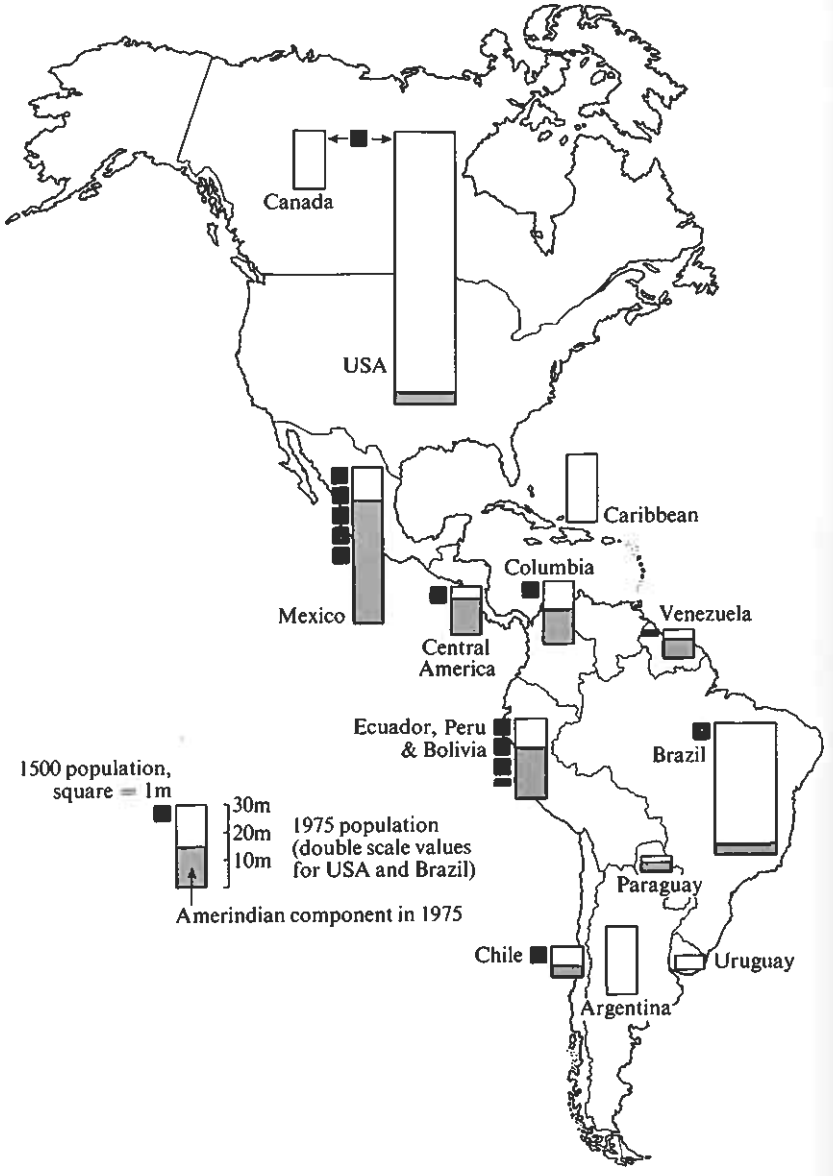


Fig. 4.4 *The Amerindian contribution to the demography of the Americas*

unfavourable sex ratio meant that the African population was less than the cumulative input – nearer 3m than 4m – and it was only when slavery was abolished that the Negro community in the Caribbean became self-sustaining. But by the middle of the 19th century the repopulation of the Caribbean was essentially complete: the islands, with the exception of Cuba, had assumed the predominantly African complexion that they have retained ever since.

Next to the Caribbean the biggest market for slaves was Brazil (see Fig. 4.5). Either the climate or the overseers were kinder here and the Africans did better. Up to the mid 19th century 3·5m Negroes were imported: they always held their own numerically and in the last century have multiplied rapidly. Where there has been so much mixing of stock it becomes very

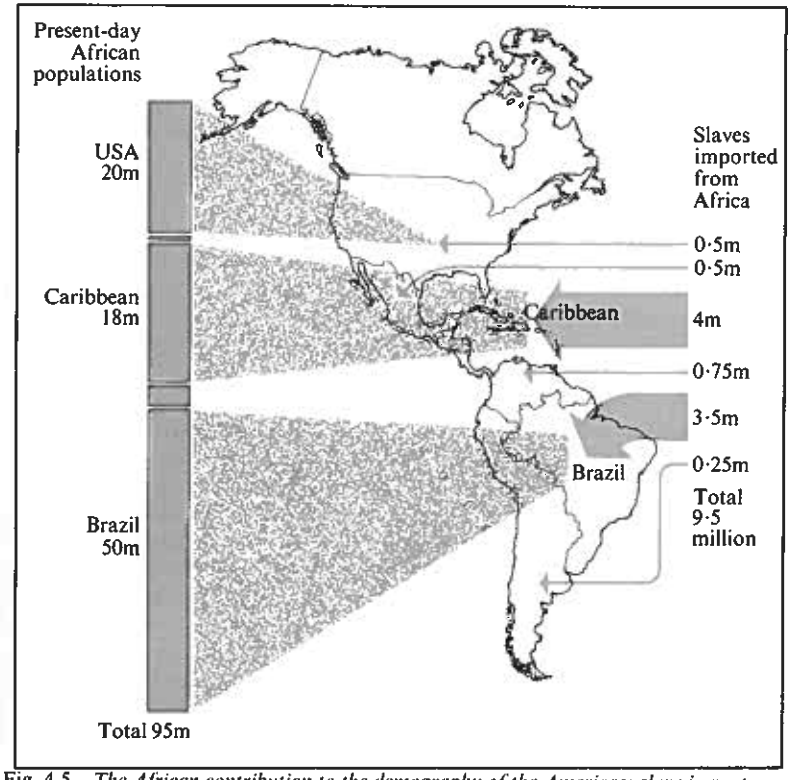
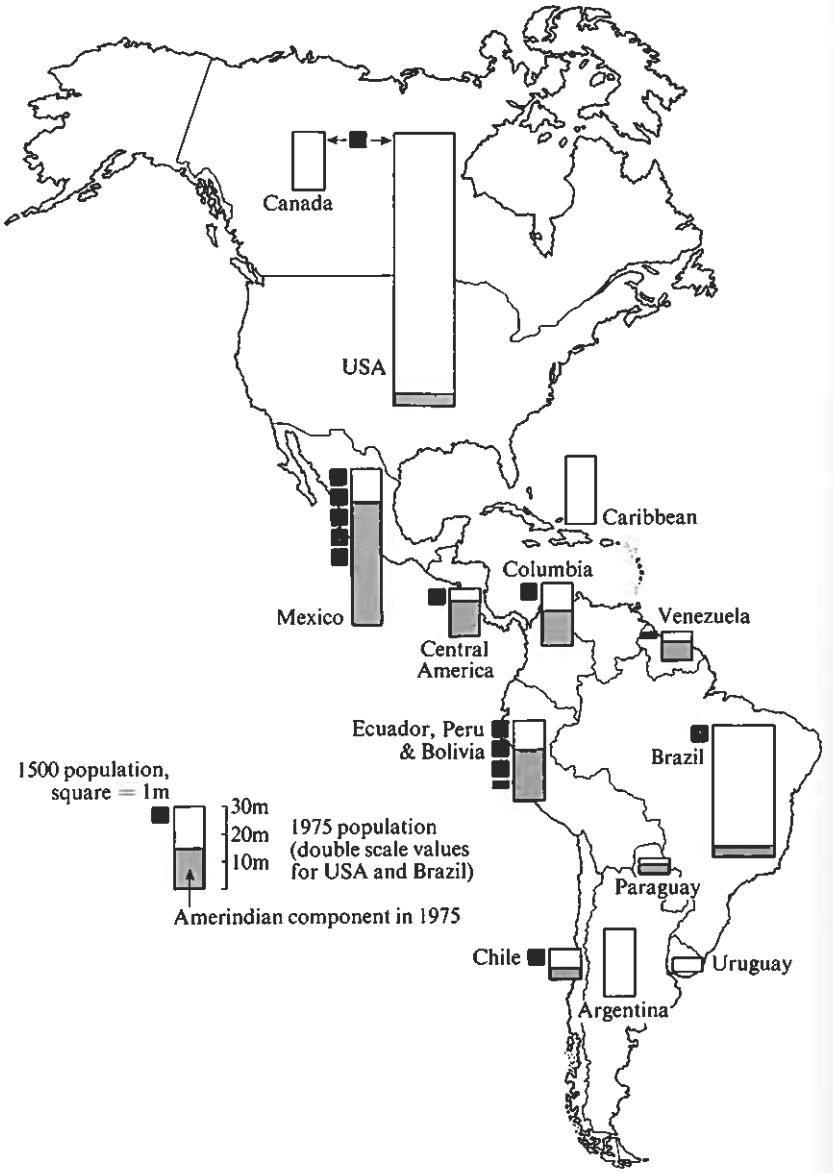


Fig. 4.5 *The African contribution to the demography of the Americas: slave imports 1550–1850 and the present-day populations of African stock*



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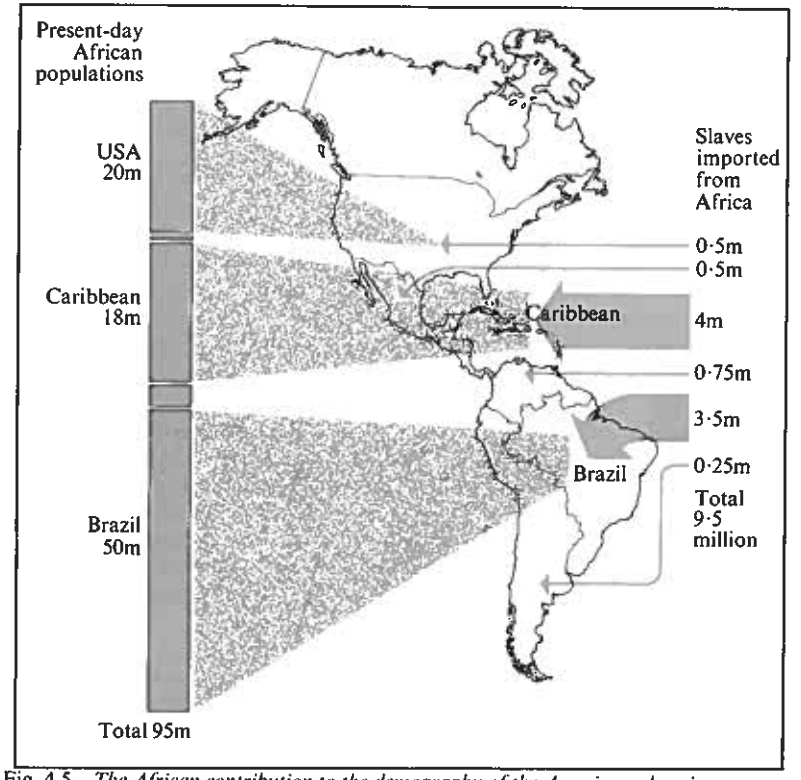

Fig. 4.5 *The African contribution to the demography of the Americas: slave imports 1550–1850 and the present-day populations of African stock*

difficult to define the black element in the population, but it is generally agreed that the African contribution to the Brazilian gene pool is about 50%, which is the equivalent of 50m individuals today. Compare this 15-fold increase with a less than 5-fold increase of the Caribbean Negro.

Best of all for the African was North America. Only about 0·4m Africans were landed there and the use of slaves never spread outside the southern states. Nevertheless the number of black citizens of the United States today is near enough 25m and, even if this is reduced to a genetic equivalent of 20m to allow for the undoubted white component in this 'coloured' population, it still represents an amazing 50-fold increase in two centuries. The North American Negro has become one of Africa's most significant contributions to the demography of the New World.

When we turn to the European contribution the contrasts are striking. In

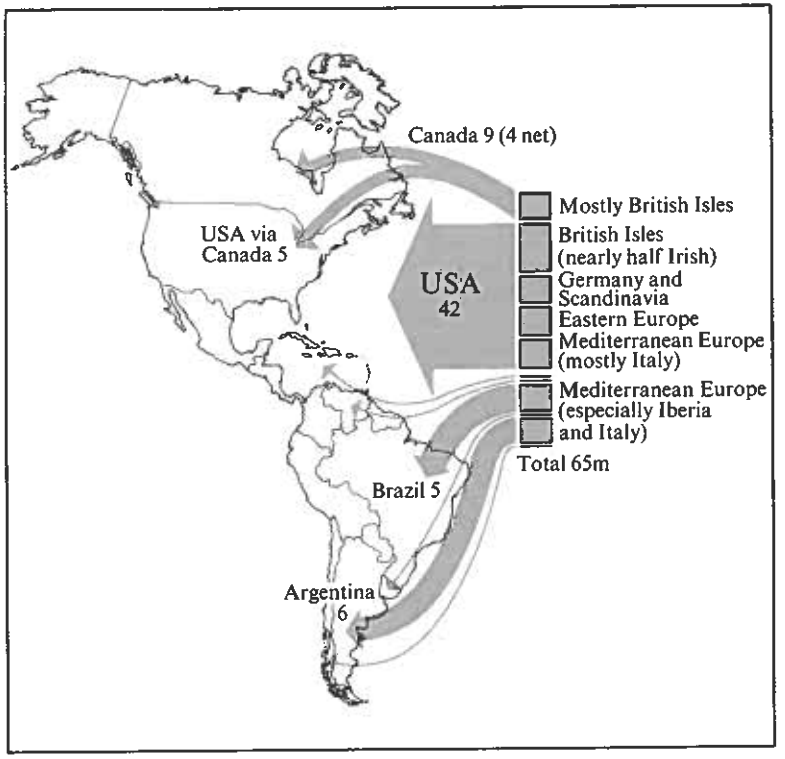

Fig. 4.6 *The European contribution to the demography of the Americas: immigration* 1500–1975

the first place it was voluntary: apart from a few thousand British convicts sentenced to 'transportation' in the 17th and 18th centuries all the European settlers went to America because they wanted to. In the second place the flow was largely to North America: four out of every five of the migrants landed in the USA or Canada. Lastly it was very slow to get started. Whereas more than three quarters of the Africans brought to the Americas had arrived by 1800, less than 3% of the Europeans had. The 'Great Migration' is a comparatively recent story.

To take the early days first. In the 16th century the movement was exclusively Iberian, with 100,000 Spanish settling in the Spanish-American Empire and 10,000 Portuguese in Brazil. Not till the 17th century did the North Europeans join in. Then about 100,000 of them headed for the Caribbean, where most of them died of fever within a few years. At the same time another 100,000 settled on the Atlantic seaboard of North America: there life, though harsh, was healthy and the result was a community that was soon multiplying vigorously. By 1700 there were 0·3m colonists in North America as compared to 1m 'whites' in Latin America. The net transatlantic movement for the century amounted to some 350,000, which means that the cumulative total since Columbus's day was still under 0·5m.

Transit figures for the Atlantic remained within this order of magnitude during the 18th century. North America absorbed another 0·4m migrants and ended the period with a white population of 4·5m. Latin America took in 0·2m immigrants and ended up with a slightly smaller number of whites, about 4m. It was not until well into the 19th century that the scale of the traffic began to change. When it did the upturn was sharp. From an average of less than 10,000 a year in the opening two decades of the 19th century the migration rate rose to double this figure in the 1820s and then moved up to near the 100,000 mark in the late 1830s. It shot way past this level in the decade following the Irish famine of 1846–8 – it touched the half million mark in 1854 – and though it fell back below 200,000 during the 1860s the retreat was only temporary: throughout the last quarter of the century it was as often over as under the half million. The peak was reached in the decade before the First World War, when the rate was over a million a year. The outbreak of war caused a sharp decline and shortly after its end the United States imposed an annual limit of 350,000, soon reduced to 160,000, on immigrants from outside the Americas. As four out of five of the pre-war immigrants had the USA as their immediate or ultimate destination this effectively cut back the continental input to about 300,000 a year, the level it has averaged ever since.

The 'Great Migration' of 1845–1914 brought 41m people to the Americas. All bar 6m of them arrived in the north and of the 35m who did 33m of them settled in the USA. This input, combined with a high rate of

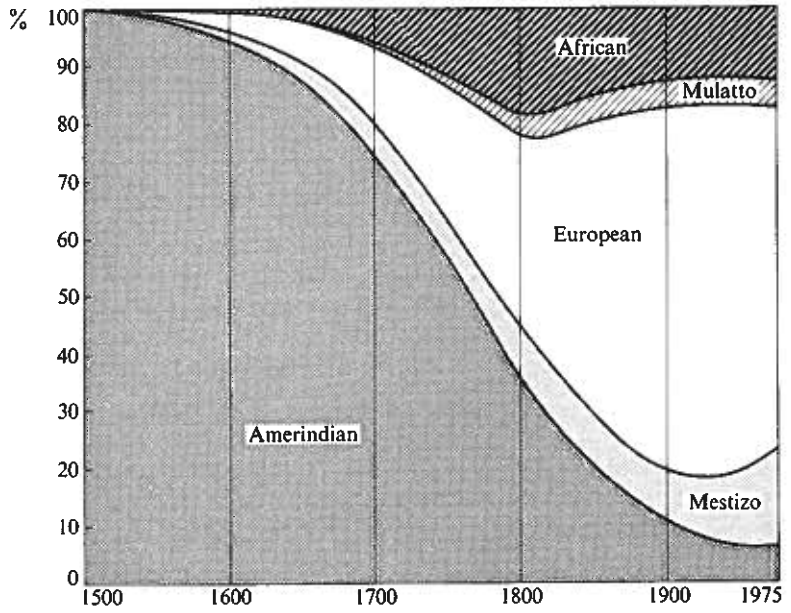

Fig. 4.7 *The Americas, ethnic structure* 1500–1975

natural increase, boosted the US share of the continental population total from 40% to 55%. The absolute figures are perhaps even more impressive: the population south of the Rio Grande nearly tripled (from 30m in 1845 it grew to 80m in 1914); the population of the USA *quintupled* (from 20m in 1845 to 100m in 1914). The effect on the ethnic structure of the continent's population was equally dramatic: the European segment expanded at the expense of both the African and Amerindian sectors (Fig. 4.7).

The prodigious growth of the USA in the late 19th century made it the world's most powerful nation: during the 20th century its material power has continued to expand but its population growth has slowed. Latin America's has accelerated. As a result the population division between America north of the Rio Grande and America south of it is now falling back towards the 40/60 distribution that existed on the eve of the Great Migration. By the end of the century – when the expectation is that there will be something over 800m people in the Americas – the division is likely to be 33/66.

Strictly speaking this comeback is not really Latin, it is Amerindian. The countries with the highest rate of increase – 3% per annum or more as against the USA's recent 1% – are those which have retained an important Amerindian element in their populations: Mexico, the Central American republics, Colombia, Venezuela, Ecuador, Peru and Bolivia. By contrast the rates for the South American countries that are most truly Latin, i.e. have populations drawn almost exclusively from Mediterranean Europe, like Argentina and Uruguay, are nearer to North American than meso-American or Central Andean values. Fig. 4.7 shows the effect of this: since 1914 the white segment has been contracting and the most dynamic element in the population of the Americas has been the Amerindian-Mestizo. Which is as it should be: it is, after all, the Red Man's continent.

THE AMERICAS AREA 1

Canada

10·0m km²

The first Americans had no option but to pass through Canada as quickly as possible, the land being almost entirely covered by the Wisconsin ice cap. Gradually, as the ice retreated northward, Canadian territory suitable for permanent colonization became available and the peopling of the country could begin. The first inhabitants came from the hunting communities established on the Great Plains to the south; later they were joined by the only two groups of pre-Columban Americans who clearly arrived from Asia long after everyone else, the Indians of the Pacific north-west and the Eskimos. Between them these three groups brought the total population of Canada up to 0·1m by AD 1000 and, with the addition of some maize-growing tribes to the St Lawrence area, to 0·2m by AD 1500. Contact with Europeans reduced this total to 0·1m by 1900, but happily the 20th century has seen a more than complete recovery, the current figure being about 0·25m.

Leaving aside the abortive Norse discovery of AD 1000 we can take the the years following Cartier's voyages (1534/5) as the period in which Europeans acquired a working knowledge of Canada's Atlantic coast. Despite this there were no more than a few hundred Europeans in Canada at any one time before 1650 and these were mostly fishermen temporarily established on the east coast. Proper settlement began in the mid 17th century. In its first hundred years it was essentially French and centred on the St Lawrence. By the time of the British conquest in 1760 a population of 70,000 had been bred from just over 10,000 French immigrants, most of whom arrived before 1700. Frontier fertility produced a birth rate of 50 per 1,000 and a growth rate of 2·5% a year. This growth continued after the British takeover, which virtually ended French immigration. There were 0·2m French Canadians in 1800, 0·7m in 1850 and 1m by the mid-1870s, despite the emigration of around 0·1m in the mid 19th century. Even so, the Canadian population of French origin fell from about three quarters of the total in the mid 18th century to 30% a century later, remaining at that proportion until recently.

Before the later 18th century, the British had little impact on Canada. Though they held the far north (Ruperts Land), they made virtually no settlement there, while their claims on the east coast, which amounted to Newfoundland and Nova Scotia, produced very little in the way of results at first. Nova Scotia, which received 2,500 British settlers in 1749, still had a British population of less than 20,000 in the mid-1770s, while Newfoundland's population was only half that. The arrival of some 35,000 Loyalists – exiles from Republican America – was to double the British element in the Canadian population, which finally drew level with the French element soon after 1800.

Migration from Britain to Canada gained momentum after 1815, with 0·5m settlers arriving in the period 1815–60. This, plus natural increase, was sufficient to push the population up to its first respectable totals: 1m by 1825, 2m by 1840 and 3m by 1860. For the rest of the 19th century the story is an odd one: very substantial numbers of migrants continued to arrive at Canadian ports (nearly 1m in the 1880s alone) but they left for the USA even faster. Between 1880 and 1900 there was a net annual loss of 20,000, which is why a population that multiplied five times in the first half of the 19th century could manage only to double in the second half.

In the 20th century the migration balance became positive again. The two great periods of immigration were the years around the First World War (1·2m net immigrants between 1900 and 1930) and after the Second World War (2m net immigrants between 1945 and 1975). The origins of these migrants changed significantly as the century advanced. The proportion of Canadians of 'other European origin', which was only 7% in the late 19th century, had risen to 26% by 1971, with French Canadians slipping slightly to 28% and 'Canadians of British origin' to 44% (not forgetting the original Canadians at 1·2%).

Primary Sources and Bibliography

The French Canadians are one of the best recorded populations in the world. Frequent censuses – thirty-six between 1666 and 1760 – and a good ecclesiastical registration system provide an almost complete record from the 17th century. This is summarized in Hubert Charbonneau (ed.), La Population de Québec: études rétrospectives *(1973), and in English by J. Henripin and Y. Peron in* **Glass and Revelle.*

After the British conquest there were counts in 'Canada' proper in 1765, Nova Scotia 1766–7, New Brunswick 1767, Lower Canada 1784 and Prince Edward Island in 1798 and 1805. Upper Canada actually held an annual census in 1826–42, other parts joining in from time to time. A general Canadian census was more or less established in 1851, and regularly on a decennial basis from 1861. Newfoundland emphasized its separateness by producing a series running 1845, 1857, 1869, 1874, 1884 before conforming. The federal census has been quinquennial since 1951.

Volume 1 of the 1931 Census *has a full list of all previous counts and estimates, and post-1851 material is summarized by M. C. Urquhart and K. A. H. Buckley in* Historical Statistics of Canada *(1965). Useful general sources are: F. Veyret,* La Population du Canada *(1953) and J. Warkentin (ed.),* Canada: A Geographical Interpretation (1968).

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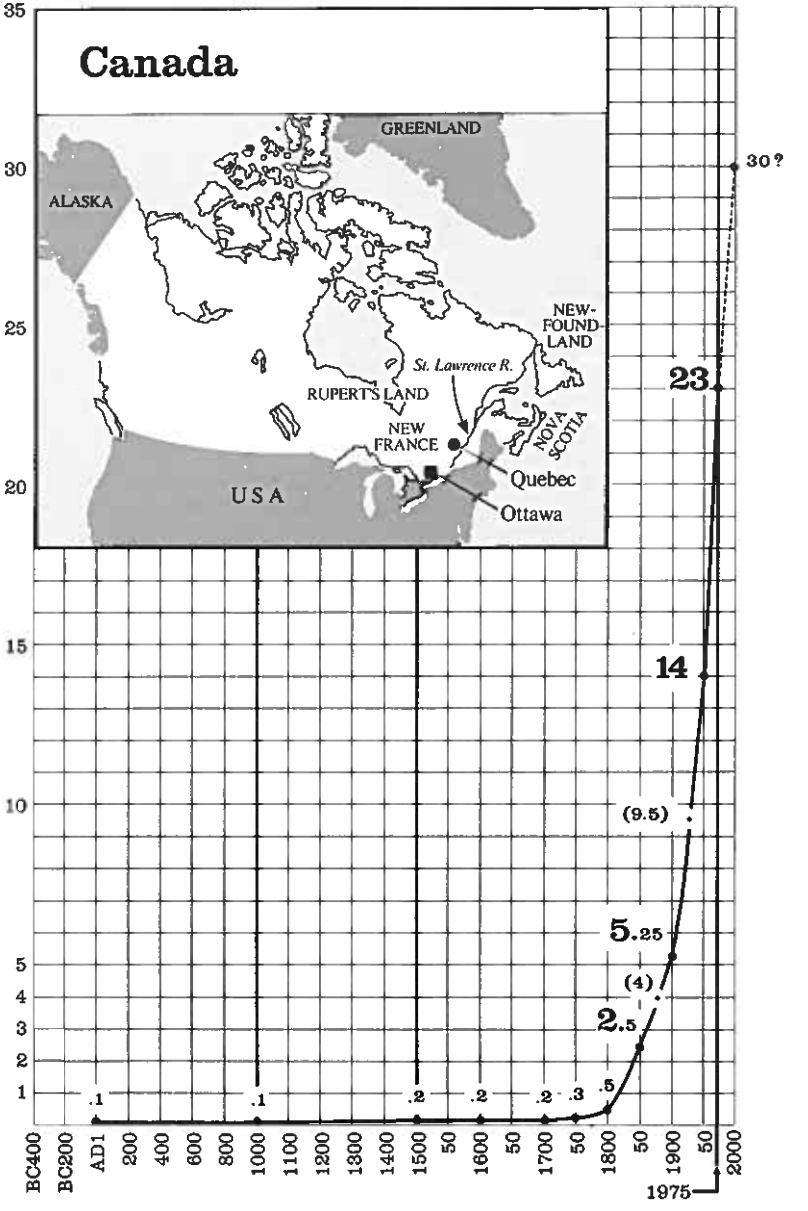


THE AMERICAS AREA 2

The Continental USA

9·4m km²
(including Alaska (1·52m km²) but excluding Hawaii (0·02m km²)

North America was not an important sector of the Amerindian world. Though it constituted half the continental land mass it contained only 1m people, 7% of the 1492 population of the Americas, figures which, if Canada is excluded, improve only marginally to 0·8m and 6% in a quarter of the total area. Culturally, too, the North American Indian was a backwoodsman: the savage splendours of Mexico and Peru had few counterparts in the simple hunting, fishing and semi-agricultural communities that were scattered across the present USA.

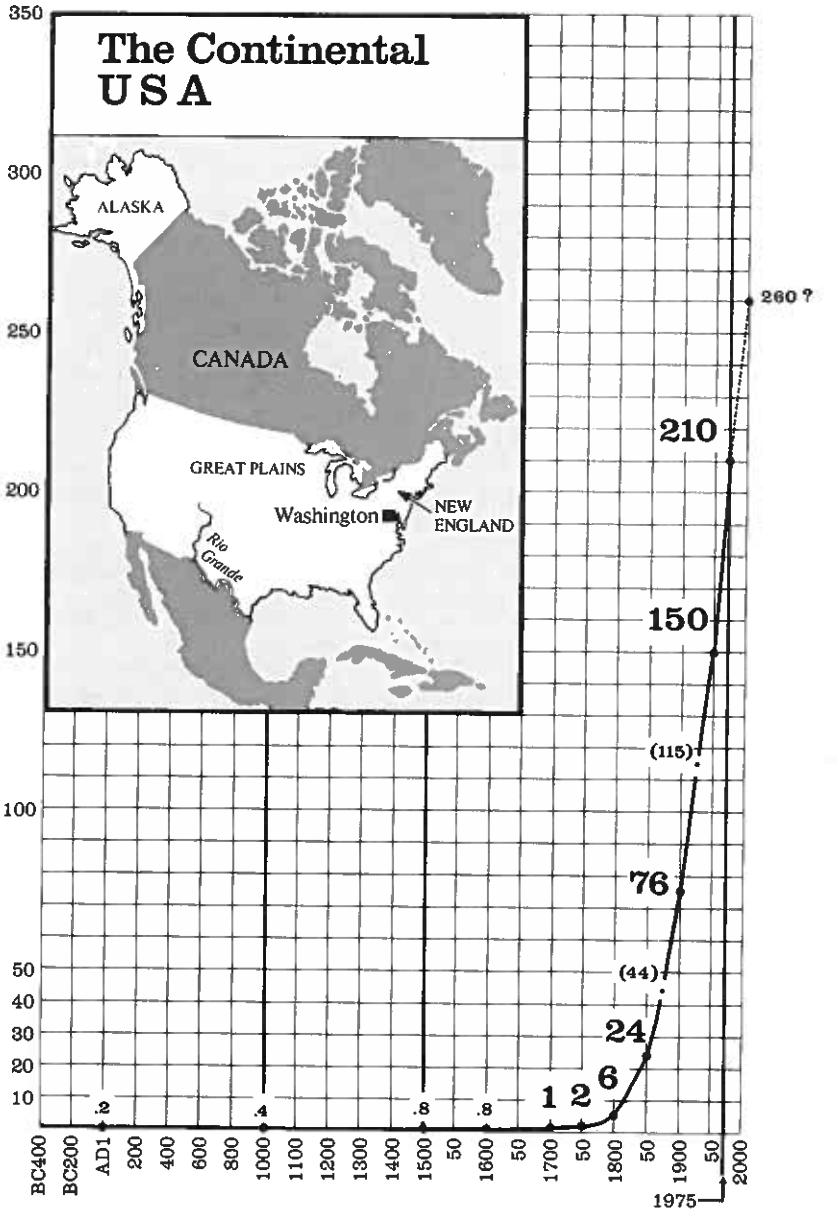
This very backwardness protected the North American Indian from exploitation in the first century of the post-Columban era. A few disastrous attempts at exploration convinced the Spaniards that there was little to be gained from attempting to expand their Empire in this direction. As the 16th century opened, the total white population of the area was limited to a few hundred bored Spanish soldiers garrisoning the forts of Florida and the outpost established in New Mexico.

Over the next half century the situation was transformed. In 1607 English settlers founded Jamestown and the colony of Virginia. In 1620 – by which time the population of Virginia had reached 2,400 – ninety-nine 'pilgrims' landed from the *Mayflower* and established the first of the New England colonies. By 1650 Virginia (with neighbouring Maryland) contained more than 20,000 people, New England 30,000. By 1700 the entire Atlantic seaboard from Maine to South Carolina had become British North America, a land of some 0·28m people.

The population in 1700 represented a transatlantic migration by some 0·1m, of whom 80% were British, 10% unwilling Africans. In the next century there was, at least as far as the white population was concerned, relatively less migration and a great deal more multiplication. Natural increase reached annual rates of 3%, sufficient to take the white total to 1m by 1750, 2m by 1775 and 4·3m by 1800. (Black slaves increased these figures by 0·2m, 0·5m and 1m respectively.) It was not for nothing that Malthus used the Americans as proof of the irrational reproductive capacity of human beings left to their own devices.

It was Ireland and not America that proved Malthus right, and it was the flight of the Irish from demographic disaster, at first merely threatening but then all too actual, that began to make the United States a land of immigrants again. Since natural increase began to fall from the early 19th century this immigration played an increasingly important part in sustaining the growth rate during the period up to the outbreak of the First World War. The Irish began arriving in America in significant numbers in 1820; after the famine of 1845 the movement became a stampede. Figures reached the 0·2–0·4m range in every one of the next five years.

Meanwhile one form of immigration had been definitely stopped, the landing



The Americas Area 2

of slaves. But though the prohibition of 1808 was effective as far as slave imports were concerned (there were no significant additions to the cumulative total of 0·4m after that date) slavery itself remained a legal and highly important institution in the southern states. By 1860 the Negro population of America amounted to 4·5m (90% of them slaves) and the southern states' determination to protect and when possible promote their 'peculiar institution' was imperilling the union. The nation, now 30m strong, faced its first major crisis.

The Civil War, which was fought with a population balance two to one in favour of the North, killed some 0·62m Americans (mostly by disease) and resolved the slavery question. It also marked a demographic turning point. Immigration, massive though it was, could no longer entirely counteract a fall in the native birth rate and overall growth dropped to 2·5% a year or less. Yet the absolute figures for immigration continued to be amazing. As the Irish flood dwindled it was replaced by new overflows from the equally poor lands of eastern Europe. Up to 1890, four out of five American immigrants came from north-west Europe; between 1890 and 1920 this fell to one in four, while two in three now came from the Russian and Austro-Hungarian empires or the Mediterranean lands. It was an extraordinarily various mixture of Europeans that pushed the annual figures to their all-time high of 1·285m in 1907.

The great days of immigration came to an end in the 1920s – indeed by the end of that decade more people were leaving America than were entering it. The expansion of the economy slowed down and hostility grew to an influx which, if it was white, was hardly WASP. In 1921 Congress limited immigration to a maximum of a third of a million a year, and three years later cut the figure again, to a sixth of a million. By that date two Americans out of every five were either foreign-born or had an immigrant parent, the net total of immigrants in the previous hundred years had reached 35m and these immigrants and their descendants accounted for half the total growth of the United States during the period.

It was not migration alone that changed the face of America in the century after 1825. A great drive westward reduced the East Coast population from 97% of the total in 1790 to 41% in 1910. This change, which was largely the work of white native-born Americans (the migrants went to the cities, the blacks stayed in the south), laid the basis for the present picture of population distribution. Considered state by state (see table) it is an extraordinarily even one, with the top three places now held by representatives of the three main population concentrations, California for the west, New York for the east and Texas for the south.

Though the heroic age of American demography came to an end with the First World War, migrations both external and internal have continued to play an important part in reshaping American society. The blacks have moved from the south to the cities of the north; their numbers have risen impressively from 9m in 1900 to 15m in 1950 and 25m today. External migrants have come from Puerto Rico and Mexico, producing communities with current populations of 1·75m and 7m respectively. The overall growth rate has received disproportionate support from these minority groups but even so has been falling steadily. It is now well below 1% per annum. This causes no distress, in fact 'zero population growth' is being actively promoted as a desirable goal. Education has certainly changed attitudes, though personal concerns are probably responsible for more of the fall than global worries: babies are now viewed as expensive consumer durables to be budgeted for rather than bought on impulse. And there's nothing wrong with that.

Primary Sources and Bibliography

The estimate of 1m Amerindians north of the Rio Grande – which breaks down into 0·2m in Canada, 0·05m in Alaska and 0·75 m in the rest of the continental USA – goes back at least as far as J. Mooney (Smithsonian Miscellaneous Collections *80, 7 (1928)); it seems to be generally accepted, though the California school of revisionists has issued a trial balloon in favour of 20m* (sic). *The present population of 0·6m represents a recovery from the all-time low of 0·5m reached in 1925.*

For the colonial period the records are comparatively speaking excellent and fix the population of the individual colonies within narrow limits. The first federal census was held in 1790 and there have been regular and reliable censuses through the US territory every ten years since then. The adjustments needed to compensate for boundary changes are, as the table shows, surprisingly small.

The Bureau of the Census pours out information; for instance Historical Statistics of the United States: Colonial Times to 1957 (*1960*). *Other basic sources are: W. S. Thompson and P. K. Whelpton,* Population Trends in the United States (*1933*); *C. and I. B. Tauber,* The Changing Population of the United States (*1958*); *D. J. Bogue,* The Population of the United States (*1959*); *H. T. Eldridge and D. S. Thomas,* Population Redistribution and Economic Growth, United States, 1870–1950; III (*1964*). *On migration there is E. P. Hutchinson,* Immigrants and Their Children: 1850–1950 (*1956*).

*A great deal of all this information has been well summarized in two places: J. Potter, 'The Growth of Population in America, 1700–1860', in *Glass and Eversley, and the chapter on population in L. E. Davis* et al., American Economic Growth (*1972*).

POPULATION OF THE CONTINENTAL USA

(in millions, to the nearest ten thousand, except for rounding of the totals)

	1700	*1775*	*1800*	*1850*	*1900*	*1950*	*1975*
Connecticut	0·02	0·20	0·25	0·37	0·91	2·01	3·10
Delaware		0·04	0·06	0·09	0·19	0·32	0·58
Georgia		0·03	0·16	0·91	2·22	3·45	4·93
Maryland	0·03	0·23	0·34	0·58	1·19	2·34	4·10
Massachusetts	0·07	0·34	0·58	1·00	2·81	4·69	5·83
New Hampshire	0·01	0·08	0·18	0·32	0·41	0·53	0·82
New Jersey	0·01	0·12	0·21	0·49	1·88	4·84	7·32
New York	0·02	0·19	0·59	3·10	7·27	14·83	18·12
North Carolina	0·01	0·25	0·48	0·87	1·89	4·06	5·45
Pennsylvania	0·02	0·27	0·60	2·31	6·30	10·50	11·83
Rhode Island	0·01	0·06	0·07	0·15	0·43	0·79	0·93
South Carolina	0·01	0·17	0·35	0·67	1·34	2·12	2·82
Virginia	0·07	0·50	0·89	1·12	1·85	3·32	4·97
Vermont (1791)			0·15	0·31	0·34	0·38	0·47
Kentucky (1792)			0·22	0·98	2·15	2·95	3·40

	1700	1775	1800	1850	1900	1950	1975
Tennessee (1796)			0·11	1·00	2·02	3·29	4·19
Ohio (1803)				1·98	4·16	7·95	10·76
Louisiana (1812)				0·52	1·38	2·68	3·79
Indiana (1816)				0·99	2·52	3·93	5·31
Mississippi (1817)				0·61	1·55	2·18	2·35
Illinois (1818)				0·85	4·82	8·71	11·15
Alabama (1819)				0·77	1·83	3·06	3·61
Maine (1820)				0·58	0·69	0·91	1·06
Missouri (1821)				0·68	3·11	3·96	4·76
Arkansas (1836)				0·21	1·31	1·91	2·12
Michigan (1837)				0·40	2·41	6·37	9·16
Florida (1845)				0·09	0·53	2·77	8·36
Texas (1845)				0·21	3·05	7·71	12·24
Iowa (1846)				0·19	2·23	2·62	2·87
Wisconsin (1848)				0·31	2·07	3·44	4·60
California (1850)				0·09	1·49	10·59	21·19
Minnesota (1856)					1·75	2·98	3·93
Oregon (1856)					0·41	1·52	2·29
Kansas (1861)					1·47	1·91	2·27
West Virginia (1863)					0·96	2·01	1·80
Nevada (1864)					0·04	0·16	0·59
Nebraska (1867)					1·07	1·33	1·55
Colorado (1876)					0·54	1·33	2·53
North Dakota (1889)					0·32	0·62	0·64
South Dakota (1889)					0·40	0·65	0·68
Montana (1889)					0·24	0·59	0·75
Washington (1889)					0·52	2·38	3·54
Idaho (1890)					0·16	0·59	0·82
Wyoming (1890)					0·09	0·29	0·37
Utah (1896)					0·28	0·69	1·21
Oklahoma (1907)						2·23	2·71
New Mexico (1912)						0·68	1·15
Arizona (1912)						0·75	2·22
Alaska (1959)							0·35
District of Columbia			0·01	0·05	0·28	0·80	0·72
Territories (whites only)			0·06	0·09	1·11		
TOTAL POPULATION OF THE 13 COLONIES / USA OF THE TIME	0·28	2·50	5·30	23·30	76·00	150·00	210·00
Whites in areas later annexed to the USA	0·02	0·05	0·06				
Indians	0·70	0·65	0·60	0·30			
Alaska	0·05	0·05	0·04	0·04	0·06	0·13	
TOTAL POPULATION WITHIN THE CONTINENTAL USA, PRESENT BOUNDARY	1·00	3·25	6·00	23·50	76·00	150·00	210·00

THE AMERICAS AREA 3

Mexico

2·0m km²

By 7000 BC the food-gathering of the Mexicans was beginning to assume the form of 'incipient cultivation', which meant that meso-America had started on the road to civilization. By the middle of the 2nd millennium BC this road had led to village farming and a population of 0·5m; by the middle of the 1st millennium BC to towns, an elaborate religious system and a population of 1m; and by the middle of the 1st millennium AD to city states with massive ceremonial centres, scribes capable of accurate calendrical inscriptions (if not quite of true writing) and a total population of 2m. The culminating point was reached in the 15th century with the Aztecs of Tenochtitlan. Their empire extracted tribute from more than half the 5m people then living in the area.

What happened next is like a time-warp story from science fiction. In 1518 the Spanish adventurer Hernan Cortez landed on the Gulf Coast to find himself in a world of pyramids and human sacrifice, of stone idols and flint knives. There could be no compromise between Catholic Spain and this fantastic neolithic structure. The Aztecs hurled themselves forward to be slaughtered by the arquebuses, swords and pikes of Cortez' tiny army. And also by disease. For even more deadly than their weapons were the new microbes the invaders had brought with them – smallpox, influenza and measles. Within a few years all Mexico was under Spanish rule and its population was falling fast.

The decline in native numbers continued until the beginning of the 17th century, when the figures stabilized at about two thirds of the pre-Columban maximum. It stayed much the same for the next two centuries, during which time the Spanish element increased from 0·1m (in 1600) to 1m (in 1800) and the Mestizo element grew to a similar total. During the 19th century there was a modest rise in the number of Indians (to 4m), a considerable increase in the number of Spaniards (to 2m) and a massive rise in the Mestizo population (to 7m, more than half the 1900 total of 13·5m). This ratio – 55% Mestizo, 30% Amerindian, 15% white – has proved remarkably stable, presumably because the tendency of the Mestizos to reclassify themselves as white balances their higher reproduction rate.

In the first half of the 20th century the growth in Mexico's population was rather slower than might have been expected: 100%, as compared, for example, with Central America's 130%. A short-term explanation of this is to be found in the events of the 1910s, when a bloody civil war and the influenza pandemic reduced the 1910 census population of 15·2m to one of 14·8m in 1921. Emigration to the USA also played its part. There were already 0·2m Mexicans living in the USA in 1910: by 1930 this *chicano* population (immigrants and descendants) numbered 1·5m. Since 1950 growth rates both at home and in the

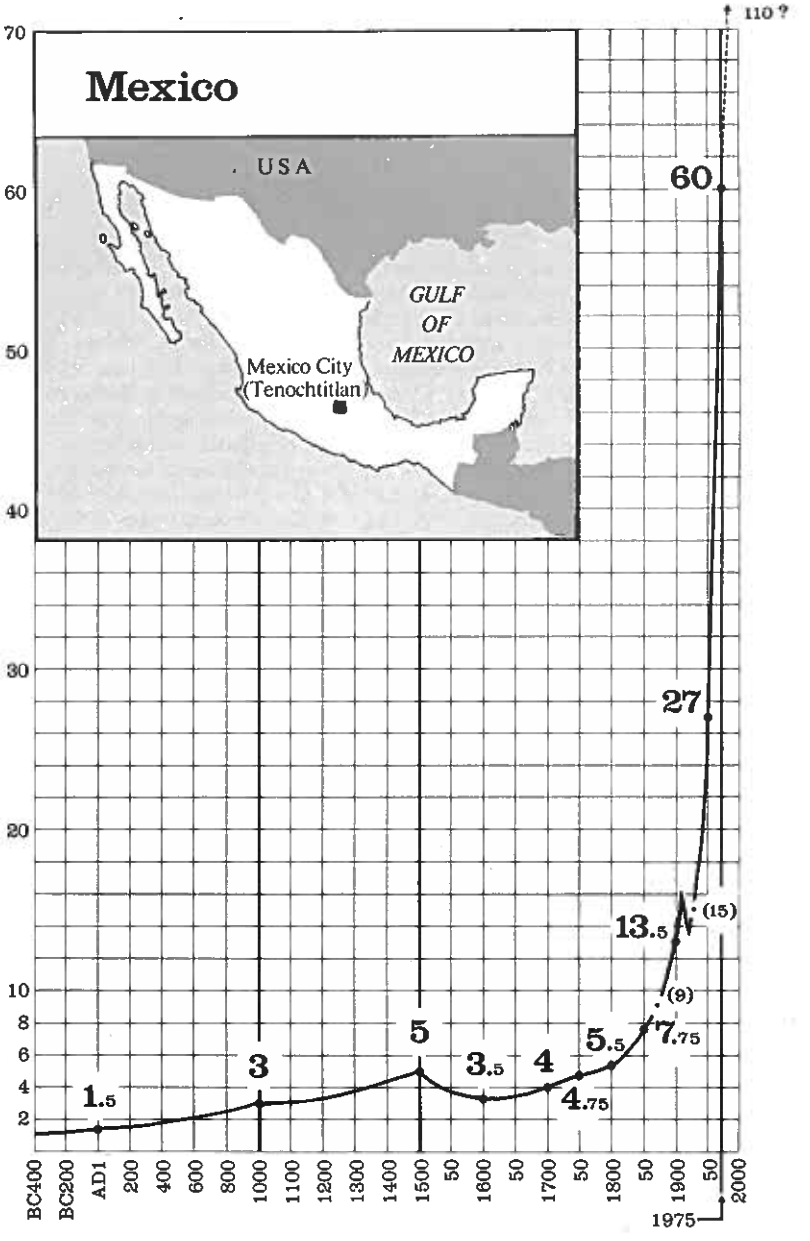
USA have been very high. The Mexican total has shot up to 60m, an increase of 125% in 25 years, and the number of *chicanos* has risen to 7m.

Primary Sources and Bibliography

The size of the population of Mexico in 1492 has lately become the subject of much academic argument. There are two basic approaches to the problem: one (exemplified by R. S. MacNeish on the Tehuacan valley in P. Deprez (ed.), Population and Economics *(1970)) seeks an average density figure by looking at the cultural, economic and archaeological evidence. The other utilizes post-Conquest documents, particularly taxation records (see S. F. Cook and W. Borah in* Essays in Population History I *(1971)).*

*The debate is summarized by * Sanchez-Albornoz and by * Stewart. The main proponents are * Rosenblat (besides the general reference see also his* La Población de America en 1492 *(1967)) and S. F. Cook and W. Borah (in* The Indian Population of Central Mexico 1531–1610 *(1960) and many other places). The point at issue is this: was the population in Mexico in 1492 no more than 5m (Rosenblat) or was it more than 30m (Cook and Borah)? Comparison with other parts of the world at comparable levels of culture leads us to throw in our lot with Rosenblat. This saves us from having to face the second improbability in the Cook–Borah thesis, a fall of 90% in the course of the 16th century. History knows of no population of comparable magnitude suffering such a catastrophic decline.*

After 1600 Mexico's population is relatively well documented and little debated. The primary sources are summarized by Cook and Borah in Essays in Population History I *(1971), while the* 1960 Census Summary Volume *gives a list of the results of the large number of counts and estimates. The first proper census was taken in 1895; others followed in 1900, 1910, 1921 and the series became regular and decennial in 1930.*



The Americas Area 3

THE AMERICAS AREA 4

Central America

0·52m km²

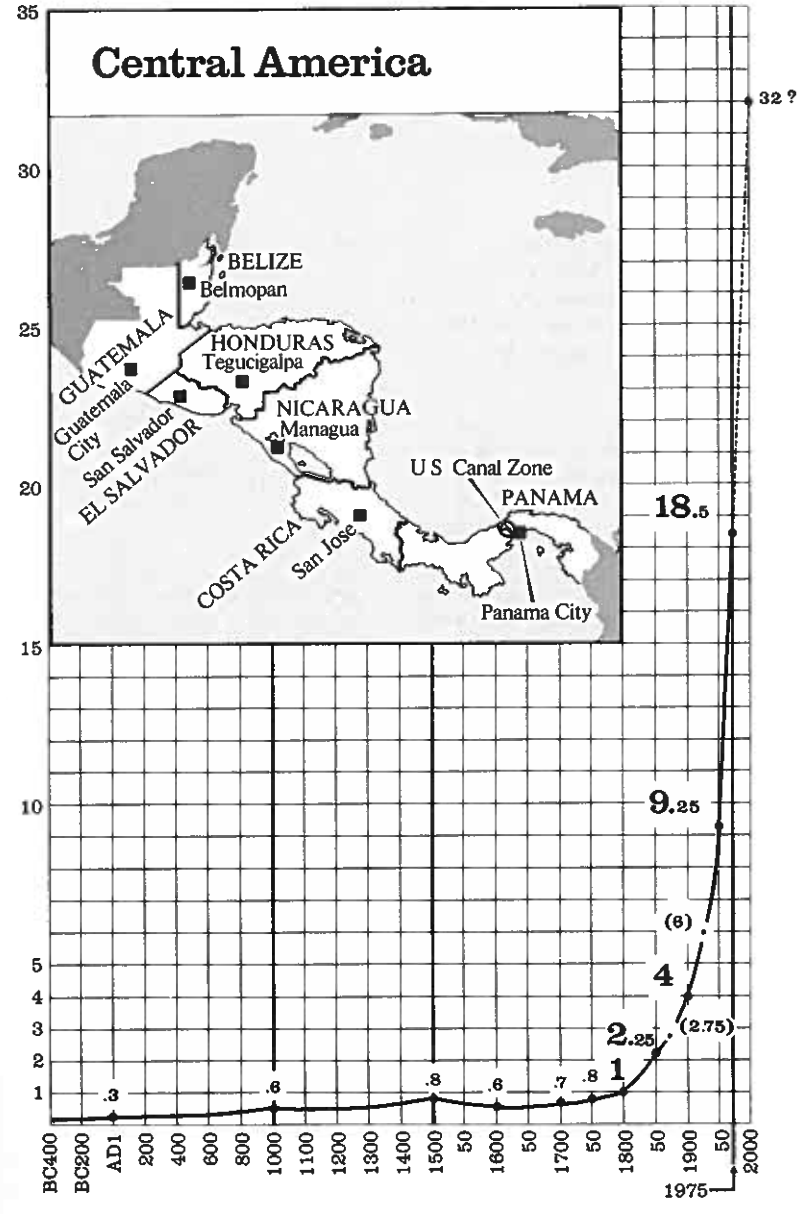
Despite its name and position Central America has usually been a backwater. The one exception occurred during the development of the northern, meso-American focus of Amerindian civilization to which the top tier of Central American states – particularly Guatemala and Belize, but to some extent El Salvador and Honduras as well – made a significant contribution. The population rise associated with this development was by American standards considerable: there was an increase from the 25,000 hunters and gatherers of 5000 BC to a peasantry numbering 0·3m by AD 1 and 0·5m by AD 800. By this last date the Maya, the people who lived in the South Mexican–Guatemalan region, had brought their culture to its 'classic' peak.

The Maya are famous for their pyramids and their dating inscriptions. Both activities came to an abrupt halt in the 9th century, which has led some Americanists to postulate a demographic collapse at this time. They find a cause for this either in an invasion by bloodthirsty Mexicans or, rather more plausibly, in soil exhaustion. Actually there is no reason to think that anything much happened except that people gave up a religious activity that had got completely out of hand. After all, the Egyptians stopped building pyramids presumably for just this sort of reason, not because there were too few of them to carry on.

A real disruption occurred at the beginning of the 16th century when the first conquistadors arrived on the scene. There were then about 0·8m natives in Central America, a number that European diseases and rapacity gradually reduced to less than 0·6m. The loss was made up by 1750, and by 1800 the population was over the million. It was heterogeneous now: a fifth Spanish, a fifth Mestizo and three-fifths Amerindian. Between these fifths a pocket has to be found for Africans though the total input of slaves into the area was small – no more than a few tens of thousands.

Since 1800 the story can be told in two words: multiplication and mixture. Growth rates that were about average for Latin America took the total population to nearly 4m by the beginning of the 20th century and to over 9m by 1950. Since then rates of increase as high as any in the world have boosted the figure to 18·5m. The steepest part of the curve may be past now – the last round of censuses turned in figures that were fractionally below expectation – but even so the prediction is still for a total of more than 30m by the end of the century.

The Central Americans of today divide their loyalties between six sovereign states and two semi-colonial anomalies – the American Canal Zone with a population of 45,000, and Belize (former British Honduras: population 10,000 in 1850, 40,000 in 1900 and 140,000 today). The table below shows



The Americas Area 4

the trends in the sovereign states since 1850. The only important point to note is the southward shift in the area's centre of gravity. Guatemala, which probably contained half the population total in the Mayan and early colonial periods and still had 40% in 1850, now has less than a third. The shift in ethnic proportions has been to a Mestizo majority (55%), with the remainder – apart from a sprinkling of blacks – dividing equally between whites and Amerindians.

THE POPULATIONS OF THE CENTRAL AMERICAN REPUBLICS SINCE 1850

	area (000 km²)	*1850*	*1900*	*1925*	*1950*	*1975*
Guatemala	109	0·9	1·4	2·0	3·0	5·5
El Salvador	21	0·4	0·9	1·4	1·9	4·1
Honduras	112	0·4	0·6	0·9	1·4	2·7
Nicaragua	130	0·3	0·5	0·7	1·1	2·1
Costa Rica	51	0·1	0·3	0·5	0·9	2·0
Panama	76	0·1	0·3	0·4	0·8	1·7

Primary Sources and Bibliography

For primary sources there are the usual Spanish taxation documents, 18th- and 19th-century estimates, partial counts and a not very impressive collection of late 19th- and early 20th-century censuses: Costa Rica 1864, 1892, 1927; El Salvador 1901, 1930; Guatemala 1880, 1893, 1921, 1940; Honduras 1881, 1887, 1901, 1905, 1910, 1916, 1926, 1930, 1935, 1940, 1945; Nicaragua 1906, 1920, 1940; Panama 1911, 1920, 1930, 1940. In 1950 censuses were held in all the republics, but the hope that this would lead to a single decennial census for the whole area has not been fulfilled. All of them have managed to hold two censuses since then, however; one in the early sixties and another in the early seventies.

M. J. MacLeod, Spanish Central America: A Socio-Economic History 1520–1720 *(1973), is good on the early data, and R. Barón Castro,* La Población de El Salvador *(1942), gives an excellent synthesis of one country's material. Unfortunately, comparable monographs for the others are lacking. For summary treatments see * Rosenblat, * Baron Castro and * Sanchez-Albornoz.*

THE AMERICAS AREA 5

The Caribbean Islands

0·24m km²

The Caribbean islands were among the last areas in the Americas to be settled by man. The first arrivals, the Ciboney, were simple food-gatherers who drifted on to the scene towards the end of the 1st millennium BC; there cannot have been more than a few thousand of them. They were followed early in the Christian era by the agricultural Arawak from the area of Venezuela. The Arawak gradually spread through the islands in the next thousand years, driving the Ciboney into the remote corners where the first Europeans found them. By then another Venezuelan people, the Caribs, were just beginning to move into the Windwards, but they contributed little to the 300,000 total that can be postulated for the West Indies at the end of the 15th century. This consisted almost entirely of Arawak, of whom there were perhaps 100,000 on Hispaniola and some 50,000 each on Cuba, Puerto Rica and Jamaica.

Into this island world, in 1492, came Columbus and his crew. Nowhere did the arrival of the European have a more devastating impact. To get the labour they needed the Spaniards soon resorted to brutal razzias: the simple patterns of native life were entirely disrupted and a system of near slavery imposed in their place. Even more important, the diseases the Europeans had brought with them repeatedly decimated this wilting society until by the 1570s its numbers had been reduced to less than a tenth of their original level. Today a few thousand Dominicans make dubious claim to Amerindian ancestry but effectively the original Caribbean population had dwindled to zero by the mid 17th century.

The second quarter of the 17th century saw the final collapse not only of the native population of the Caribbean but of the Iberian claim to ownership of the whole New World. In the Caribbean the British took St Kitts and Barbados, the French Guadeloupe and Martinique and the Dutch Curaçao: by 1650 there were 50,000 Europeans in the area, a third of them British, nearly a third French and no more than a third Spanish, though Spain still held all the larger islands. As an attempt at direct settlement the invasion was a failure. The favoured crop, tobacco, grew better in North America and the second choice, sugar, needed slave labour, not European farmers. As the Negroes were shipped in the Europeans left. The result was a big increase in numbers (from 0·2m in 1650 to 0·5m in 1700) but a fall in the European component that was not merely proportional (from 75% to 20%) but absolute (from 150,000 to 100,000). The repopulation of the Caribbean islands with a predominantly African stock was already achieved by the beginning of the 18th century.

Politically and economically the 18th century was a period of relative stability. By its opening the British and

French had added a major island apiece to their Caribbean empires: the British Jamaica and the French Haiti (Western Hispaniola). The slave populations of these two were built up from almost nothing to 0·3m and 0·5m respectively by 1800 (as against white populations of 20,000 and 30,000), which means that they took nearly half the Negroes imported in the course of the century, say 1·25m out of 2·75m. For the slave populations were not self-sustaining: they grew only because the input was more than sufficient to make up for the loss inflicted by cruel overwork, chronic undernourishment and an unfavourable sex ratio. This is, indeed, quite obvious from the fact that it took an input of nearly 3m during the 18th century to obtain a growth in numbers of 1·5m. Nowhere else did the African suffer quite so badly as this.

The slave trade was suppressed and slavery itself abolished in the course of the 19th century. Another 0·75m Africans were landed in the Caribbean before this state of affairs was consummated: they were mostly brought in by Spanish shippers, who took advantage of the lack of competition to expand their trade in its last few decades. Once freed, the African's natural talent for reproduction soon asserted itself and on all the islands population totals started to mount. In the case of Cuba the increase was boosted by substantial immigration of Spaniards (0·75m) and black labourers from the poorer islands (0·25m, mostly Haitians) which helped to keep this, the largest of the Antilles, well ahead of the rest in population terms. It also kept the upper half of Cuba's population genuinely white. By contrast Haiti, which at the end of the 18th century was the site of the Caribbean's only successful slave revolt, has been 100% black since then and so poor as to be unable to sustain the rates of increase achieved elsewhere.

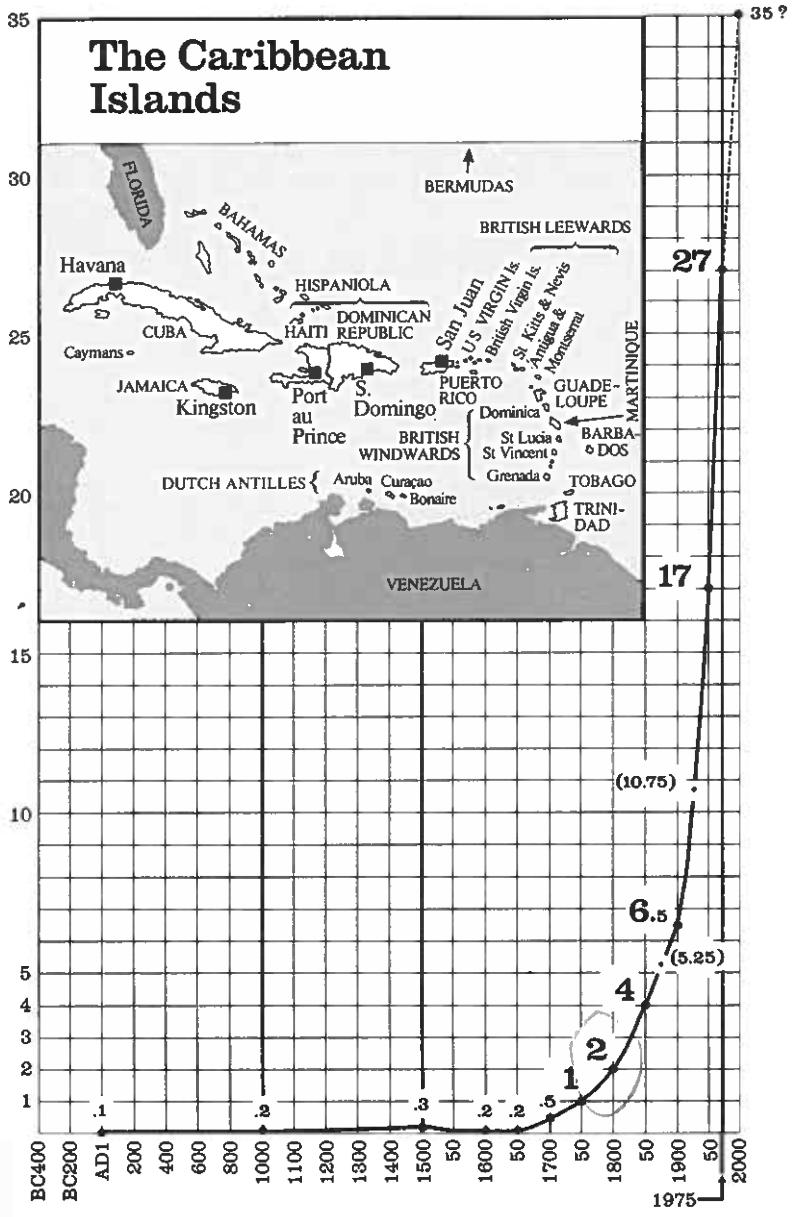
In this century there has been substantial emigration from the Caribbean to the USA (where there are presently 0·75m people of Cuban origin and 1·75 Puerto Ricans) and Britain (0·75m, mostly Jamaicans) which has gone some way towards mitigating the problems of increasing numbers and limited resources. The figures for the various islands and island groups are given in the table on page 301, together with estimates for the earlier periods and a rough indication of the present ethnic composition. The non-African percentage is mostly white except in the case of Trinidad and Tobago where it is almost entirely Asian, the result of the import of indentured labourers from India in the period 1838–1917.

Primary Sources and Bibliography

The size of the pre-Conquest population of the West Indies is hotly debated between A. Rosenblat (in La Población de America en 1492 *(1967)), whose estimates are used here, and S. F. Cook and W. Borah (in* Essays in Population History I *(1971)), who suggest 7m or 8m for Hispaniola alone! If anything, Rosenblat's 0·3m for the area is probably a bit on the high side.*

For the colonial centuries there is an embarras de richesse *because it was both necessary and easy to count the small embattled European populations and the slaves they used.*

For Cuba see J. Perez de la Viva in Cahiers des Amériques Latines, série Science de l'homme, *8, 1973, and the historical section of the 1899 census (reprinted in the 1907 and 1919 censuses). There doesn't seem to be much of use to the historical demographer*



on either half of Hispaniola or for Puerto Rico since the US War Department Report of 1900 (Vol. I, Part 13). For Jamaica and the British Lesser Antilles see R. V. Wells, The Population of the British Colonies in America before 1776 *(1975), B. Edwards,* History of the West Indies *(1793), and G. W. Roberts,* The Population of Jamaica *(1953).*

*The best general survey is by * Rosenblat, though his figure of 0·65m for 1650 – derived from * Wilcox – is too high. For the slave trade see * Curtin.*

AREAS AND POPULATIONS OF THE CARIBBEAN ISLANDS

	Area (*in km²*)	*Population* 1650	1700	1750	1800	1850	1900	1925	1950	1975	*African Component*
Bahamas	0·01					0·03	0·05	0·06	0·08	0·20	90%
GREATER ANTILLES											
Cuba	0·12	0·03	0·10	0·15	0·40	1·20	1·60	3·40	5·50	9·30	33%
Jamaica [1]	0·01		0·05	0·17	0·30	0·40	0·74	0·92	1·40	2·00	90%
Haiti	0·03	0·03	0·05	0·19	0·50	0·90	1·30	2·50	3·40	4·60	100%
Dominican Rep.	0·05	0·07	0·10	0·13	0·15	0·20	0·70	1·10	2·30	4·70	75%
Puerto Rico	0·01		0·01	0·05	0·15	0·50	1·00	1·40	2·20	3·10	50%
LESSER ANTILLES	0·02										
US Virgin Is.			0·01	0·03	0·04	0·04	0·03	0·02	0·03	0·09	90%
Br. Leewards [2]		0·01	0·03	0·07	0·10	0·09	0·10	0·08	0·11	0·15	90%
Guadeloupe			0·02	0·05	0·11	0·13	0·18	0·24	0·21	0·35	90%
Martinique			0·02	0·08	0·11	0·13	0·20	0·23	0·23	0·36	80%
Br. Windwards [3]			0·01	0·03	0·08	0·11	0·18	0·16	0·28	0·39	90%
Barbados		0·04	0·08	0·08	0·08	0·14	0·18	0·16	0·21	0·24	80%
Trinidad and Tobago				0·02	0·08	0·08	0·27	0·38	0·63	1·10	60%
Neth. Antilles [4]			0·01	0·03	0·04	0·03	0·05	0·06	0·16	0·24	90%
Bermudas [5]				0·01	0·01	0·01	0·02	0·03	0·04	0·06	66%
TOTALS	0·24	0·20	0·50	1·10	2·10	4·00	6·60	10·70	16·80	27·00	66%

1. Including the Caymans
2. British Virgin Is., St Kitts and Nevis, Antigua and Montserrat
3. Dominica, St Lucia, St Vincent and Grenada
4. Aruba, Curaçao and Bonaire
5. The Bermudas lie in the Atlantic not the Caribbean but are included here for convenience: for their position see Fig. 4.1

THE AMERICAS AREA 6

Colombia, Venezuela and the Guyanas

2·52m km²

6a	**Colombia**	**1·14m km²**
6b	**Venezuela**	**0·91m km²**
6c	**The Guyanas**	**0·47m km²**

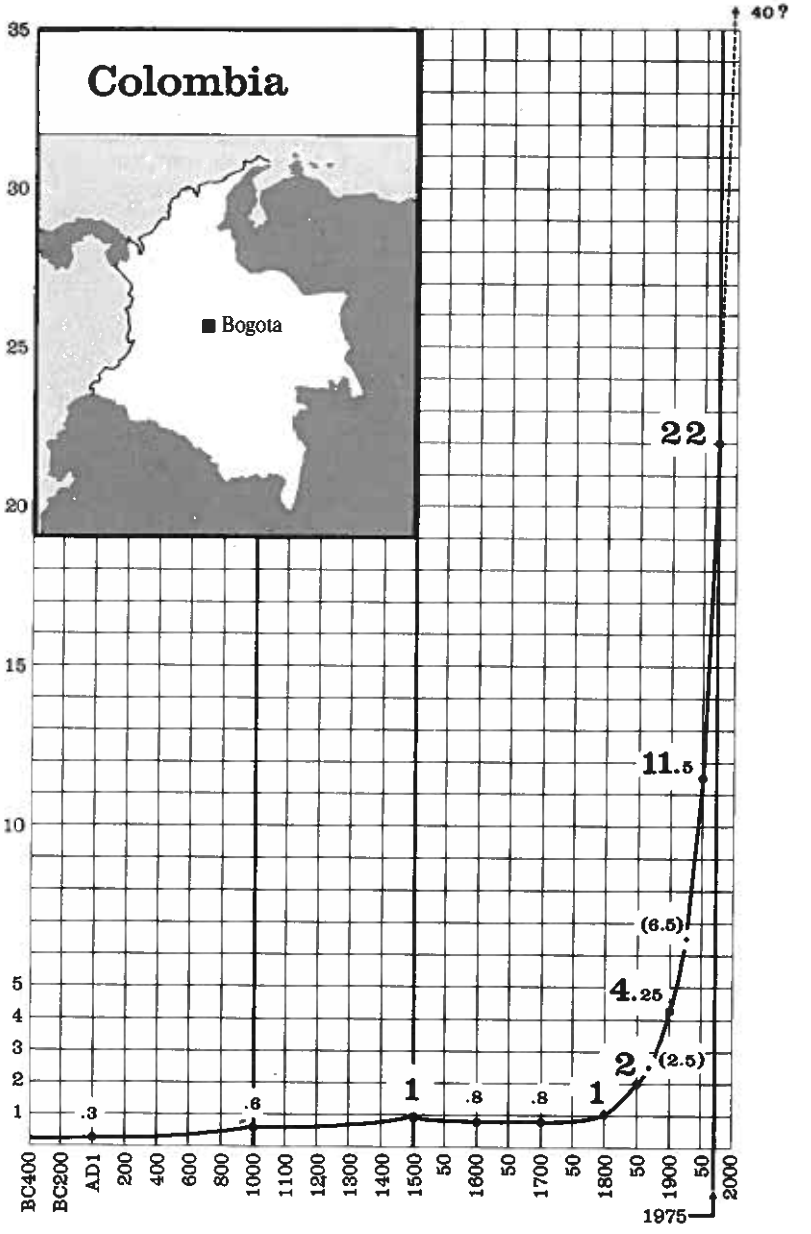
The cultural gradient of this area in pre-Spanish times was from west to east, western Colombia being on the fringe of the Andean zone that eventually produced the Inca Empire. It is in this western section that the area's first experiment in agriculture took place (*c.* 5000 BC) and here that the first farming villages appeared (during the course of the 2nd millennium BC). When the Europeans arrived the level of this peasantry was, by Amerindian standards, relatively sophisticated. By contrast the east was sparsely populated with simple food-gatherers. This explains why Colombia had always contained two thirds of the overall population and specifically 1m of the 1·5m living in the area in AD 1500.

The Spanish conquest brought its usual and awful consequences, compounded in this part of Latin America by forced labour in the mines. By 1650 the native population had fallen by a third. In terms of pure-blooded Amerindians it has continued to fall ever since, until today they represent only a per cent or two of the total population. However, from the 17th century the growth of the Mestizo population has compensated for this decline and secured the continuance of a strong non-European element in the population. The total never fell far, for besides the Mestizo we have to count the white (mainly Spanish) settlers and their black slaves, each group numbering some 0·1m by the later 17th century.

During the 18th century the white population grew rapidly – largely by natural increase – so that by the time independence was gained in the early 19th century it accounted for about a quarter of the total. The black and Mulatto populations, a scattered and miscellaneous group of runaways and slaves in various degrees of freedom, contributed another eighth. The rest were Mestizos or Amerindians.

Since independence the populations of the two successor states, Colombia and Venezuela, have continued to develop mainly by natural increase. The only major exceptions to this generalization are two brief outbursts of migration from Europe (and Colombia) to Venezuela, the first immediately before the Second World War and the second immediately after. These added nearly 0·5m people – mainly Iberians and Italians – to the Venezuelan population and helped the white element maintain its traditional one fifth share of the whole.

East of the two big states are three little ones, the Guyanas, respectively British, Dutch and French in colonial days and now known as Guyana,



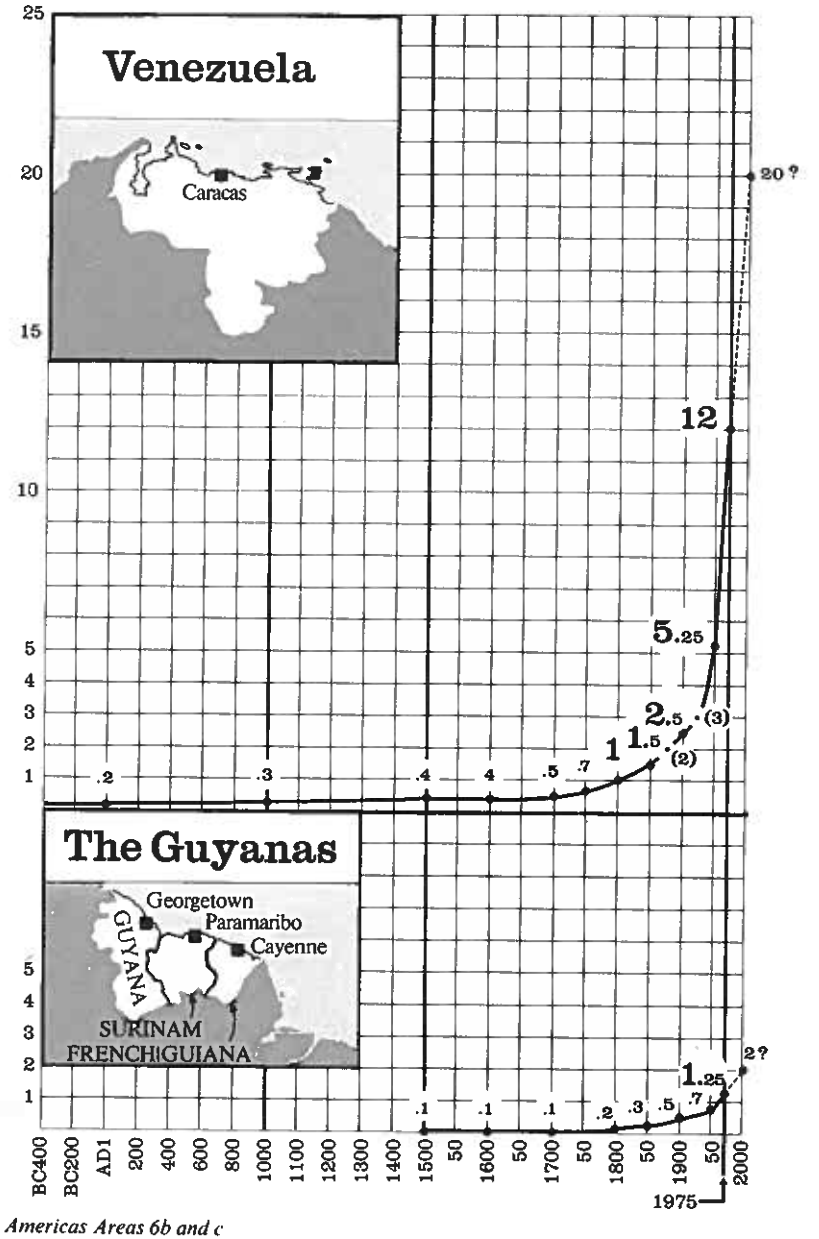
The Americas Area 6a

Surinam and (this one still undecolonized as yet) French Guiana. Their populations remained trifling until the introduction of a plantation economy in the 19th century. This was dependent on Asian indentured labour – in the Dutch case brought from both India and Indonesia, in the British case from India, with 0·24m imported between 1838 and the end of the system in 1917. The result in both Guyana and Surinam is racial heterogeneity of an almost unique complexity. Guyana's 0·8m population is 50% Asian Indian, 30% black, 5% Amerindian, 2% white and 1% Chinese, with the rest mixed. Surinam's 0·4m is 40% black, 40% Asian Indian, 16% Indonesian, 2% Chinese, 1% white and 1% Amerindian. French Guiana contains only 60,000 people altogether.

Primary Sources and Bibliography

The primary sources are the usual ones for Latin America: vague estimates in the 16th century, taxation documents in the 17th and 18th, then counts and censuses. Census years are: Colombia 1778, 1782, 1803, 1810, 1825, 1835, 1843, 1851, 1864, 1870, 1905, 1912, 1918, 1928, 1938, 1951, 1964, 1974; Venezuela 1787, 1838, 1844/7, 1854, 1857, 1873, 1881, 1891, 1920, 1926, 1936, 1941, 1950, 1961, 1971; Guyana 1841/4, decennially 1851–1931 (except 1901), 1946, 1960, 1970; Surinam 1964.

** Sánchez-Albornoz has a summary of work done on the aboriginal population of Colombia. As usual we follow * Rosenblat for pre-Conquest figures, which are close to those in J. H. Steward,* Handbook of South American Indians, *Vol. 5 (1949). Post-Conquest figures are based on * Sánchez-Albornoz, * Rosenblat and * Barón Castro. See also F. Brito Figueroa,* Historia económica y social de Venezuela *(1966), T. L. Smith on Colombia in* Journal of Inter-American Studies *8, 2 (1966), and J. L. de Lannoy and G. Perez* Estructuras demograficas y sociales de Colombia *(1961). For Guyana see D. Nath,* A History of Indians in Guyana *(1970), and for Surinam H. E. Lamur,* The Demographic Evolution of Surinam 1920–1970 *(1973).*



The Americas Areas 6b and c

THE AMERICAS AREA 7

Brazil

8·51m km²

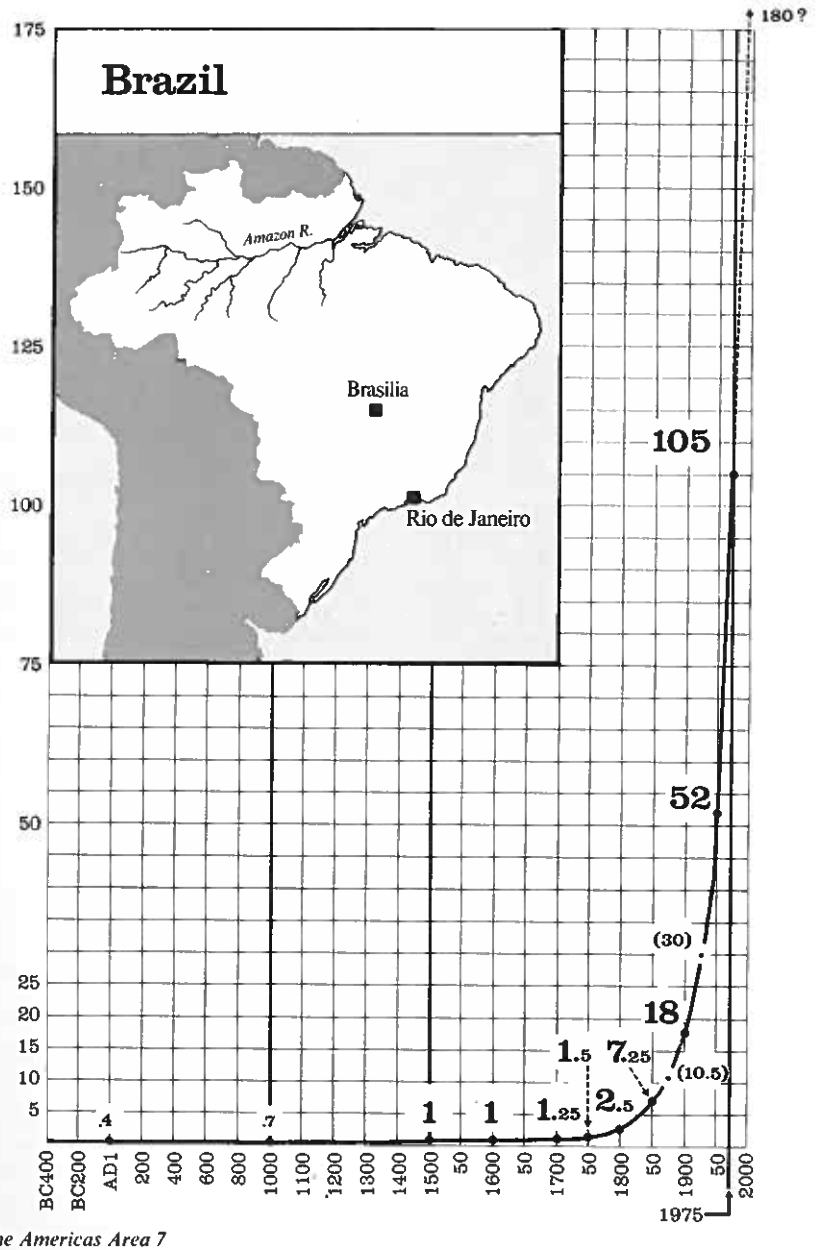
When the Portuguese discovered Brazil at the beginning of the 16th century the whole vast area contained no more than 1m natives. Settled agriculture and the relatively high densities of population associated with it were almost entirely limited to the lower reaches of the Amazon; in the rest of the country the people depended more on gathering than growing and the density figures were correspondingly low. In the years immediately following the arrival of the Portuguese this low density operated in the natives' favour: they were so scattered that neither the newcomers nor their microbes could easily get at them. However the pattern of contact, decline and destruction was only postponed. As white colonization progressed, so native numbers fell – to 0·7m in 1700, 0·5m in 1800 and 0·2m today.

Brazil is the enduring monument to Portugal's century of maritime glory but most of the effort made by the mother country at the time went into the creation of its empire in the East. It has been calculated that to maintain a force of 10,000 men in the East cost the lives of 100,000 Portuguese in the course of the 16th century, a heavy drain on a country with a total population of only 1·25m–2m. By contrast the settlement of Brazil was achieved with a net outflow (up to AD 1600), of no more than 15,000.

For a long time the number of Portuguese settled in Brazil remained very small. In 1550 the white population was only 15,000 and it took to the end of the 16th century to double. By 1650 it was about 70,000. These settlers ran a plantation economy manned first by virtually enslaved Indians, then, as these unfortunates died off, by specially imported and entirely enslaved Africans. In 1650 the latter outnumbered their white masters two to one. The total population remained at the million mark as the growth of white and black populations did no more than offset the fall in the number of Amerindians.

At the end of the 17th century a gold strike injected a bit of speed into this sleepy situation. There was substantial internal movement of population, a wave of new immigration from Portugal and a step-up in slave imports. This last was no flash in the pan: slave imports were to continue at a very high level till the mid 19th century. Indeed it was only after nearly everyone else had withdrawn from the Atlantic slave trade that the Brazilian end of it recorded its peak figures: a third of a million landings in the 1820s and the same again in the 1840s. It is this prolongation of the trade through the first half of the 19th century that puts Brazil at the top of the table of slave-importing countries. The final sum adds up to 3·5m Africans for the period 1550–1850, or 40% of the entire Atlantic traffic.

Brazil became an independent state in 1822. The extent to which its society rested on slavery is shown by the population figures for that date. Out of



The Americas Area 7

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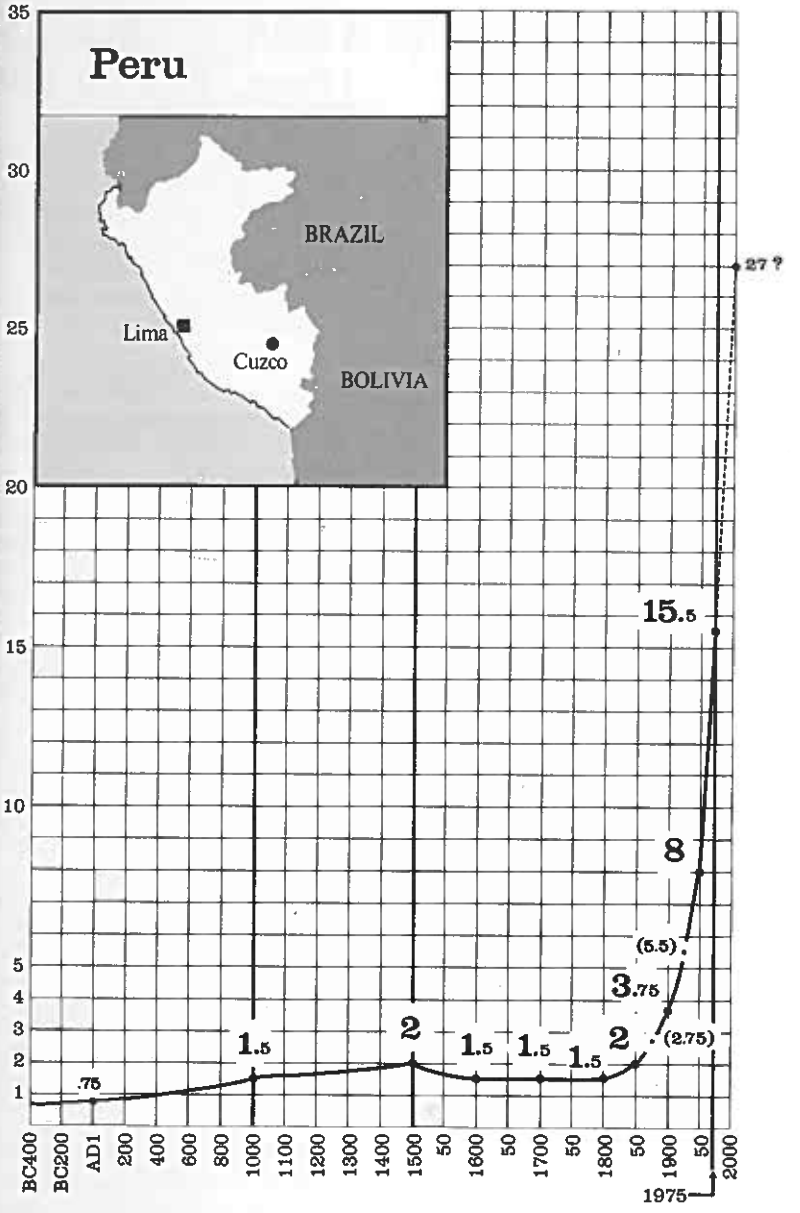
a total of 4m more than 2m were black slaves, only 1m free whites. Amerindians were down to 0·4m, the remaining 0·2m being free blacks and Mulattos.

Since independence two things have happened: the total population has grown very fast and the white element, because of massive immigration, has grown even faster. From 1m (25%) at independence the whites have officially increased to 60m (55%) and if this states the genetic truth – because one who can get away with it call self white – it doesn't do so by than 10%. Blacks by contrast are to an official figure of 15% (mo (25%) in reality) with mulatto mestizos sharing the remainder e between them.

Primary Sources and Bibliography

The census years are 1775, 1798, 1808, 1822, 1872, 1890, 1900, 1920, 1940 and tenth year since then. The early censuses need careful interpretation; this (and else) is supplied by D. Alden in Hispanic American Historical Review *43, 2 (Early data, including apparently good figures for the colonists, are quoted b Hugon in* Demografia Brasileira *(1973) and by * Rosenblat, who gives his estimates for 1650, 1570 and 1492; he is again at the low end of the range of est of the pre-Conquest population, which runs from 1m to 3·5m.*

Racial proportions are also given by Rosenblat (there is a good official estim 1818), and the trends discussed by T. Lynn Smith in Brazil: People and Instit *(1972). A great deal of work has been done on slavery in Brazil: * Curtin provid best numerical introduction and represents the modern consensus. Migration sinc is covered by both Hugon and Lynn Smith, and net estimates are quoted by * Sá Albornoz.*



e Americas Area 8b (text overleaf)

THE AMERICAS AREA 8 Ecuador, Peru, Bolivia and Paraguay

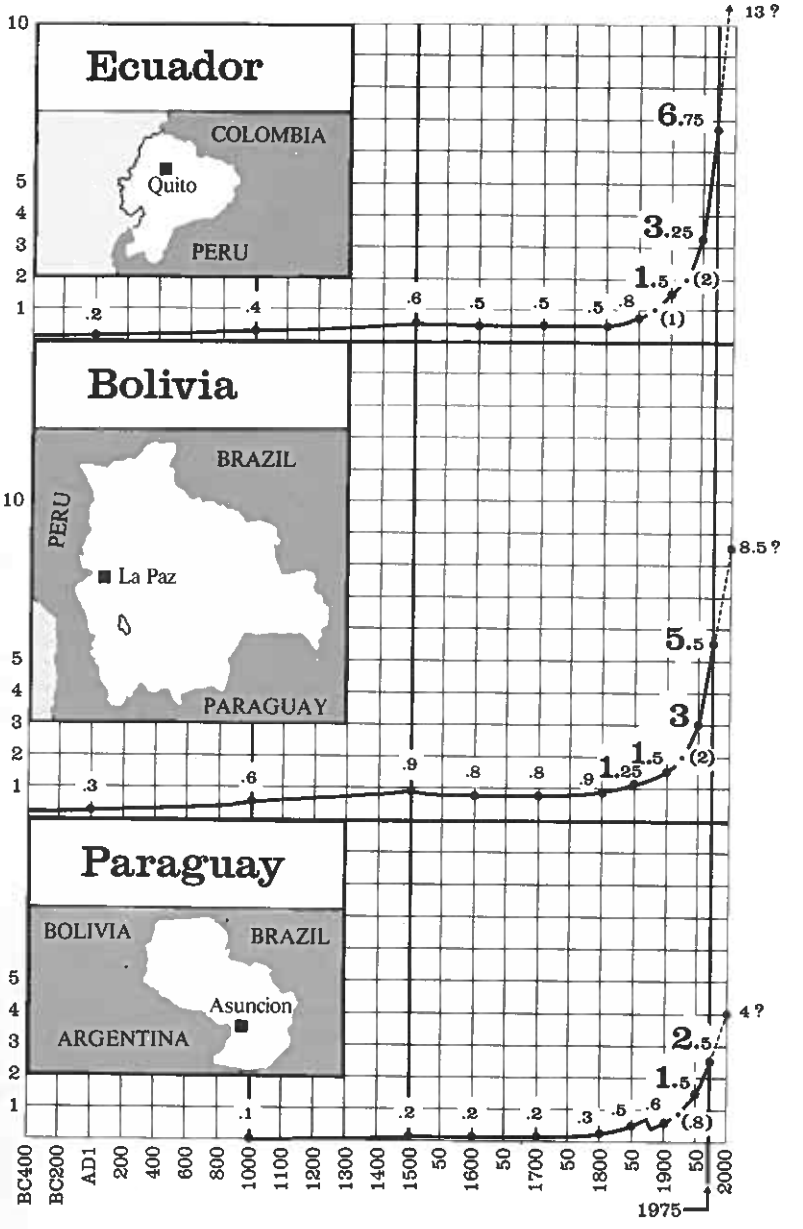
3·08m km²

8a	**Ecuador**	**0·28m km²**
8b	**Peru**	**1·29m km²**
8c	**Bolivia**	**1·10m km²**
8d	**Paraguay**	**0·41m km²**

Agricultural experiments began in the coastal zone of Ecuador and Peru as early as 5000 BC. They led to the development of a village-based farming economy in the 2nd millennium BC and, about the beginning of the Christian era, to the creation of the second major focus of Amerindian civilization, the Andean culture sequence, of which the final expression was the Inca Empire of the 15th century AD. In population terms this means totals of 40,000 in 5000 BC, 0·75m in 1000 BC, 1·25 in AD 1 and 3·75m in AD 1500. Inca rule, which spread out from the capital city of Cuzco in the course of the 15th century, eventually covered the whole area bar the sparsely inhabited east of Bolivia and the territory of Paraguay: the last of the Incas, Atahualpa, received the homage of more than 3m natives.

The destruction of the Incas by a handful of Spanish adventurers was followed by the decimation of their subjects. Brutality, cultural shock and, most important, disease brought the Amerindian population down to 2·5m by the mid 17th century and to about 2m by the late 18th century. However, there was not the total demographic collapse that occurred in other, less culturally advanced areas and eventually, around 1800, the native population began to increase again. In 1900 the number of Amerindians rated as pure blooded had risen to 3m; today it is reckoned at 12m.

Not only have the natives of the Andean zone survived as a people, they have always kept a numerical superiority over their conquerers the Spaniards. From 50,000 in 1600 the Spanish population increased to 150,000 in 1750 and 0·5m in the 1820s, the era of independence. By 1900 there were roughly 2m people of Spanish descent in the area, today there are more than 9m. The Mestizos, the third component in the population, have increased in the same proportion and to much the same final figure. The only country to show a different pattern from this Indian : Mestizo : white ratio of 4 : 3 : 3 is Paraguay, where the aboriginal population of 150,000 Indians has dwindled to a mere 30,000 today and the split is between Mestizos (75%) and whites (25%). Paraguay also deserves special mention for the spectacular population drop it suffered in the War of the Triple Alliance against Argentina, Brazil and Uruguay: between 1865 and 1870 two thirds of the adult male population either died or disappeared and total numbers dropped from 0·6m to 0·3m.



The Americas Areas 8a, c and d

Since the original injection of conquistadors, movement in and out of Area 8 has been of relatively little importance, at least when judged by American standards. Peru imported a small number of black slaves, less than 0·1m, and in 1850–75 brought in indentured Chinese labourers to about the same total: neither race makes a significant contribution to present-day demography.

Primary Sources and Bibliography

The Incas were given to counting people and things by making knots in bits of string but as no one knows exactly what their system was, the few records that survive are of no present use. The early colonial period has left the usual collection of guesses, estimates, tax records and ecclesiastical soul counts: head counts start in the 18th century. The census record is: Peru, 1777, 1785, 1791, 1795/6, 1813, 1836, 1850, 1862, 1876, 1940, 1961, 1972; Ecuador, 1905, 1950, 1962, 1974; Bolivia, 1831, 1854, 1882, 1900, 1950, 1972; Paraguay, 1886, 1899, 1935, 1950, 1972.

The population of the Inca Empire is subject to as wide a degree of estimation as that of pre-Conquest Mexico. Most older estimates varied between 4m and 10m, but recently a figure of 39m has been put forward by D. N. Cook in Anuario del Instituto de Investigaciones Historicas *8 (1965). Again we prefer * Rosenblat's much lower figure; his estimate for Paraguay, though, seems too high.*

Peru is magnificently served by its historical demographers. Among the more recent works are an excellent compendium by the Centro de Estudios de Población y Desarrollo, Informe demografico Peru 1970 *(1972); G. Vollmer,* Bevölkerungspolitik und Bevölkerungsstruktur im Vizekönigreich Peru zu Ende der Kolonialzeit 1741–1821 *(1967), and Cook's article. G. Kubler's work in English,* The Indian Caste of Peru 1796–1940 *(1952), is still very useful. W. Steward,* Chinese Bondage in Peru *(1970), covers this interesting episode. See also D. M. Rivarola and G. Heisecke,* Población, urbanización y recursos humanos en el Paraguay *(1970) and A. Averanga Mollinedo,* Aspectos generales de la población boliviana *(1956).*

THE AMERICAS AREA 9

Argentina, Chile and Uruguay

3·71 km²

9a	**Argentina**	**2·78m km²**
9b	**Chile**	**0·76m km²**
9c	**Uruguay**	**0·18m km²**

9a and b Argentina and Chile

In AD 1500 the Amerindian cultures of the southern fifth of South America could not have been set out more methodically if a professor of anthropology had done it. In the north of Chile and the north-west of Argentina were peasants living on the outskirts of the Inca Empire; down in the far south some of the most primitive people ever recorded eked out a precarious existence in the wastes of Patagonia and Tierra del Fuego. Between these extremes lived men at various intermediate stages of hunting and gathering, cultivation and agriculture. The total population amounted to something under 1m, a number that translates into a density figure of the low order of magnitude characteristic of pre-Columban America.

The Spanish occupation of this area was never complete and the number of Spaniards in it grew only slowly – from 70,000 in 1650 to 0·3m at independence (which came in 1810 in Argentina and in 1818 in Chile). The number of Indians declined over the same period – from 0·8m in 1650 to 0·35m in 1825 and, though by that date there were also 0·75m Mestizos to be reckoned with, both Argentina and Chile entered the era of independence markedly underpopulated. Even in 1850 they had less than 2·5m people between them and it is understandable that both did their best to encourage immigration from Europe. Only Argentina had any substantial success. While Chile has never recorded more than 5% of its population as foreign-born at any census, Argentina's 1914 census produced a figure of 30% and most censuses have reported more than 10%. All in all, since 1850, Argentina has received at least 2·5m net immigrants; Chile barely 0·2m.

The resulting differences between Chile and Argentina are substantial. The population of Argentina has multiplied 40-fold since independence, that of Chile only 10-fold. Moreover the white population of Argentina has risen disproportionately: from 0·15m in 1825 to 15m in 1950. (The bulk of Argentina's immigrants arrived between 1880 and 1950, the peak years being the 1910s. Nearly half of them came from Italy, a third from Spain.) The white population of Chile during the same period has increased only in proportion: from 0·3m to 3m. Consequently Argentina is now a nation of predominantly European origins, with barely 10% of its population claiming an Indian or a mixed ancestry, while Chile is a nation divided

almost equally between whites and those of Indian or mixed descent. In both countries mixed is a much more important category than Indian: there are only about 0·3m reasonably pure-blooded Indians left today, most of them in Chile.

Primary Sources and Bibliography

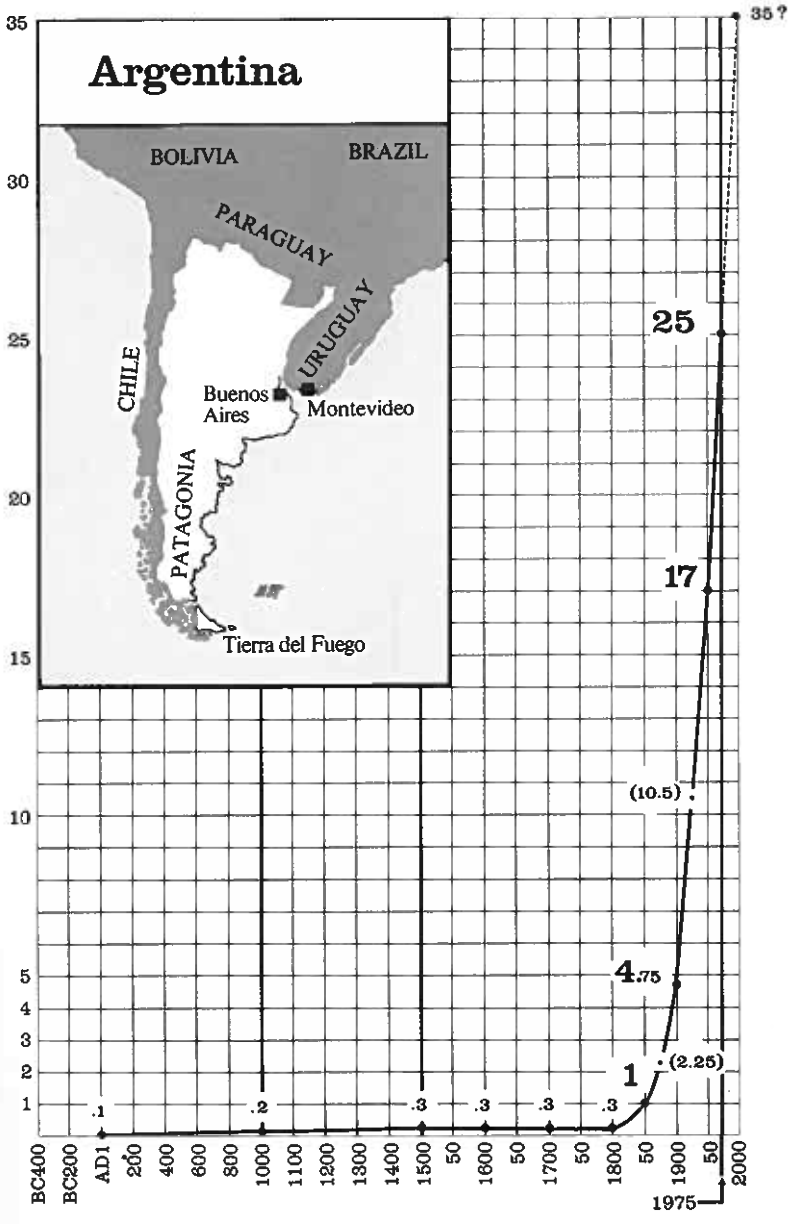
The census record is: Argentina, 1778, 1813, 1857, 1869, 1895, 1914, 1947, 1960, 1970; Chile, 1777, 1813, 1832, 1844, 1854, 1865, 1875, 1885, 1895, 1907, then decennially from 1920 except 1952 for 1950. Argentina is well documented, most recently in J. Comadrán Ruiz, Evolución demografía Argentina durante el periodo hispana (1535–1820) *(1969); E. J. A. Maeder,* Evolución demografía Argentina 1810–1869 *(1969); F. de Aparicio (ed.),* La Argentina: suma de geografía, *Vol. 7 (1961). The demographic history of Chile between 1700 and 1830 is covered in an article by M. Carmagnani in* Journal of Social History *1, 2 (1967), the period since then by O. Cabello in* Population Studies *9, 3 (1956).*

*As usual, *Rosenblat is a good starting point for early population data, and *Sánchez-Albornoz for recent migration figures.*

9c Uruguay

The demographic history of Uruguay is that of Argentina in microcosm. The few hundred Amerindians of the area were succeeded by a few thousand Iberians during the 16th and 17th centuries: Montevideo made its appearance in the 1720s and numbers slowly inched up to reach 40,000 by 1800. Who owned the territory was a matter of dispute; the Spaniards looked to Buenos Aires, the Portuguese to Rio. Eventually the quarrel was resolved by Argentina and Brazil agreeing to the creation of the independent state of Uruguay (1830). Its population of 75,000 increased to 130,000 by 1850, 0·9m by 1900 and 2·25m by 1950. Today it stands at 2·75m, nearly all of whom are of European descent.

Immigration has played an important part in Uruguay's growth, the net input amounting to 0·5m people in the last 150 years. Most immigrants came from southern Europe in the later 19th century: a third of them got no further than Montevideo, which now contains half the country's population.



The Americas Area 9a

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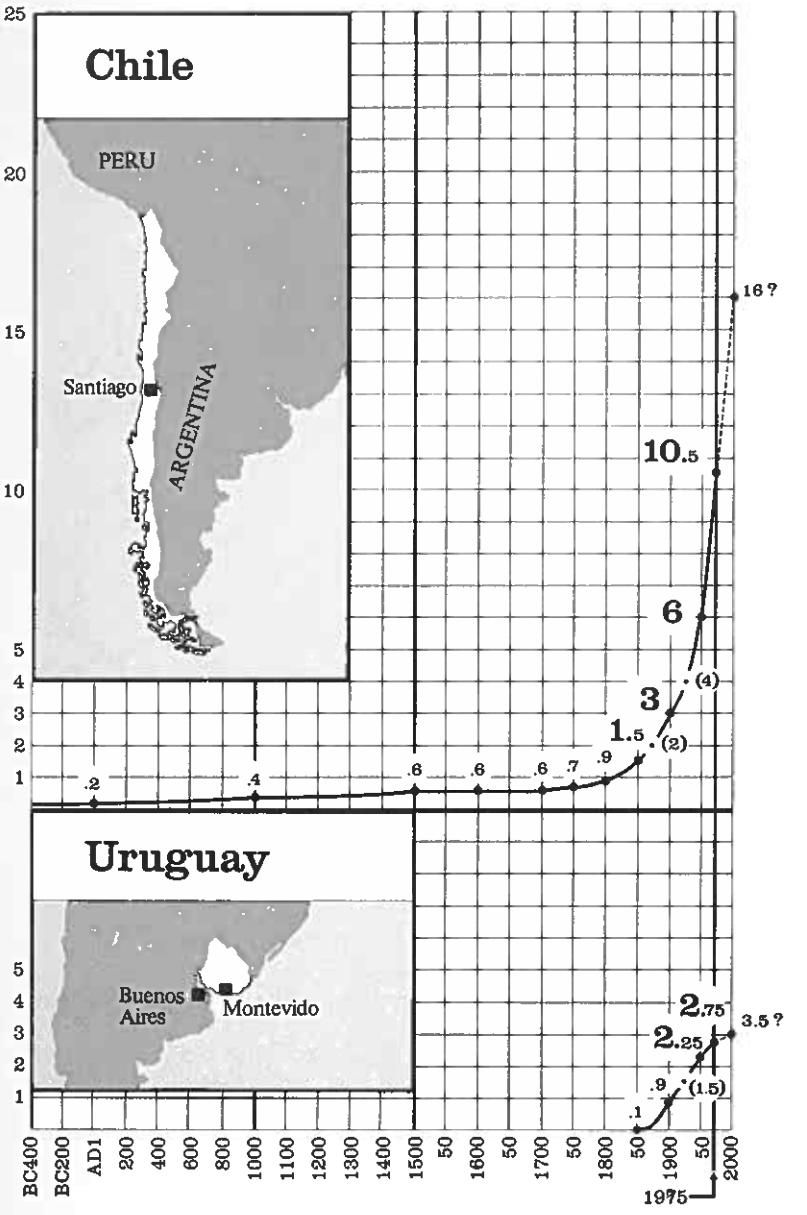
Uruguay's population history is adequately covered by E. M. Narancio and F. Capurr
Calamet, Historia y análisis estadistico de la población del Uruguay (*1939*), *and b*
J. A. Oddone, La formación del Uruguay moderno (*1966*). *The odd feature of th*
primary data is the irregularity of the census: the sequence runs 1852, 1854, 1908
1963, 1975.



The Americas Areas 9b and c

Part Five

Oceania

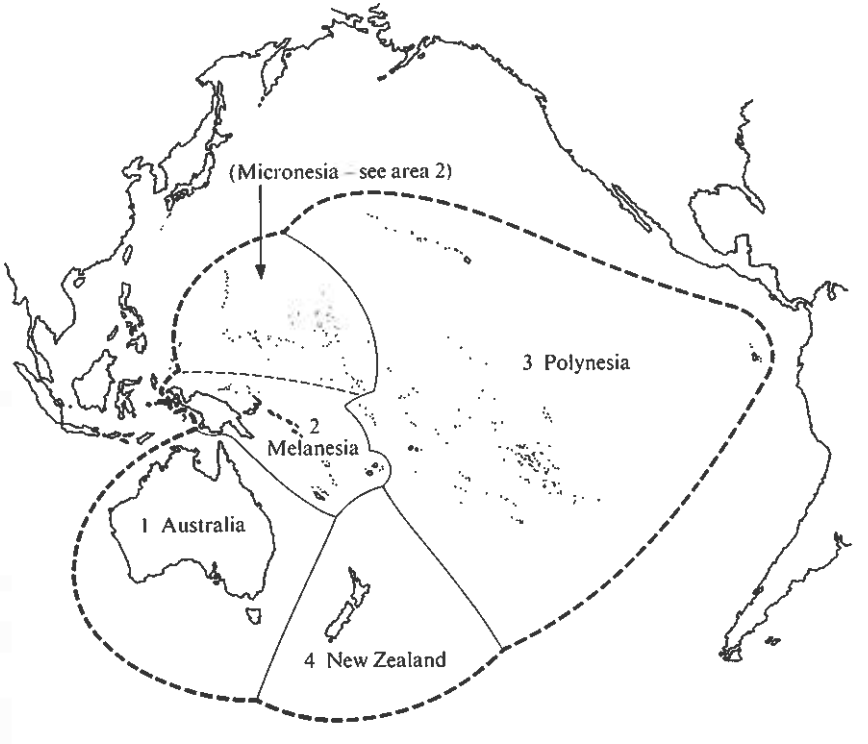


Fig. 5.1 *Oceania, subdivision into areas*

1 AUSTRALIA
2 MELANESIA
3 POLYNESIA
4 NEW ZEALAND

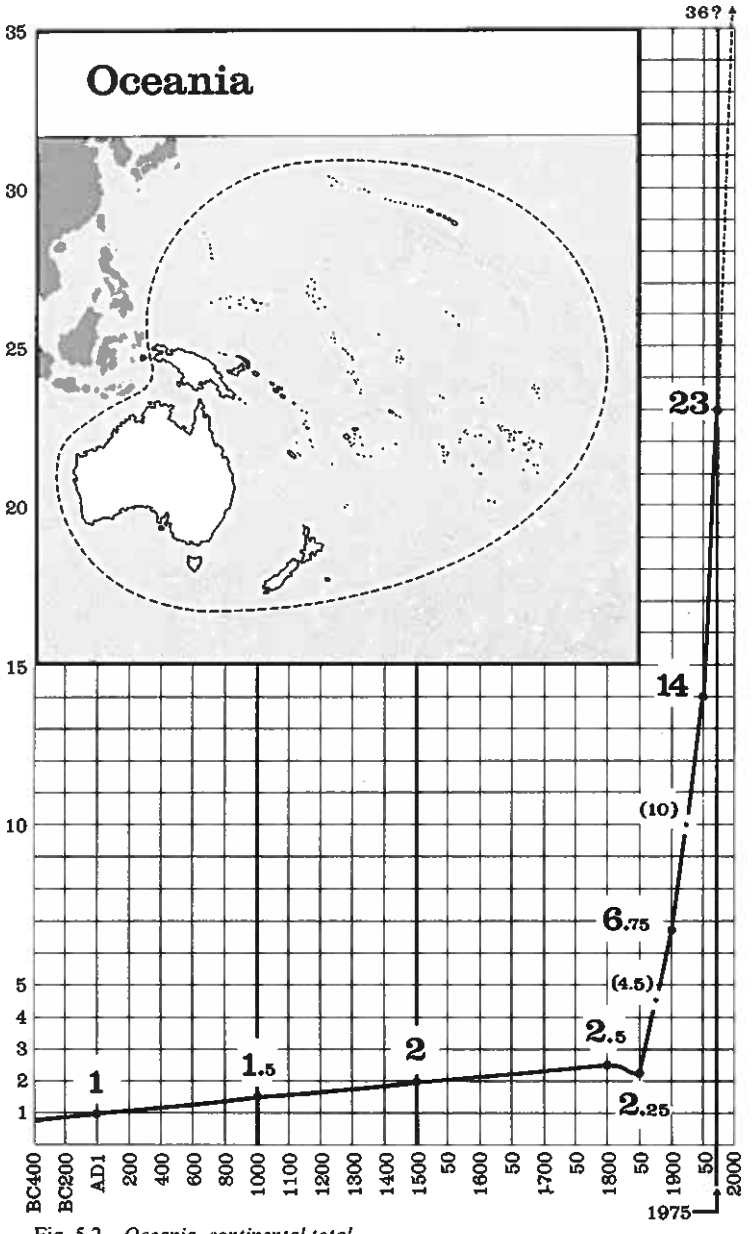


Fig. 5.2 *Oceania, continental total*

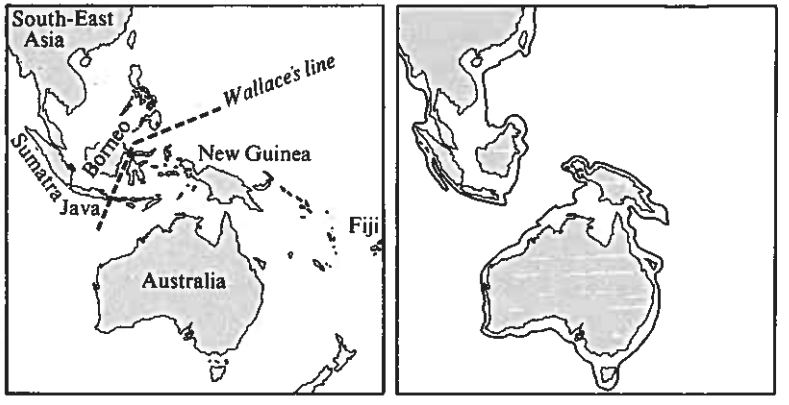
OCEANIA: OVERVIEW

9m km²

The geography of the island chain that stretches from South-East Asia to Fiji looks smooth enough on the map: first come the large Indonesian islands, then the smaller, then the relatively huge land of New Guinea and finally a scattering of islands tailing off to nothing in the south Pacific. But it has been known for a long time that from the biological point of view there is an important discontinuity in the sequence. This falls somewhere between the larger Indonesian islands and New Guinea. The islands to the west support an up-to-date fauna of placental mammals, those to the east make up a sort of 'lost world' inhabited by primitive marsupials of the sort that are vanishingly rare everywhere else. This is the biological basis for the distinction between Asia and Oceania.

Wallace, the first person to point out this discontinuity, took the deep channel running east of Borneo and Java as the dividing line and this is reasonable enough: during the Ice Ages, when the sea level was lower than now, this channel marked the eastern border of the Asian mainland. But there is more to Wallace's line than Wallace realized. The land mass of

Fig. 5.3 *South-East Asia and Oceania: present coastline (left) and outline of main land masses in* 50,000 BC *(after * Howells pp. 136–7)*



Australia–New Guinea originated in a different part of the globe from Asia and drifted into its present relationship with the Indonesian archipelago only some 50 million years ago. Hence its cargo of primitive beasts.

Exactly where the geological dividing line between the continents should be drawn is still unclear. The convention of the moment allots everything up to New Guinea to Asia. This is a minimum definition of Oceania but still means that the Indonesian Republic must be treated as a part-Asian, part-Oceanic state; adjustments involved in adding the area and population of western New Guinea (West Irian) to Indonesia-in-Asia are given on page 332.

Early on in the last Ice Age, around 70,000 BC, the Indonesian islands were inhabited by a race of man ancestral to the present-day Melanesians. Oceania was uninhabited. As the cold reached its maximum intensity and more and more water was locked up in the ice caps, the sea-level fell by 100 metres, with the result that new islands appeared and existing islands linked up at many points through the archipelago. The voyage from Asia to Oceania became easier than it has ever been since. Moving eastward the Melanesians reached first New Guinea, then Australia, the latter apparently by 50,000 BC. The numbers involved must have been tiny and the technology palaeolithic at its most primitive, but the area available for colonization was immense and the figure for the population of the Australia–New Guinea land mass must soon have been over 100,000. By 5000 BC, when the Ice Age was over and the rising sea-level had created the present geographical outline, this figure would have risen to the quarter of a million mark.

By this time the neolithic techniques that had come into use in Indonesia were percolating into New Guinea. As a result population densities there began to rise and New Guinea society to develop the features that characterize Melanesia today. Indeed, with the discovery and colonization of the islands to the east of New Guinea – an event that is currently dated to the 2nd millennium BC – the Melanesian world expanded to its full geographical extent. As Australia remained untouched by the new influences and its population was now levelling off in the 200–250,000 area the Melanesians had moved into the majority position in Oceanic demography. This dominance was to increase over the next twenty centuries. By AD 1000 the Melanesians numbered well over a million and constituted 80% of the population of Oceania.

With Australia an unchanging palaeolithic backwater, any challenge to Melanesia's predominance had to come from a new population group. The nucleus of one had been developing over the period since 1000 BC in the Tonga islands and, since 300 BC, when the Tongans discovered and colonized Samoa, in the Samoan Islands as well. By the beginning of the Christian era these outliers of the Melanesian world were sufficiently differ-

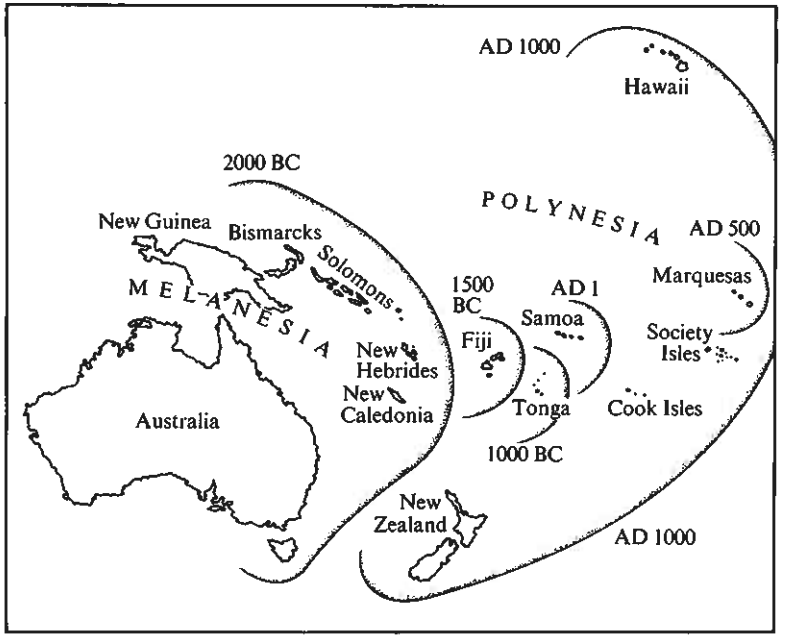


Fig. 5.4 *Native colonization of the Pacific Islands*

entiated from it in language and culture to deserve the separate title of Polynesians. Their seamanship had developed too: Polynesians were increasingly capable of surviving the accidental voyages of discovery that resulted from errors in their local navigations; they were even beginning to be capable of organizing deliberate explorations. This potential was fully realized with the next period. Between the 4th and 10th centuries AD a series of epic colonizations took the Polynesians to Tahiti, Hawaii, the Cook Islands and New Zealand. In demographic terms the rewards were not enormous: Hawaii and New Zealand had at most a quarter of a million inhabitants each when first probed by Europeans in the 18th century; the rest of Polynesia no more than 100,000. By Oceania's modest standards, however, the Polynesian contribution was enough to raise the total for the area to 2·5m and reduce Melanesia's share of it to two thirds.

*

The European discovery of Oceania was a curiously long-drawn-out business. It took from the early 16th century, when Magellan became the first European to sail the Pacific, to the late 18th century, when Cook's

voyages of exploration showed that there was no major undiscovered land mass in the area, for geographers to learn to draw its outline properly. Contacts between Europeans and Oceanians were equally slow to develop. Essentially as isolated as ever, the natives continued to increase at the same rates as they had in pre-Magellanic times.

All this changed after 1788, the most important date in Oceania's history. In January of that year a fleet of eleven British ships arrived off the coast of Australia and disembarked approximately a thousand people at Port Jackson, near present-day Sydney. The European invasion of Oceania had begun.

The new era was no fun at all for the natives. All early observers agree that the aboriginal peoples living in contact with the early settlers suffered a rapid decline in numbers. In some places whole tribes simply melted away. This has led to the lavish use of words like 'extinction' and 'depopulation' in most works on this phase of Oceania's history. In the larger view these accounts are misleading. Half of Oceania's population lived in New Guinea, which was outside the area of European interest and quite unaffected by it. Moreover, although even cursory contact with the white man could lead to outbreaks of diseases which were new to the Pacific and against which the natives had no resistance, any drop in population would in the normal course of events have been made up in a decade or two. It needed colonization as well as contact to drive native numbers down really drastically.

Just how big was the fall in Oceania's native population? Taking the three worst cases together – Australia, New Zealand and Hawaii – the drop was from 700,000 in 1800 to 150,000 in 1900, or 80%. On the other hand, because of the continuing growth in untouched and populous New Guinea, the loss in Oceania as a whole was much less dramatic – of the order of 12%. Perhaps the best way to get a measure of the average South Sea Islander's experience is to take Australia, Polynesia and New Zealand together but exclude Melanesia. The result is a fall of 50% in the aboriginal total, which is savage but stops some way short of annihilation (Fig. 5.5).

As is obvious from this graph the course of Oceanic demography since 1850 has been all white and straight up. From 0·6m in 1850 Australia's population has rocketed to near 14m today. Over the same period New Zealand's population has grown from 0·1m to 3m. And Hawaii, which became America's fiftieth state in 1959, has more than 0·3m white Americans in its 0·86m population. Altogether, Europeans and Americans of European ancestry form 70% of Oceania's present-day population of 23m. It has been a remarkable performance considering that 200 years ago the percentage was nil.

Just as Australia now dominates Oceania's demography so the history of immigration to Oceania is predominantly British. The British Isles have

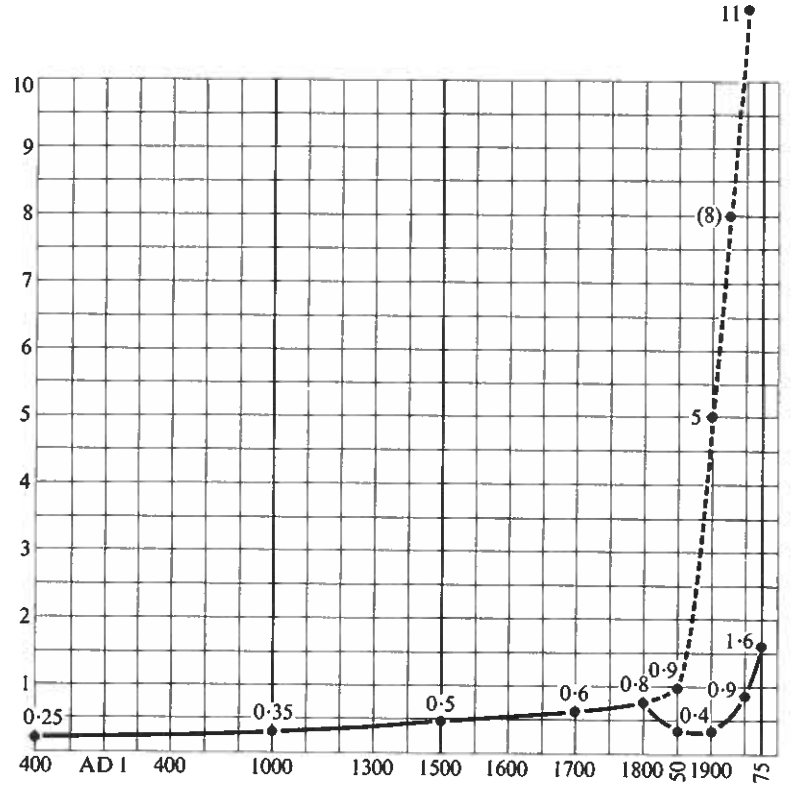


Fig. 5.5 *Population of Oceania minus Melanesia. (Solid line: aboriginal populations of Australia, Polynesia and New Zealand. Dotted line: total population.) The native populations fell a little further than the rounded figures given above indicate: there was a drop from 420,000 to 360,000 between 1850 and 1900 (a fall of 15%) and the nadir was reached only in the first decade of this century at a figure about 10,000 lower than this*

supplied three quarters of the 4·5m people who have crossed the seas to settle in Australia and 90% of the 1m who have settled in New Zealand. The other migrants are numerically puny by comparison though of considerable local importance and often fascinating sociologically. Such are the French who settled in New Caledonia, the Indians who came as indentured labourers to Fiji (for both of which see Area 2 Melanesia) and the extraordinary mixture of Japanese, Chinese, Filipinos and Americans who have converged on Hawaii.

The demographic future of Oceania is bound to be dominated by Australia's growth rate. This is not spectacularly high and is likely to fall

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further in line with the general trend for advanced countries. Probably t
area as a whole will have a population of around 36m by the end of t
century. Interestingly enough the rates of increase of the aboriginal peopl
have recently risen to very high levels so they are likely to figure mo
significantly in the total than they do now.

OCEANIA AREA 1 Australia

7·69m km²

The most logical – and the intellectually safest – starting point for the population history of Australia is sometime after 10,000 BC, when the post-Glacial rise in the level of the world's oceans had completed the isolation of the aboriginal Australians from the world beyond the Torres Strait. Before that break several waves of migrants had moulded the aboriginal population into substantially its present form. After it the aboriginal was left alone for some 10,000 years to seek and to find balance with the forces of nature.

That balance, in demographic terms, seems to have arrived many millennia before Christ. The maximum population that Australia could support as long as man remained a roving, hunting, gathering creature was about 300,000; and we will not be far wrong if we imagine that between 10,000 BC and the arrival of Western man in the late 18th century AD the population was fluctuating around the quarter of a million mark.

For the aboriginal the European impact was harsh and bitter. His world collapsed in the decades following the landing of the first settlers (mostly convicts) in 1788, and from this simple truth romantic anthropologists have generated the concept of 'cultural shock' as a cause of increased mortality. The more hard-headed demographers tend to prefer the idea that the natives lacked resistance to Western disease. Whatever the explanation – and there was some straightforward slaughter thrown in as well – the aboriginal population began to fall and it continued to fall until the early 20th century. By then some tribes were extinct, notably the Tasmanians (originally some 4,000 strong: the last died in 1876) and the overall number was down to 60,000. Recovery – at least in demographic terms – has seen a rise to some 80,000 today.

While the prehistoric Australians struggled and largely failed to come to terms with modern Western society, the somewhat sorry and entirely involuntary representatives of that society who had been dumped on Australia's shores in 1788 and the following half century or so – until transportation ceased in the 1840s – wrote a success story, though with the traditional hazardous beginning. The original shipment of 736 convicts (188 of them women) and their guards had become a population of 10,000 by the late 1800s and 100,000 by the early 1830s. The pre-Magellanic maximum of 250,000 was reached in the 1840s, the 0·5m mark by the early 1850s and the million by 1860.

The year 1860 is a convenient point at which to pause and look back. Three quarters of the growth from virtually nothing to 1m in seventy years had been achieved by immigration. This immigration was overwhelmingly British, and before the Gold Rush of the 1850s, which doubled the population in a decade, it was substantially – though after 1820 decreasingly – the forced migration of convicts, nearly 150,000 in all.

After 1860 the pattern changed. Australia began to settle down to a more respectable and more urban (if only marginally more urbane) way of life. The contribution of migration to population growth dropped to around the 40% mark, before almost ceasing for a time at the end of the century. The migrants remained substantially British in origin, only one tenth coming from elsewhere in Europe – mostly from Germany, though there were some from Scandinavia and Italy as well.

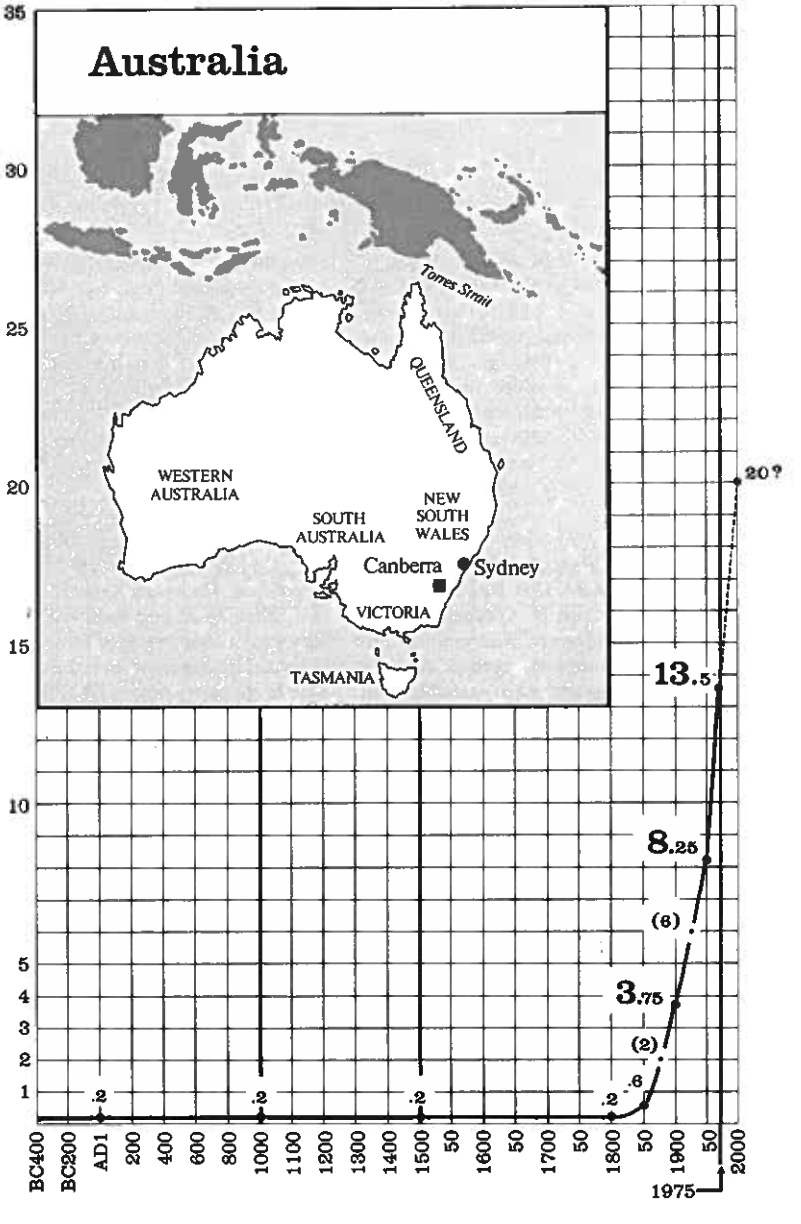
The pattern established in the later 19th century has in many ways been followed to the present time. Net immigration has tended to come in bursts, at periods when the balance of push and pull has been favourable to emigration from the old to the new European worlds. Particularly favourable periods were the ten years before 1914, the ten years after 1918 and the period from 1945 to the late 1960s. These three high-input phases added approximately 0·3m, 0·4m and 2m net immigrants respectively to the Australian population. Up to the late 1940s these additions were still predominantly British in origin. Since then the British component has fallen to a third, the remaining two thirds being largely of central and southern European origin.

Primary Sources and Bibliography

The population histories of the aboriginal and the settler populations of Australia must be considered completely separately – indeed, until 1967 the legally defined statistical 'population of Australia' was the non-aboriginal population.

For the aborigines – who were never properly counted until the second half of the 20th century – the best source is F. Lancaster Jones, The Structure and Growth of Australia's Aboriginal Population *(1970). The quarter of a million pre-European population estimate is that of A. R. Radcliffe-Brown in the Australian* Official Year Book 23 *(1930). F. L. Jones would like to reduce this to perhaps 215,000. The time needed for the original group of aborigines to multiply up to 0·3m is discussed by Joseph Birdsell* (Cold Spring Harbour Symposium on Quantitative Biology, *xxii (1957), p. 47).*

For the history of the settlers see W. D. Borrie, Population Trends and Policies *(1948), W. D. Borrie and G. Spencer,* Australia's Population Structure and Growth *(1965), and the* Australian Encyclopedia *(1958) under 'Population' and 'Immigration'. The basic source is the census, decennial for the whole of Australia since 1881, and with a positive abundance of earlier state censuses: 8 for New South Wales from 1828, 3 for Tasmania from 1841, 6 for South Australia from 1844, 4 for Western Australia from 1848, 3 for Victoria from 1854 and 3 for Queensland from 1861 (and another in 1886). Needless to say, state census dates coincided only intermittently.*



Oceania Area 1

OCEANIA AREA 2 Melanesia

0·98m km²

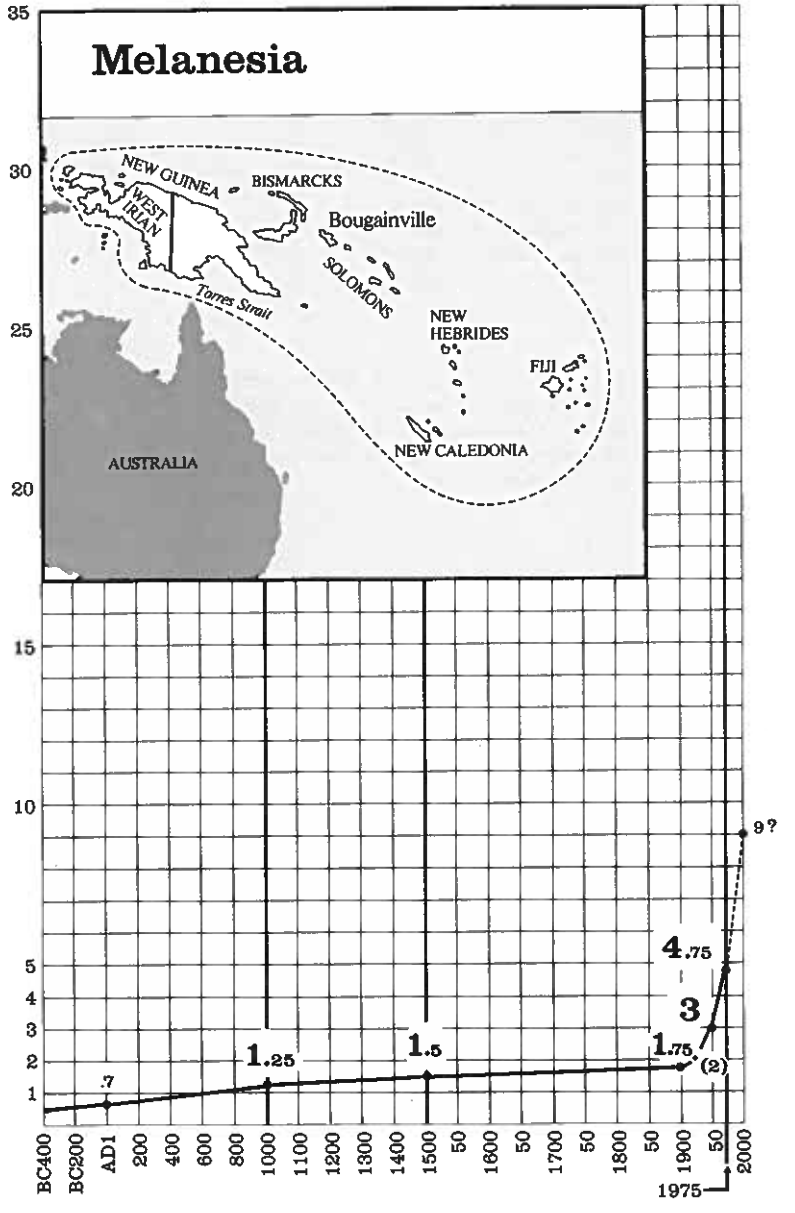
Melanesia consists of the large island of New Guinea (0·83m km²) and a series of small islands that trail off from New Guinea's eastern end getting smaller and further apart as they go. The main groups are, from west to east, the Bismarcks, the Solomons, the New Hebrides, New Caledonia and the Fiji Islands. 'Island Melanesia' (as opposed to New Guinea) has a total land area of 0·150m km²

Melanesia was first occupied by palaeolithic man around 50,000 BC during the movement that was responsible for the population of Australia. Within a few thousand years these simple hunters and gatherers had spread as far as the Bismarcks and their number had reached the 20,000 mark. This represented an equilibrium point for the cultural level and no further growth took place until the 6th millennium BC. In the interim the rising sea level of the early post-Glacial period had created the geographical division between the Melanesian and Australian provinces of Oceania by flooding the land bridge between the two and forming the Torres Strait.

The cultural division soon became equally complete, for Melanesia now began to receive neolithic influences from Indonesia which either never reached Australia or never took root there. Melanesia moved forward into the New Stone Age while Australia stayed in the Old. The new techniques were horticultural rather than fully nevertheless they were sufficient to support a population that by 1500 BC had grown to a quarter of a million and had spread to the easternmost islands of the archipelago. By 500 BC the total will have risen to half a million.

The growth rate now slowed down. In AD 1500, on the eve of the European discovery of the Pacific, there were at the most a million and a half. Melanesians – 70% of them in New Guinea, 30% in the islands. As it turned out the Europeans had no sooner discovered Melanesia than they turned their back on it and their few perfunctory explorations were of far less importance to the natives than the introduction of the sweet potato from Indonesia. Not till the early 19th century, when the population had reached 1·75m, did the Europeans begin to make much impact and it was only at the end of the century that the area was divided up between the colonial powers.

The most immediate effect of colonialism was on the islanders. Between 1879 and 1916 the British imported some 60,000 Indians to run the plantations they established on Fiji and as the native population fell from 110,000 to 85,000 over the same period, Fiji today is a half-Indian, half-Melanesian society. The French created a rather similar situation in New Caledonia, where they established a penal colony. A third of the present-day New Caledonians are descended either from the convicts who were deposited there



Oceania Area 2

(80,000 between 1853 and 1897) or the voluntary European immigrants who accompanied them.

Of course none of these figures is of much significance in relation to the population of New Guinea, where things went on much as before until well into this century. By 1950 New Guinea contained 2·2m people as against the 0·75m in the islands. Today the figures are 3·3m and 1·5m respectively and the whole area is in the throes of the demographic revolution. The islands currently divide as follows:

Bismarcks	0·25m
Solomons	0·25m
New Hebrides	0·09m
New Caledonia	0·13m
Fiji	0·55m
Micronesia	0·23m
Total	1·50m

West Irian

The western half of New Guinea (West Irian) is politically part of Indonesia. It contains 30% of the island's population or 1m people as of 1975. The rest of Melanesia is under U N mandate or remnant colonial administrations of one sort or another, though eastern New Guinea and the northern Solomons will be independent by the time this book appears.

Micronesia

North of Melanesia lie the scattered atolls and other small islands that form Micronesia. The people are similar to the Melanesians and seem to have been in the area since the 1st millennium BC. There were less than 100,000 of them in AD 1500; today there are about 225,000. Politically the area is under American control.

Primary Sources

New Guinea is stony ground for the historical demographer. There were surveys of the native population of the western half in 1959–62 and in 1968 but so far there has been no head count there. In the eastern half there was a sample census in 1966. The Bismarcks and the northern Solomons (specifically Bougainville) are administratively linked to eastern New Guinea and share the same sources – or lack of them. Elsewhere the picture is a bit brighter. In the southern Solomons there was a sample census in 1959 followed by a proper head count in 1970. In the New Hebrides the authorities published accurate estimates from 1910 on and took a census in 1967. New Caledonia has a series of offical estimates starting in 1863 and has held a quinquennial census since 1910. Fiji took its first census in 1879 and has taken them decennially since 1881.

Estimates are available for most parts of Melanesia from the mid 19th century. They vary from careful administrative assessments to wild guesses, but because there were no data on which to base calculations it doesn't necessarily follow that the official figures are any better than the guesses. And all the figures are contaminated by the belief that the population of the area was collapsing.

Bibliography

For a general survey of the current situation see Melanesia *by H. C. Brookfield and Doreen Hart (1971); for an outline of the historical trends see * Howells. There is a good account of the Solomons in the 1970 census report and excellent coverage of Fiji in R. G. Ward,* Land Use and Population in Fiji *(1965). New Caledonia is covered by an article in* Pacific Viewpoint *5, 1 (1964).*

OCEANIA AREA 3 Polynesia

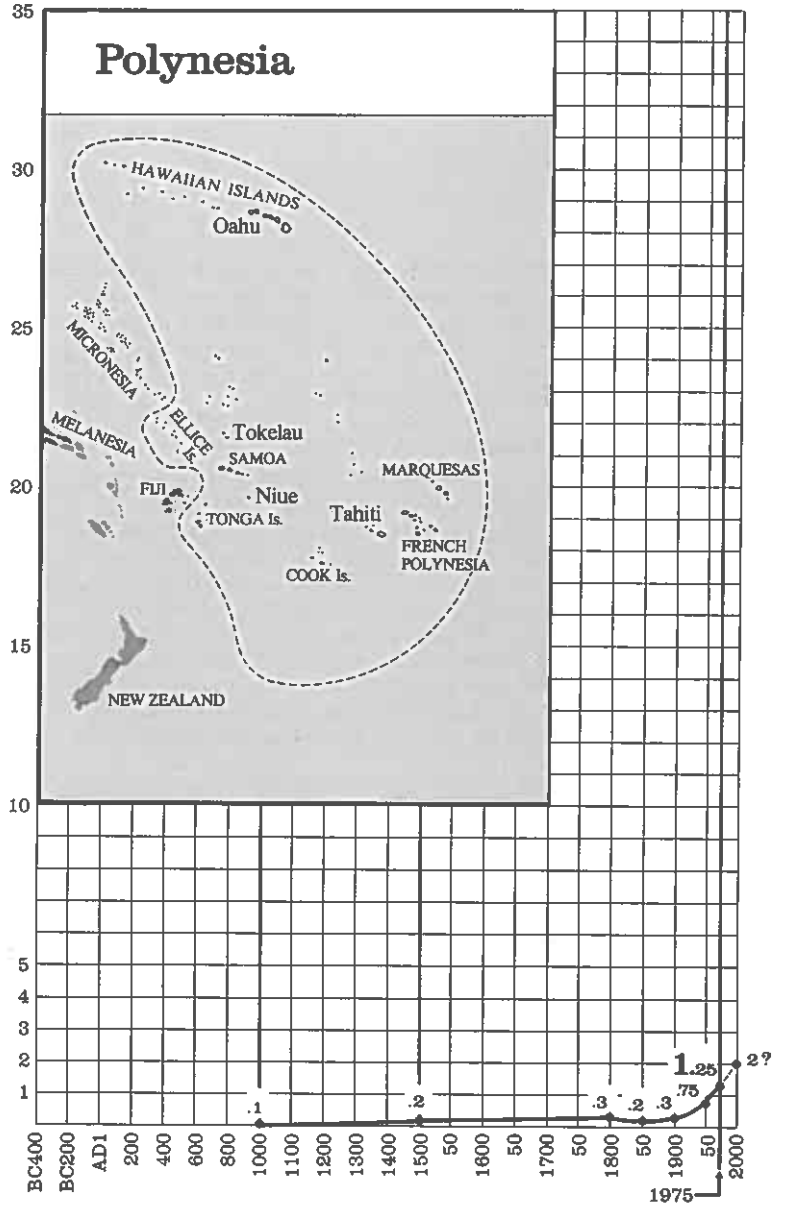
0·025m km²

The Polynesians are all descended from a few score Melanesians who colonized the islands of the Tonga group around 1000 BC. Over the next 700 years these pioneers multiplied up to about 10,000 and developed the linguistic and cultural features that distinguish them from their parent group. In 300 BC both range and population were extended by the discovery and colonization of Samoa: the Samoans in their turn discovered and colonized Tahiti and the Marquesas around AD 300.

These voyages were soon outclassed by the epic navigations of Polynesia's golden age. Between AD 400 and 900 the islanders reached north as far as Hawaii and south-west to the Cook Islands and New Zealand. The history of the New Zealand colony is given separate treatment elsewhere (Oceania Area 4) but the figures for Hawaii are in themselves sufficient to revolutionize Polynesian demography. By the 15th century the Hawaiian islands were supporting half the area's 200,000 population, by the end of the 18th century the majority of Polynesians lived there: 200,000 in the Hawaiian archipelago (most of them on Oahu Island) as against 100,000 in the rest of Polynesia (most of them on Tonga, Samoa and Tahiti). And whereas the South Pacific islands seemed to have reached a natural limit, Hawaii still afforded room for growth.

The arrival of the Europeans in the last quarter of the 18th century put an end to the Polynesian idyll. This may have been over-sentimentalized in the popular imagination – the noble savages were as often savage as noble – but at least Polynesian society had been fruitful and multiplied. Now European diseases cut a swathe through the islands. The fall in the aboriginal population of Hawaii was particularly rapid – from 200,000 in 1775 to 70,000 in 1850 and 35,000 in 1900. Overall, between the end of the 18th century and the end of the 19th the number of Polynesians was reduced from 300,000 to under 150,000. Because of an inflow of people from outside Polynesia the area did not suffer a drop in population on anything like this scale. Hawaii attracted immigrants from China, Japan, the Philippines, Portugal and the United States (which last annexed the Hawaiian archipelago in 1898), so its population in 1900 was 150,000, only 25% off from the late-18th-century peak, and Polynesia in toto was no more than 20% down.

In this century Polynesia has boomed. From 0·25m in 1900 its population grew to 0·75m by 1950 and has now reached 1·25m. The major part of this increase has occurred on Hawaii, which currently supports 860,000 people, but even the South Pacific islanders, who are still almost purely Polynesian, have done well (see the table). This goes some way to compensating for the fact that Hawaiians of Polynesian blood now form less than 10% of the population of their homeland.



Oceania Area 3

POPULATION OF THE MAJOR POLYNESIAN ISLAND GROUPS, 1900–1975

	1900	*1925*	*1950*	*1975*
Tonga	20	25	50	90
Samoa	40	50	100	200
French Polynesia	30	35	60	125
Cook Islands	8	10	15	25
Tokelau, Niue, and the Ellice Islands	5	8	12	20
Total for Polynesia exclusive of Hawaii (rounded figures)	100	125	240	460
Hawaii	150	300	500	860

Primary Sources and Bibliography

In proportion to the size of their populations, the Pacific islands must be among the most intensely studied corners of the demographic world. The sources are a large number of 18th- and (mostly) 19th-century estimates of widely varying quality, and an equally large number of 20th-century counts and censuses. For Tonga, Samoa, the Cook Islands and French Polynesia there is an extended discussion of sources and trends in N. McArthur, Island Populations of the Pacific *(1968). Also for Tonga see an article by A. C. Walsh in* Pacific Viewpoint *11, 1 (1970). For Hawaii see R. C. Schmitt,* Journal of the Polynesian Society *76: 467–75 (1967) and 80: 237–43 (1971). For a bit more about the minor islands than is in the usual handbooks see the (British) Naval Intelligence Division's Second World War publication* Geographical Handbook of the Pacific Islands *and the Australian semi-annual* Pacific Islands Yearbook and Who's Who.

*The best historical survey of the whole area (and more) is by * Howells; but see also R. G. Ward (ed.),* Man in the Pacific Islands *(1972).*

OCEANIA AREA 4 New Zealand

0·27m km²

Australia has only two stages in its population history – before and after 1788. New Zealand at least manages three, indeed four if we count the absence of population as a stage: the islands of New Zealand were uninhabited well into the Christian era. Prehistory begins around AD 750 with the arrival of the first inhabitants, probably from the Marquesas in eastern Polynesia. On the basis of an economy which essentially involved outmanoeuvring the flightless moa, these original New Zealanders managed to increase from a few boatloads in the 8th century to a population approaching 15,000 in the 14th century.

By the mid 15th century the moa-hunter was no more; he was outmanoeuvred in his turn by the semi-agricultural Maori, also immigrants from Polynesia. This time a few boatloads in the 14th century increased to a population of a quarter of a million by the 18th century. When compared, in terms of density, with the Australian population, a measure is gained of the advantage of agriculture, even in its Polynesian form and even when practised in a not very suitable climate which confined the Maori mainly to the North Island.

Western man's first contacts with New Zealand were tentative. Proper settlement began only after 1840 – but by then even tentative contact had wrought its inevitable havoc. European diseases and European guns had between them reduced the Maori population to some 100,000 by the 1840s, and it continued to fall substantially until it reached about 50,000 at the end of the Maori wars in 1872. After that date, though there was a continuing downward drift, it was relatively slow and came to a halt in the 1890s at the 42,000 mark. There was then a steady rise to 100,000 in the mid-1940s and since then a spectacular rate of growth, of up to almost 4% a year at times, has taken the Maori population of New Zealand to nearly a quarter of a million once more.

The pattern of growth of the originally European population of New Zealand – in fact largely British with a considerable Scots contingent – has been almost the reverse of that of the Maori people. In the mid 19th century growth was rapid. The thousand settlers of 1839 had become about 25,000 by 1850 and 300,000 by 1875, reaching 0·5m in the early 1880s and 1m in 1911.

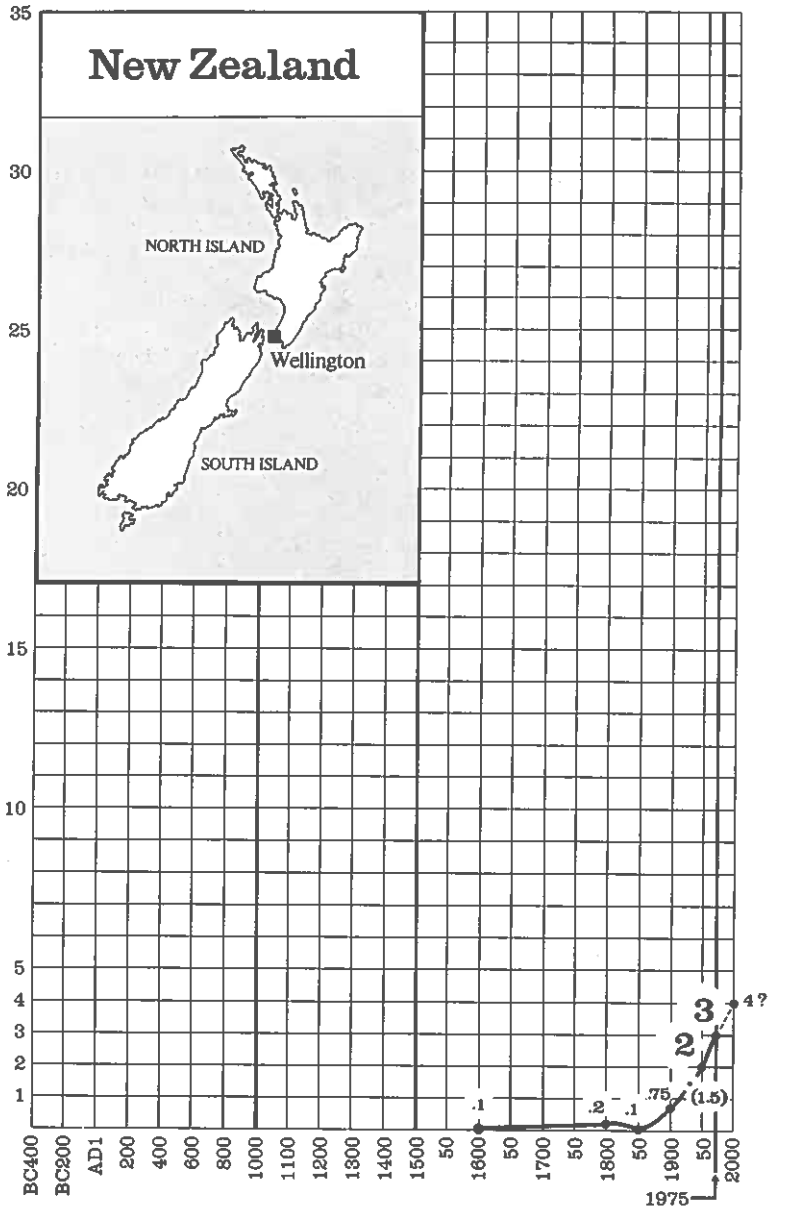
Within the 19th century period of settlement, the rapid growth of the first decades came to a peak in the Gold Rush years of the 1860s, when the population doubled in the first half of the decade. After the excitements of the 1860s the pattern settled down to one of continued steady migration before slowing down in the 1880s, when for the first time natural increase became more important than immigration as a contribution to the overall growth of the population of New Zealand. Since 1900 the pattern has been much the same as

Australia's, with substantial migration in the ten years before and the ten years after the First World War and in the period since the Second World War, particularly in the late 1940s and in the 1950s.

Primary Sources and Bibliography

The demography of New Zealand is very well documented but very little written-up. There were censuses of the white population in 1851, 1861, 1864, 1867 and 1871, and of the whole population – white and Maori – in 1858, 1874 and 1878. Since 1881 there has been a regular census held quinquennially except for 1931 and 1941 (no census taken) and 1946 (census taken the preceding year). All this raw material is summarized in the usual census publications and also in A Survey of New Zealand Population (*Town and Country Planning Branch, Ministry of Works, 1960*).

Estimates of the pre-European population are given in K. B. Cumberland and J. S. Whitelaw, New Zealand (*1970*), *and are discussed also by * Hollingsworth. The prehistory of New Zealand is open to considerable debate; there may have been a whole series of Polynesian contacts and settlements from the 8th century onwards. However the arguments work out, the population graph is going to look much the same.*



Part Six

Global Overview

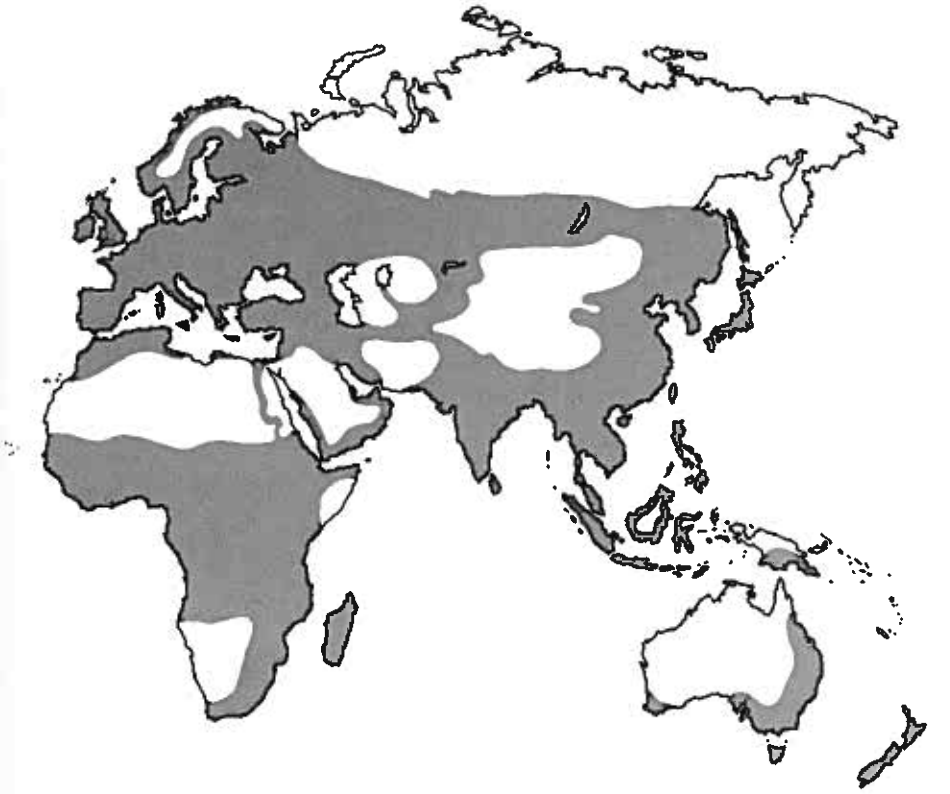


Fig. 6.1 *Man's habitat*

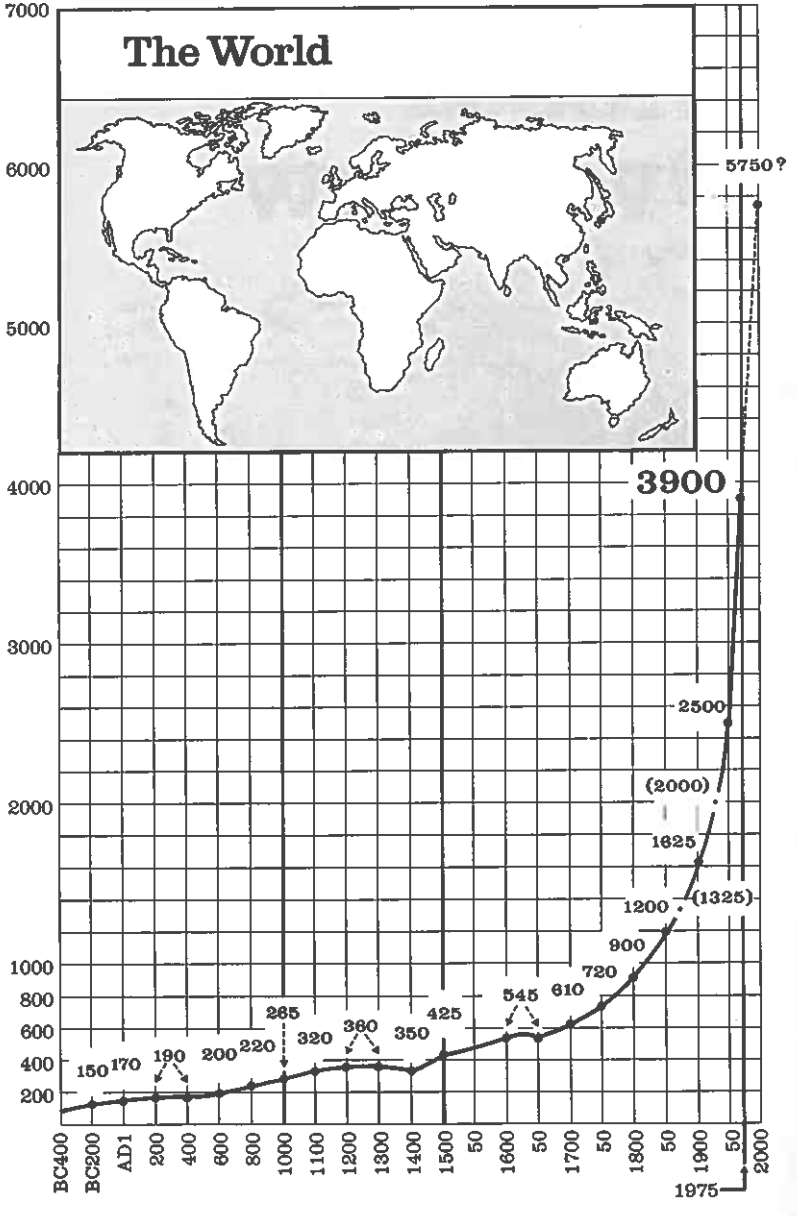


Fig. 6.2 *Total population*

GLOBAL OVERVIEW

When we last looked at the global situation (on page 14) the year was 10,000 BC and the total population some 4m. Partly because of better weather, partly because of the colonization of Oceania and the Americas, the trend was very gently upwards, but the weather could hardly be expected to go on improving indefinitely and there were no other habitable continents to be discovered: if population was to increase further some new factor had to be added to the situation. Numbers did go on growing, indeed around 5000 BC the rate of growth began to accelerate. The new factor that made this possible was, of course, the development of agriculture. It is fair to say that no aspect of human society was to be more radically, immediately and permanently altered by the 'neolithic revolution' than the quantitative.

Though the details of the pattern of growth during the last few thousand years BC are disputable the overall picture is not. Up to 5000 BC the area under crops was too small to have much effect on the global situation and total numbers made only sluggish progress (Fig. 6.3). Then came the upswing. There was (according to us) a gain of near 50% in the course of the 5th millennium BC and of roughly 100% in each of the next three millennia. Finally, around 1000 BC – coincident with the beginning of the Iron Age in Europe and the Near East – the rate of growth rose to its peak for this cycle. The doubling time dropped from 1,000 years to 500, the global total shot up, breaking through the 100m level in 500 BC. Never before had there been so many people multiplying so fast. However, although absolute numbers continued to mount – to 150m by the 2nd century BC and to near 200m by the 2nd century AD – the rate of growth now began to slacken off. The gain over the period 500 BC to AD 1 was 70% not 100%: over the next 200 years the addition was a mere 12% and then growth ceased entirely. The cycle that had begun 6,000 years earlier – we can call it the primary cycle – was complete.

Though man's estate was altered out of all recognition by the primary cycle it must be emphasized that this was a phenomenon with strict geographical limits. The shape of the population graph was entirely determined by developments in Europe, North Africa and mainland Asia. Africa south of the Sahara was only entering its 'primary cycle' as the global event was

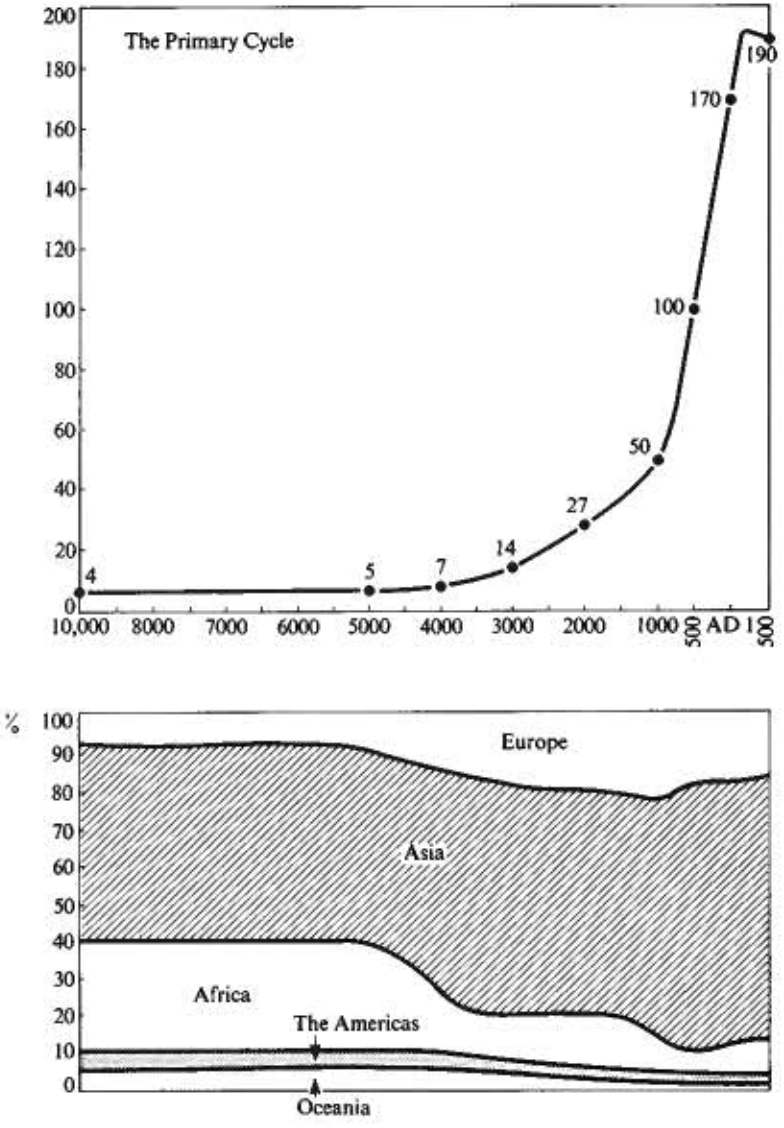


Fig. 6.3 *World population* 10,000 BC–AD 500

nearing completion. America was moving in parallel with Africa rather than Europe or Asia, and Oceania was hardly moving at all. So the primary cycle is really the story in demographic terms of the evolution and culmination and, indeed, final decay of the classical societies of the Mediterranean, the Near East, India and China. Relatively speaking Africa, America and Oceania lost ground, their share in the global total falling from 40% to less than 15%, with Africa (30% in 10,000 BC, 10% in AD 500) doing particularly badly.

What brought the primary cycle to an end? Is there a clue in the almost identical timing of the down-turn in both the Roman and Chinese Empires? Does this mean that we should look at climate as the determining factor? Certainly we should look. Specifically we should try to find out if the weather got worse in the 3rd century AD, the critical century in both east and west. It is reasonable to expect the next generation of climatological research to provide a definite answer to this question, so theoretical arguments for and against the hypothesis are a bit pointless, but, for what it's worth, our guess is that the answer will be negative. It seems certain that within Europe it was the Mediterranean lands that suffered the biggest fall in population and that the northern countries escaped relatively lightly. This is the opposite of what one would expect to happen in a 'little ice age'.

To us the most likely thing is that the primary cycle, far from being cut short, played out its full history. The people at both ends of the old world multiplied up to, indeed somewhat beyond, the optimum for the technology of the time. Contact across Central Asia though tenuous was sufficient to keep their parallel development in phase.

*

The collapse of the Roman and Han empires – the 'slave-owning societies' of Marxist terminology – was followed by the half dozen centuries known as the Dark Ages. During this period the Old World took time off to refashion and revitalize itself: there was little numerical growth in any of the major centres of population and in many there were actually less people than there had been during the classical noon. By the 10th century this transitional phase was clearly coming to an end. In Europe a new society had emerged, the feudal society characteristic of the high medieval period, and it was expanding in every sphere – political, cultural, technological and demographic. At the same time China was entering on one of the most remarkable periods of growth it has ever experienced, the first hundred years of the Sung Empire. The medieval cycle had begun.

In the medieval cycle, as in the primary cycle, events at opposite ends of the Eurasian land mass have an astonishing synchronicity. It is interesting to pursue the analogies – the switch from bureaucracy to aristocracy for

example – in the two cultures' parallel evolution from classical to medieval forms because behind these sociological similarities there are presumably common technological factors and it is – again presumably – their sharing in these factors that kept the two cultures in phase. The whole subject is as important as it is ill-understood. Anyhow, once again the two curves rose, overshot and fell back in approximate unison. The Chinese peak did, it is true, come a hundred years earlier than the European, but an adequate explanation for this is at hand in the Mongol invasion of the early 13th century. Not only did the Mongols kill a great many Chinese – about 35m on our estimate – they deliberately destroyed as much of the agricultural infrastructure as they could. Recovery from this sort of working-over was hardly possible within the limits of the cycle.

In Europe the medieval cycle proceeded to its Malthusian limit. It arrived there around the year 1300. A series of famines and minor epidemics followed which kept population figures oscillating just below the best throughout the first half of the 14th century: then a deadlier enemy even than Genghiz Khan arrived from Central Asia – the bubonic plague. Total numbers which had risen from 26m at the beginning of the cycle to near 80 at its peak fell back to 60m. The extreme boom-and-bust of the medieval cycle as experienced by Europe and China is damped down in the global figures. Our graph (Fig. 6.4) puts the starting point in the 6th century when, for the first time in 300 years, there was an increase in total numbers. It was a modest one, 10m on 190m, or 5%. In the following two centuries the gain was of the same order: in the 9th and 10th centuries it reached 10%. Then came the real boom: in the 11th century numbers went up by 55m or 20%. In the 12th century the rate dropped back to 12% and the cycle topped out at 360m in 1200. This figure was not to be exceeded till well on in the 15th century.

With Africa, America and Oceania still working their way through retarded versions of the primary cycle the main reason for the damping-down effect is not far to find. There is another element in it however: some countries which had reached the medieval stage of development still hadn't caught up with the major centres as yet. Japan is a good example; its numbers were still rising vigorously in the 14th century and its medieval cycle didn't come to an end until 1700.

*

The Near East led the world into the primary cycle; Europe and China shared the honours in the medieval period; the third cycle – the cycle of modernization – had its beginnings in 15th-century Europe, though China, initially at least, was only marginally behind. The technological basis for this final surge is clear. It starts with the ships and guns that enabled the Europeans to discover, dominate and, in important instances, colonize the

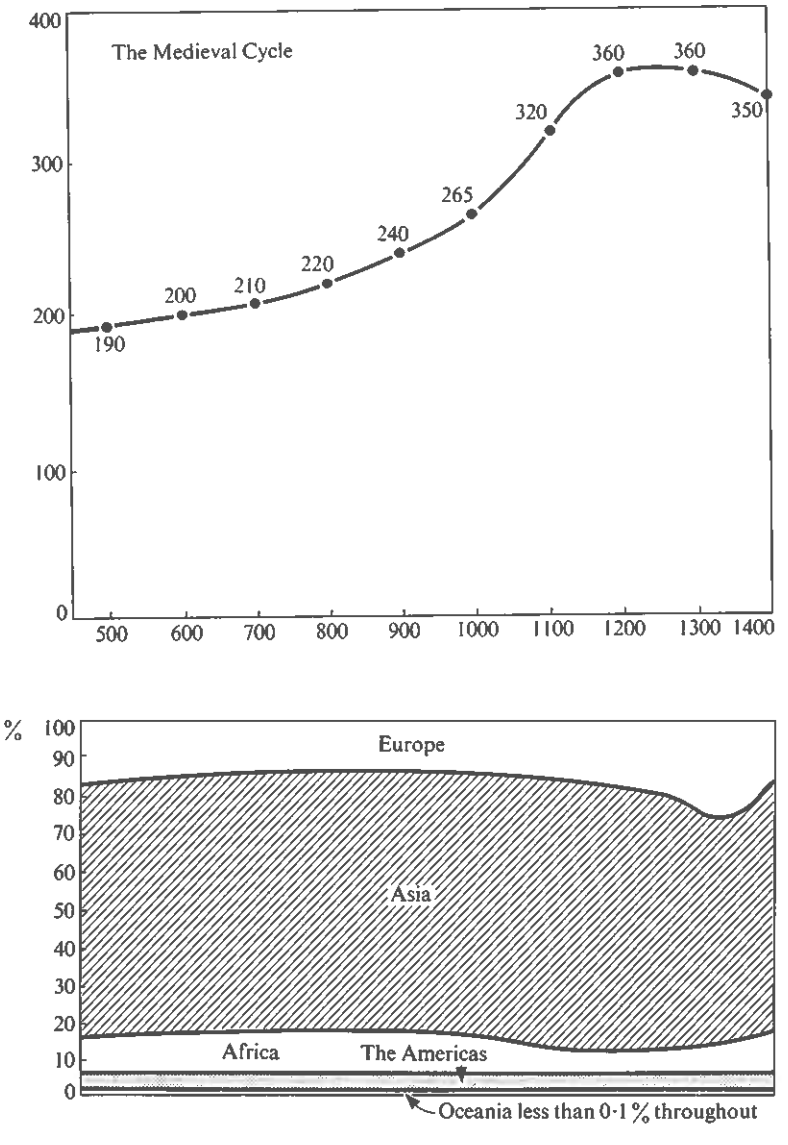


Fig. 6.4 *World population* AD 500–1400

other continents. It continues through the agricultural and industrial revolutions of the 18th and 19th centuries and accelerates as the communications revolution of the 20th century brings all the world into one 'global village'. And this is, quite obviously, only the half of it. On the most optimistic estimate it is going to take until well into the next century for the rate of growth to decelerate, while the cumulative totals can't be expected to level off nor the cycle to reach its end before the beginning of the 22nd century. This account of the modernization cycle can therefore only be in the nature of a progress report: we can begin at the beginning but we have to stop before the end.

The beginning is shaky statistically, which is a pity because there seems to have been an initial hiccup consisting of rapid growth in the 15th and 16th centuries – rates of 21% and 28% respectively, both higher than any increases ever achieved before – followed by a marked slowing to 12% growth in the 17th century. Of course 12% is still a high rate by any standard except that set by the previous two centuries, but the fall-off is interesting because once again it was simultaneously experienced in east and west. This time the prima facie case for a climatic change being responsible seems much stronger because from the 18th century onwards growth was resumed at a very high rate in both continents. This effect – putting a kink in the curve – is just the sort of way one would expect a climatic change to act. However it should be remembered that all cycles can be interpreted as a burst of activity followed by a pause for breath and this may be true of the initial phase of the modernization cycle. Certainly in Japan there was a pause of this type not in the 17th century but in the 18th century. This is particularly worth remembering because Japan, though catching up fast now, was still behind Europe and China in its social evolution.

From the year 1700 on there were no more of these hiccups. Growth rates accelerated to unheard-of levels – to 45% in the 18th century and 80% in the 19th century. All along Europe had been the dynamo with rates consistently higher than the other continents: now it broke away into a class of its own with a 19th-century gain of 115%. Indeed if the outflow of 40m people to the Americas is taken into account the rate for the period rises to a phenomenal 135%.

The extra factor that made figures like these possible was a sustained fall in mortality rates or, to put it another way, an increase in the expectation of life. With their birth rates still as high as ever the Europeans were able to increase their share of the world's population to nearly a quarter and, in addition, to make over the Americas and Oceania in their own image. The rest of the world had a high birth rate but not the low death rate.

In the 20th century the situation has swung the other way. Europe is completing both its 'demographic transition' and its modernization cycle

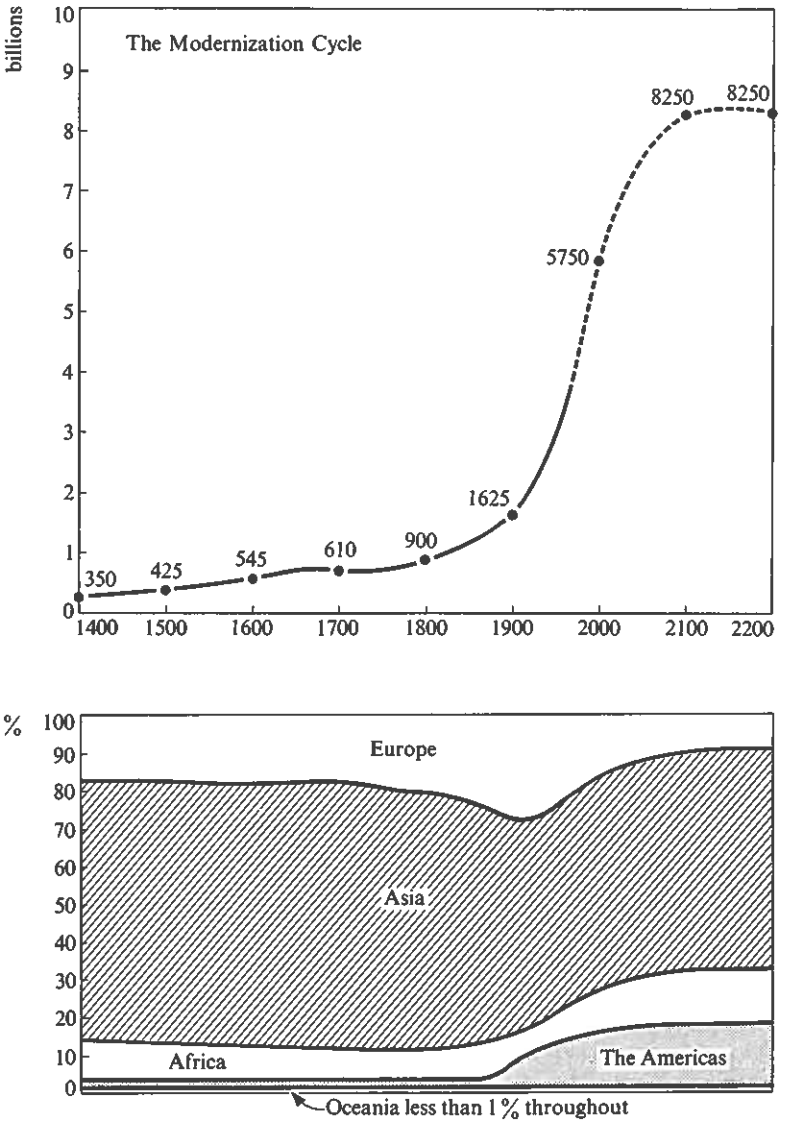


Fig. 6.5 *World population* AD 1400–2200

by lowering its birth rate to match its death rate. The other Old World countries have entered the first phase of the transition and the middle, maximum growth phase of the modernization cycle: they have reduced their mortality rates but not their birth rates. The result is that since 1900 Europe has grown relatively slowly – by 63% as against a global average of 140% – and its position in the world table has fallen correspondingly – from 24% of the whole to 16%. Asia has pulled up from just under 60% to just on 60%, Africa from 7% to 9·5% (see Fig. 6.5).

These shifts in global distribution pale into irrelevance when viewed against the magnitude of the absolute figures achieved during the modernization cycle. In 1575, after a century of rapid growth had added 100m to the total, the world's population reached 500 million. By 1825 it had doubled to a billion, by 1925 it was nearly 2 billion, by 1975 only a fraction under 4 billion. Note how the time to double dropped from 250 years to 100 years and then 50 years. If, as seems likely, it remains at 50 years for the next phase of the cycle, there will be nearly 8 billion people on the earth's surface by 2025. After that the rate *must* slow down. The hope is that this deceleration will occur as a result of the raising of living standards and the spread of education, not as a result of the imposition of Malthusian checks. It is certainly happening this way in the more developed parts of the world today and the absence of similar signs in the poorer countries is not to be taken too pessimistically: they can hardly be expected to show this sort of response at this stage in their evolution. But even in the Third World a slow-down should become apparent before too long and the S-shaped curve of the modernization cycle can be expected to top out towards the end of the 21st century at a figure between 8 and 9 billion. Of this number less than 1 billion will be Europeans while the Americans and Africans will both number more than a billion. The remaining 5 billion will be Asians.

If population doesn't slow down spontaneously it will have to be stopped by some sort of catastrophe, either man-made, microbial or nutritative. Nuclear warfare is one obvious method of cutting back population but has the disadvantage that it could easily cause sufficient global contamination to extinguish the human race. Plague could be almost as devastating: it is unlikely that any bacterium could cause a numerically significant epidemic nowadays, but it is not hard to imagine a virus infection that could have a 95% mortality. Myxomatosis, a disease for which there is no treatment, caused this sort of drop in the rabbit population in many areas of the world in the 1950s. Famine is the ultimate sanction, but if it comes to that it will hardly be acting alone: in the apocalypse the four horsemen ride together.

Let us end on a happier note. The human race has solved its problems so far and it is reasonable to suppose that after something of an overshoot it

will learn how to achieve a numerical level which optimises living standards. We can perceive this optimum only in terms of present day technology and present day expectations. What it will turn out to be given the technology and expectations of the 22nd century is another matter, possibly higher than one might think. And, for sure, once the equation between numbers and resources has been satisfactorily balanced, further scientific advances would make a resumption of population growth possible. It doesn't seem at all likely though that any matured society would choose quantity over quality. Our guess is that instead of moving further towards the theoretical limit – which is somewhere around 20 billion – the human population, on this Earth at least, will never approach closer to it than the 21st century level of between 8 and 9 billion.

Appendices

APPENDIX 1: RELIABILITY

The hypotheses of the historical demographer are not, in the current state of the art, testable and consequently the idea of their being reliable in the statistician's sense is out of the question. It is nevertheless true that there is a remarkable degree of agreement as to the numbers of mankind over the last 1,000 years (see table below) and that this congruence justifies some confidence. *Durand has suggested the term 'indifference range' to define the area of confidence: by this he means the range within which there is no reason for preferring one figure to another. Outside if figures become increasingly unlikely not because they can be proved to be wrong but because there are good arguments against them. Durand's 'indifference range' gradually contracts from something over ±10% in AD 1000 to something under ±2% for the present day.

Further back in time the agreement is still good, at least as far as the authorities cited by Durand are concerned. For AD 1 he quotes five sources whose mean figures are 275m, 300m, 256m, 'at least 300m' and 300m. Their average (near 300m) is considerably higher than the figure we have proposed for this date, 170m, indeed our figure is actually outside Durand's indifference range. It would be out of place to offer a defence of our position here: sufficient to say that it is rooted in our study of the Roman world, where we believe that the case against higher figures is now a very strong one. Anyone interested in checking our thesis can do so on a

The world's population in the period 1000–1900 according to different authorities (after *Durand, p. 61 (Table 6)); our estimates added for comparison.

	Date of estimate	*Estimate for 1000*	*1250*	*1500*	*1750*	*1900*
Carr-Saunders	1936	—	—	—	728	1,608
Willcox	1940	—	—	—	694	1,571
Bennett	1954	275	369	446	749	1,555
Cipolla	1962	—	—	—	750	1,650
Durand	1967	—	—	—	791	1,650
Clark	1968	280	384	427	731	1,668
McEvedy and Jones	1975	270	375	415	720	1,630

province by province basis using the bibliographies for the individual countries of Europe, Asia Minor and North Africa. There is, however, one argument in our favour which is apparent only in the global context: our figure for AD 1, being 100m below the agreed figure for AD 1000, fits better on the sort of exponentially rising curve that everyone agrees best describes mankind's population growth than does the orthodox 300m for both AD 1 and AD 1000. One could say that ours is the null hypothesis and that the case for a higher total is one that has to be argued. (Edward Deevey, who in the *Scientific American* for September 1960 put forward a figure of 133m for AD 1 (not quoted by Durand), seems to have derived it from his graph in just this sort of way.)

For the very earliest periods one is talking in terms of orders of magnitudes. Durand quotes 3 estimates for 10,000 BC with lower limits of 1, 2 and 5m and a common upper limit of 10m. Our proposal of 4m falls at the lower end of this range.

APPENDIX 2 HISTORIOGRAPHY

The first attempts at estimating the world's population were made in the second half of the 17th century. By then the population of Europe could be estimated with some confidence at about 100m. Asia's was clearly larger, at least by a factor of 3, maybe by a factor of 5. Africa was thought to be roughly the equal of Europe, ideas about America were vague. Considering the gaps in the data the four-continent totals proposed by G. B. Riccioli (1661) and, more particularly, Gregory King (1696) were surprisingly near the mark (see the table below). Unfortunately both spoilt their global estimates by throwing in an extra 100m for an as yet undiscovered continent in the southern hemisphere.

'Terra Australis Incognita' turned out to be much smaller than expected and very sparsely inhabited, all Oceania containing no more than 2m people. This gradually became clear during the 18th century, and to the extent that it was possible to drop the 'undiscovered' item from the sum it could be said that world population estimates improved. However, little progress was made in respect of Asia and America and none at all in the case of Africa. With the 19th century the situation was transformed. A good view of the way in which contemporary estimates developed can be obtained by looking at the figures given in successive editions of Hubner's annual *Geographisch-statistische Tabellen*. These are substantially the same as ours from the start (1851) in the case of Europe and Asia, from 1870 in the case of America and from 1910 in the case of Africa. The global totals do rather better, being within 10% of ours throughout.[1]

	(Our estimate for 1650)	Fr Riccioli's estimate, 1661	Gregory King's estimate, 1696	*(Our estimate for 1700)*
Europe	105	100	100	118
Asia	375	500	340	420
Africa	58	100	95	61
America	12	200	65	13
TOTAL	550	900	600	612

Riccioli's and King's estimates of the populations of the four major continents; our estimates added for comparison.

Serious thoughts about the likely size of populations in the past begin with the Enlightenment, in particular with David Hume's prescient essay *Of the Populousness of Ancient Nations* (1742). However, no one did any systematic work on the subject until Karl Julius Beloch, who published his *Die Bevölkerung der Griechisch-Römischen Welt* ('The Population of the Graeco-Roman World') in 1886. He followed this up with volumes on renaissance Europe (1900) and medieval and early modern Italy (published posthumously). His position as the founding father of historical demography is beyond dispute. In his day he was alone: now the subject is a respected discipline and historical demographers jostle each other at symposia and confuse our bibliographies.[2]

CAST IN ORDER OF APPEARANCE

Giovanni Battista RICCIOLI. Born Ferrara, Italy, 1598. A Jesuit, he held a chair of Philosophy, Theology and Astronomy at Bologna in the Papal States. Wrote extensively in support of the Church's anti-Copernican position, also on metrology. Died 1671.

Gregory KING. Born Lichfield, England, 1648. At various times was a genealogist, a cartographer, a surveyor (he laid out Soho Square in London) and a master of official ceremonies (investitures and so on). Remembered today for his statistical essays. Died 1712.

David HUME. Born Edinburgh, Scotland, 1711. Gained international eminence as a historian, economist and philosopher. Today it is his philosophical works, particularly the *Treatise of Human Nature* (1739–40),

1. The Hubner data are tabulated by *Willcox on pp. 643–4 of Vol. II.

2. Most of the data in this appendix derive from the historiographical essays in *Willcox (Chapter I of Vol. II) and *Russell (pp. 5ff.)

that are considered classical: in his own time his main reputation was as a historian. This was made by his *Essays* (1741–2) and his *History of England* (1754–62). Contemporaries also counted among his achievements the disproof of the then fashionable theory of physiognomy: there was apparently no sign of intelligence in his fat face and 'vacant and spiritless eyes'. Died 1776.

Karl Julius BELOCH. Born Nieder-Petschkendorf, Germany, 1854. Became Professor of Ancient History at the University of Rome at the age of 25: died there fifty years later (1929), the grand old man of Italian classical studies. In many ways a perfect example of the virtues and defects of the German scholar of the Imperial era: immensely hard-working, intelligent and perceptive but also arrogant, insensitive and antisemitic.

General Bibliography

All the works mentioned here are given their full titles in the list at the end of this section.

Current population figures for all the countries of the world are given in many reference books, not all of which agree. The official international source is the *United Nations *Demographic Yearbook*, the handiest is the **World Bank Atlas*, the most up to date is the *United Nations *Population and Vital Statistics Report* which is revised every three months. These publications are obviously only as old as the United Nations and World Bank but there were equivalents before the war – the *Statistical Year-Book* of the *League of Nations and the **Annuaire international de statistique*. Between them these make it easy to locate the official figure for any country in any year since the First World War.

Before that there were no international agencies collecting statistics and one has to turn either to the individual national series (some of these contain international data for comparison – *Mitchell has a list of the ones that do) or to various unofficial compendia. The earliest of these is *Bötticher's of 1800. The easiest to use are the **Encyclopaedia Britannica* (starting with the 7th edn of 1830–42) and the **Statesman's Year-Book* (starting 1864). For the very first attempts to stitch together global totals see *Willcox; our Appendix 2 is a precis of his study.

So much for contemporary estimates; now for retrospective collections. Among the most useful are the 1952, 1953 and 1955 editions of the *United Nations *Demographic Yearbook*, which give census figures back to 1850, and the 1952–6 and 1960 editions, which give mid-year estimates back to 1920. For 19th-century Europe there is the quinquennial table published by the Swede *Sundbärg in 1906 and a decennial one in the 1924 edition of the German **Handwörterbuch*. Further back than 1800 the terrain belongs to the historical demographer rather than the compiler of statistics. Of the various people who have prepared global series the easiest to get hold of is *Clark, but the most recent and comprehensive is *Durand. *Durand also gives all the rival series: our Appendix 1 is based on his survey.

Regional studies are best considered in chronological sequences. For the Europe–North Africa–Near East region there is *Beloch for the classical period, *Russell for the period extending from late antiquity to medieval times, and *Braudel for the 16th century. For Europe during its medieval

transformation into an independent unit and in the period since, see *Beloch (2), the relevant chapters of the *Cambridge and *Fontana economic histories and, particularly for recent trends, *Kosiński. The census figures for the continent have recently been collected in *Mitchell's most useful volume: as to boundary changes the consequences of the last lot are worked out by *Frumkin.

For the North Africa–Near Eastern region since it started to go its own way the main references are *Poliak, *Bonné and the collection of papers edited by *Clark and Fisher. Asian demography is so completely dominated by China and India that it is largely subsumed in the bibliographies for these two areas: for the remainder see *Myrdal, *das Gupta and, specifically for South-East Asia, *Fisher. For sub-Saharan Africa the only broad studies are in *Kuczynski, the report of the **Haut Comité* and *Clarke and they are neither comprehensive nor entirely about Africa: Kuczynski is concerned with British possessions, the *Haut Comité* with the French Empire and Clarke with the 'Third World'.

For Oceania there is only *Howells, whose book is first class but not meant to be more than an introduction.

The New World has attracted more attention than the Old, presumably because it is a lot easier to get a grip on the subject at an overview level. *Rosenblat is one of the classics of historical demography – a combination of carefully worked-out estimates by area and race for 1492, 1570, 1650, 1825 and 1950, and a very detailed bibliography. *Barón Castro gives another set of 19th- and 20th-century estimates. *Sánchez-Albornoz a good survey of recent work. For the debate that has followed the claims of the 'Berkeley School' see *Sánchez-Albornoz, *Stewart and *Dobyns.

International migrations – the only sort we are concerned with – have been very shakily monitored until recently. The standard work is *Willcox: movements since his day are summarized in the background paper prepared for the *United Nations World Population Conference of 1974. For the Atlantic slave trade there is the first-class study by *Curtin.

Most of the books and papers mentioned so far have been written by people who were not trained as historical demographers but as anthropologists, archivists, economists, statisticians or just plain historians. This is not chance: very few historical demographers are interested in population figures except at a parochial level. What they like best is writing papers – long papers, on small subjects, with no conclusions. Hunting about for the few that are relevant to a simple study like ours is an exhausting business. Luckily, many of the most useful papers are available in one or other of three collections: the proceedings of the 1963 **Colloque International de Démographie Historique*, the selection edited by *Glass and Eversley in 1965 and a second set edited by *Glass and Revelle in 1972. Further references can be culled from two useful compendia of 'work done', *Reinhard (in French) and *Kirsten (in German). There is no English equivalent unless one counts *Hollingsworth, who has splendid footnotes but behaves frivolously when it comes to making estimates of his own.

As for the journals themselves, the two main ones are **Population Studies* (in English) and **Population* (in French): an eye on these will catch most important additions to the literature either directly or via reviews. There are also two bibliographical publications, **Population Index* and **Annales de démographie historique*, which, in theory at least, note anything that is published on the subject in any place in any language: brief abstracts give a fair idea of which references are worth following up. Of course they miss some items, particularly when these are contributed by unexpected disciplines. Serendipity is a necessary quality for anyone working in this field.

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Bold face entries indicate standard graphs; italic means the reference is to a map or diagram.