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# Human Migration in Historical Perspective

William H. McNeill

It is safe to assume that when our ancestors first became fully human they were already migratory, moving about in pursuit of big game. The rapidity with which hunting bands occupied all the continents (except Antarctica) in about 50,000 years attests this propensity. No dominant species had ever spread so far so fast before. Our ancestors broke through climatic and geographical barriers with comparative ease because the invention of clothes and housing allowed them to sustain a tropical microclimate next to their almost hairless skins, no matter what conditions prevailed in the environment at large.

Tools, language, and disciplined cooperation in the hunt made it easy for advancing human bands to outwit rival predators. Moreover, as our ancestors left tropical Africa behind and moved into temperate zones, they shed most of the parasites and disease organisms that had helped to maintain ecological equilibrium within humanity's cradleland. A population explosion resulted, sustaining the rapid occupancy of the principal land masses of the earth.

Once that great migration had been completed (ca. 8000 B.C.), a global crisis confronted humankind. Population growth could no longer be accommodated by finding new, unoccupied hunting grounds. Intelligent humans responded by intensifying their food search; and in many different places the possibility of expanding natural populations of edible plants was systematically explored. Where suitable plants existed, agriculture began; and the enhanced food production this allowed, together with the intensification of infection that resulted from a more sessile existence, meant that for the ensuing few thousand years human population growth and an expanding food supply remained in approximate balance.

Much early agriculture was itself migratory—slash and burn. As a result, both wheat and barley traveled across the whole of Eurasia within 5,000 years, moving east and west from their initial locus of domestication in the Near

East. Other forms of agriculture were more closely tied to special environments—for example, rice to seasonally flooded ground—and therefore spread more slowly. In the New World, maize had to undergo a lengthy biological evolution before agriculture became productive enough to sustain entire communities. This retarded cultural evolution and kept Amerindians significantly behind the pace of Old World developments until modern times.

The next major historical–ecological horizon dates from about 4000 B.C., when, in favored locations, human communities learned to build sailing vessels capable of crossing open water and became able to navigate well enough to get back to home port, at least most of the time. This made offshore islands like Crete available for human settlement, and gave fishing and long-distance trading far greater importance than before. Initially, though, these new possibilities were important mainly in the Mediterranean, where summer trades, and in the Indian Ocean and South China Sea, where monsoon winds, made navigation easy.

More important for human life as a whole was the development of another specialized lifestyle: pastoral nomadry, dating from about 3000 B.C. It required human populations to establish enzyme mutations that allowed adults to digest milk. Domesticated flocks and herds, too, underwent biological change registered in the bones that archaeologists study. Once these adaptations had occurred, human herdsmen could kill off all but a tiny breeding stock of male newborns and substitute themselves as consumers of animal milk.

Pastoralists, of course, were also migratory, since the concentrated flocks and herds on which they depended—sheep, goats, cattle, horses, and later even camels—ate the herbage faster than it grew, and had therefore to move to new ground every few days or weeks. That kind of mobility meant that once the biological adaptations and skills required for successful nomadry had been achieved, the broad grasslands of the Eurasian steppe and the equally extensive savanna lands of Africa and the Middle East were quickly occupied by pastoralists, whose rapidity of movement and superior diet gave them a clear military advantage over more sessile and (often) protein-deficient cultivators.

The emergence of seafaring populations along the coasts of quiet seas, and of nomadic communities in the heartlands of Eurasia and Africa, meant that even when the plow made fully sessile agriculture normal on suitably well-watered soils after 2000 B.C., there still remained a mobile element among Old World populations that kept each part of the ecumene at least loosely in touch with the rest. Under these circumstances, important innovations could and did spread very widely and rapidly whenever the superiority of the new was clearly apparent. Eurasia's lead over other parts of the earth in technical skill's resulted from this circumstance.

The increased variety in ways of life had as its initial result the creation of what we commonly call civilization. Sumerian-speaking seafarers from the south settled in the flood plain of the Tigris-Euphrates about 4000 B.C. and subjected the previous inhabitants to their rule. In the next millennium rulers

and subjects proceeded to elaborate the earliest known civilization, developing wheeled vehicles, bronze metallurgy, writing, monumental building, irrigation, and many other new skills. A dozen or so Sumerian cities, each inhabited by 20,000 to 50,000 persons, were the first to exist.

Civilization differed from other forms of society in allowing occupational specialization among relatively large numbers of persons. Such specialists quickly developed higher skills than were attainable when everyone farmed or hunted most of the time and engaged in other forms of activity only occasionally. The fundamental differentiation was between rulers and ruled, for it was this distinction that allowed a few to collect taxes and rents in kind from the majority and then use such unrequited income to sustain themselves and the gods, as well as artisan specialists and soldiers. Trade goods for distant exchanges came mainly from artisan workshops, where specialists' skills produced goods precious enough to bear the high cost of transport.

The advantage of civilization lay in the superior skills that specialization guaranteed, and the enhanced wealth that division of labor permitted. Its weakness lay in the alienation that normally prevailed between rulers and ruled. Common interest, though real in the very long run, was hard to recognize in view of the immediate collision between tax collectors and taxpayers. Moreover, early civilizations usually exhibited ethnic differences between rulers and ruled that reinforced and widened the social distance between them.

Ethnic diversity was in turn largely a function of military specialization that allowed some groups to dominate others. Professional warriors arose very early—by 3000 B.C.; and since they were armed and armored with metal, which was lacking in uncivilized communities, such troops could expect to prevail in most encounters with barbarians. This gave civilized communities a capacity to expand, sometimes by direct conquest, but more often by contagion, as neighbors acquired the military and other skills needed to hold threatening civilized neighbors at bay. The record of history therefore shows that over the long haul civilized social structures expanded in spite of innumerable local setbacks and temporary breakdowns of the social hierarchies sustaining early civilization. Evolution toward civilized complexity occurred in the New World some 2,000 years later than in Mesopotamia. Not surprisingly, Amerindian peoples never caught up and were radically vulnerable to Spanish conquistadores and to the diseases the Europeans and Africans brought to America after 1500.

Once civilized societies had taken root in the Far East, in India, and around the eastern Mediterranean, as well as in the Middle East (i.e., by about 2000 B.C.), the resulting social diversity complicated and at the same time structured subsequent patterns of human migration. Details are infinitely complex; yet one can hope to discern a few overall, organizing tendencies.

On a priori grounds alone, one may distinguish four possible forms of migration within an ecumene already occupied by human populations whose diverse skills and social organization defined the carrying capacity of the landscapes they happened to occupy. These are:

- 1 radical displacement of one population by another as a result of systematic exercise of force;
- 2 conquest of one population by another, leading to symbiosis of two previously diverse communities on the same ground;
- 3 infiltration by outsiders with some degree of acquiescence from existing populations and without displacing existing rulers;
- 4 importation of individuals or even of whole communities that had been forcibly uprooted from their initial place of residence by slave raiders and/or traders.

Of these, the first was and remained characteristic of barbarian societies—that is, of societies organized on kinship lines in which nearly every family did the same sorts of things as every other family, save, perhaps, for a few chieftains and priests. Such societies had little use for foreigners, except for a few itinerant smiths who made iron tools and weapons available to the barbarian world of Eurasia and Africa after about 1000 B.C. Occupation of a given territory involved exclusion of others, although fictitious kinship, solemnized by special rituals, could and did expand in-group boundaries beyond biological limits.

Pastoralists of the steppe were the most important human communities that conformed to these specifications. Struggles over pasture lands were endemic and ever recurrent among them. Victory for one tribe or tribal confederation required survivors among the defeated to flee elsewhere. Invasion of agricultural lands was one possibility for defeated steppe communities; assault on some neighbor within the grasslands was the only alternative, since both the northern forests of Eurasia and the tropical rain forests of Africa were too inhospitable to allow survival of more than a scattered few.

Constant turmoil was thus generated within the Eurasian and African grasslands. In northern Eurasia, a definite geographical gradient asserted itself. Any group seeking to expand or fleeing from an aggressive neighbor preferred to go where grass was richer and temperatures somewhat less harsh. Dispersion from Mongolia, where conditions were the most severe, therefore asserted itself in the form of sporadic migrations, east, south, and west. In the savanna lands and hot deserts of Africa and southwest Asia, Arabia played a very similar role, for that land, too, represented the most severe landscape within which nomadry could flourish and therefore became a cradle whence streams of emigrants moved west across Africa as well as north into the Middle East.

Nor did nomadic migration stop where grass gave way to cultivated fields. On the contrary, the superior nourishment and superior mobility inherent in the nomad way of life meant that tribesmen were always able to exploit any weakening of the civilized frontier guard. When such weakening occurred, successful raids snowballed into conquest. In this way Semitic speakers supplanted Sumerians in Mesopotamia by about 2000 B.C. To the north, first Indo-European tribesmen, then Turks, and finally Mongols spread their languages and political dominion far and wide across most of Eurasia, while Semitic

tribes, stemming ultimately from Arabia, did the same in North Africa, both north and south of the Sahara.

Such conquest, however, involved a break with the nomad way of life, and brought such peoples into the circle of civilization, with its mixing of diverse populations and systematic differentiation of occupations. Civilized populations had their own distinctive migratory patterns that therefore intersected the nomadic movements we have been considering. Two such currents, if we knew more about them, would explain a great deal of the political and cultural history of the world. But statistics are absent, so impressionistic description is all that historians can supply, at least so far.

Basic to civilized society was the fact that cities became seats of intensified infection—so much so that urban populations were incapable of sustaining themselves biologically. This changed only in the second half of the nineteenth century, when public health measures and the advance of scientific medicine made it possible for the first time to interrupt the cycles of infection for a wide variety of crowd diseases.

Before then, cities had to import people from the hinterland as well as food and raw materials in order to survive. Consumption rates for food and raw materials were relatively constant, but deliveries were often interrupted by political upheavals and difficulties of transport. Sporadic food shortages, together with the erratic outbreaks of lethal epidemics, made for sharp fluctuations in urban deaths. In a bad year, a large fraction of the population might die in a matter of weeks. In a good year, births might equal or exceed deaths. But on the average, population decay prevailed. In recent times, when statistics do become available, the gap between urban deaths and births was substantial. In eighteenth century London, for example, the shortfall averaged 5,000 per annum, or about 1 percent of the city's population. Urban die-off was probably higher in more ancient times, since fluctuations in food supply had been much reduced by improved transport in eighteenth century Britain.

Since cities, the seats of civilized skills and specialization, were demographic sink holes, civilization itself could only persist if rural populations normally produced a surplus of children over and above what was needed to maintain the rural work force and its production of a taxable surplus. Family regimens making early marriage almost universal could assure this result, of course; and it is clear that the moral codes of all Eurasian civilizations did inculcate such a regimen for the majority, despite the praise of celibacy associated with Christianity, Buddhism, and Manichaeism. In view of the natural and manmade disasters that afflicted rural communities—crop failures, epidemics, and plundering raids, or any combination of the three—the rural demographic balance obviously had to be such as to guarantee rather rapid growth whenever these disasters were absent. Otherwise speedy recovery from rural die-off in a bad year and maintenance of decaying urban populations would be impossible. This, in turn, meant that after no more than a single generation of normal harvests and immunity from political and disease disaster, villages could expect to see more children coming of age than the local supply

of cultivable land could easily support in situ. The regular appearance of this sort of surplus, at least in some rural localities, maintained a condition of overall stability. Anything else would swiftly deprive the cities of the influx of eager apprentices from the countryside that was needed to keep urban skills alive across the generations.

Obviously, an exact balance between supply and demand for labor was impossible to maintain, especially in a world where unforeseen disaster was a recurrent reality. Periods of acute manpower shortage were probably as important for early civilized history as periods of surplus. Shortages provoked slave raids to recruit personnel for the least attractive occupations of civilized society. Much early war was of this character. Heavy population losses arising from military operations were at least partially offset by wholesale enslavement of the defeated. Often this involved forcible migration from some remote periphery toward the center of urban civilization. The Jewish prophets who mourned their lost Zion beside the waters of Babylon may remind us of this pattern of forced migration; and the general importance of slavery in the ancient world, of which Karl Marx made so much, is further attestation of the frequency with which voluntary recruitment into urban centers fell short of desired levels.

The opposite circumstance also could arise when too many rural children came of age and crowded into cities, overflowed provincial towns, and provoked various kinds of public disorder until political disaster again cut back the population to or below the carrying capacity of the land. Hellenistic and Roman Palestine illustrated this condition vividly, and since the Gospels and the Book of Maccabees derive from that overcrowded matrix, and since modern times have also seen prolonged and massive population growth, we are likely to take rural surplus as normal. A better perspective would recognize that rural population growth and cut-back alternated irregularly, with periods of shortage rather more threatening to the continuance of early civilizations than periods of surplus.

Once in a while another response to population growth in the rural hinterlands of civilized societies became possible. Whenever civilized methods of agriculture could get more from the soil than existing fringe populations were able to produce, migration to the frontier made sense. And when rural manpower surpluses existed, extra hands could migrate out from the crowded center and take up land on the frontier, thus extending the civilized body-social onto new ground.

The Chinese occupation of what is now central and southern China is the most conspicuous and best documented example of such civilized pioneering. It was a result of the superiority of Chinese rice paddy agriculture to any less labor-intensive use of land in the Yangtse valley and further south. The taming of northern Europe to the plow between A.D. 300 and 1300 is second only to China's southward expansion in historical scale and importance. It arose from a juxtaposition of an expanding Germanic rural population with a new technique, to wit, the use of mouldboard plows. These plows created an artificial drainage system in even the flattest landscapes of northern Europe,

and thereby allowed grains, native to semiarid habitats, to flourish on previously waterlogged soil.

As historic China was shaped by water engineering and rice paddy cultivation, so historic Europe was delineated by migrants whose way of life depended on the mouldboard plow and the social organization of work its operation dictated. The emigrants traveled from the plains of northwest Germany, where the technique originated, outward in every direction—to Scandinavia, the British Isles, northern France, northern Italy, and east along the Baltic and Danube to establish the frontier states of Prussia and Austria. Far less is known about comparable expansion in the Middle East and Central Asia, where Iranian engineers, by inventing underground water conduits, checked evaporation losses and thus expanded the areas of irrigation markedly, beginning some time before the Christian era. Even greater ignorance exists for North Africa and India, where, nevertheless, areas under cultivation did sporadically increase under circumstances presumably analogous to those prevailing in China and northern Europe.

What one needs to conceive, therefore, is a basic human circulation within civilized bodies-social that sporadically carried some families toward the periphery, where they expanded the area under cultivation; and a contrary, more continual movement toward urban centers, where recruitment from the hinterland was necessary to sustain human skills and numbers. These were the really massive flows, analogous to currents in the earth's magma that direct the motion of tectonic plates. As collisions of tectonic plates provoke geological spectaculars—mountain ranges, earthquakes, volcanoes—so also in human affairs it seems likely that political spectaculars like the rise and fall of civilizations rested on these basic currents of human migration.

The juxtaposition of civilized agricultural societies with steppe nomads and seafaring communities within the Eurasian context also provoked two other, comparatively slender migration patterns that nonetheless played important parts in historic development. One was military, the other mercantile.

First, the military. As I have already said, nomads, by dint of their way of life, enjoyed a systematic military advantage over agricultural populations. The result was sporadic conquest from the time of Sargon of Akkad, circa 2250 B.C., to the Mughal and Manchu conquests of India and China in the sixteenth and seventeenth centuries. Across those three millennia, the middle reaches of the ecumene experienced recurrent conquest by nomads or by the heirs of nomads who had abandoned pastoralism for the richer reward of shepherding humans, substituting taxes and rents for harder-won milk and fleeces.

But, as Ibn Khaldun was perhaps the first to point out, the conditions of life that faced successful nomad conquerors were not conducive to the maintenance of their power. Alienated subjects were prone to rebellion; and the superior numbers of agricultural populations meant that such rebellions, inspired by heartfelt native reaction against alien rulers' exactions, could and often did spread like wildfire. Moreover, tribal discipline and moral cohesion

among the rulers was certain to diminish once the daily exercise of tending herds and moving from pasture to pasture ceased to govern their lives, while the epidemiological perils of urban living eroded their numbers.

These factors conspired to produce speedy decay of purely nomadic empires. Those that lasted more than about a century had to accept some sort of recruitment from below to strengthen and prolong their power. But even in such cases, other, slower processes—often related to the inability, after prolonged peace, to find satisfactory niches for what had become an excessive rural population—came into play, provoking civil war and opening the way, as often as not, for a new invasion from the grassland.

Disease and famine associated with such catastrophes sharply reduced rural and urban populations, often far below the level needed to staff the least attractive jobs. The surviving poor also benefited from the fact that social upheavals always pruned back personal claims on tax and rental income, swollen in times of stable administration above any really functional level. New dynasties therefore often began their careers by exacting rather less per capita from a sharply diminished tax- and rent-paying population, and then saw both population and the tax and rent burden creep upward as time passed, until a new social crisis broke out.

These political rhythms meant that nomads, by advancing their camps to or just outside the cities of the civilized world, constituted a slender and sporadic counter-current to the migration of peasants toward the frontiers. Its political-military importance was quite out of proportion to the numbers involved. Only Japan and western Europe were far enough removed from the Eurasian grasslands to be almost exempt from the rhythm of nomad conquest, and they not completely. Elsewhere in the Old World, political history turned mainly on these events.

The dynamics of these military migrations had another important effect. The tribesmen of the steppe and savanna lands of Eurasia and Africa acted like the molecules of a confined gas to transmit advances in military technology and related skills from one end of the ecumene to the other in very short periods of time. The “instantaneous” diffusion of stirrups in the fifth century A.D. is a well-known example of this phenomenon; the spread of gunpowder weaponry in the fourteenth century—a change that eventually helped to destroy nomad military superiority—is another. The overall effect was to assure that Eurasians maintained an easy military superiority over other, more isolated populations. The modern expansion of Europe was vastly assisted by this fact.

So much for the military patterns of Eurasian migration. To begin with, mercantile migration was a good deal more tenuous, when measured numerically. Before about A.D. 1000 only a tiny handful of persons made a living by moving long distances with goods for sale. Still, such groups carried knowledge and skills across otherwise unbridgeable barriers, and had much to do with the spread of civilization onto new ground. That was because when some itinerant trader happened across a potentially valuable resource at a distance from his home, he was often able to show local chieftains and men of authority

how to start up a new mine or to produce some other commodity for export. In this way, local social hierarchies, analogous to the more elaborate ones of civilized cities, sprang into existence even at great distances. In favorable circumstances, closer and closer ties with the metropolitan center could bring a more active exercise of the full range of civilized skills to such communities without political annexation or conquest. Southeast Asia illustrates this pattern best; the spread of urban life through the western Mediterranean in the first millennium B.C. offers another example of what could happen through trade.

In these and other instances, long-distance traders found it possible to move back and forth between regions of high and low skills; and in doing so they tended to spread skills and knowledge more uniformly, within limits set by geography and by the social organization of existing populations. Being more knowledgeable than nomad tribesmen, they carried a good deal more than military technology from place to place. For example, the spread of religions was a byproduct of the circulation of ancient traders. All of the world's higher religions, from Buddhism to Islam, were initially propagated along the trade routes of the Old World, partly by merchants and partly by itinerant holy men whose pattern of life approximated closely that of merchants, although their stock in trade was salvation rather than any more tangible commodity.

However tenuous, these military and mercantile patterns of migration were therefore important in shaping the world's high culture and politics. They also circulated diseases from one part of the civilized world to another. The establishment of regular caravan and shipping contacts between China and the eastern Mediterranean about the time of the Christian era was probably what allowed destructive epidemics to break out in both the Roman and Chinese empires in the second century A.D.—epidemics that killed off so many of the inhabitants as to disrupt city life and precipitate the collapse of both the Han and Roman empires.

Civilization recovered, of course, in both Europe and China as survivors developed resistances to the new disease patterns that had come to prevail. Then, when the Mongol empire was at its height in the fourteenth century, another bout of serious disease exposure ensued. Bubonic plague was the chief killer. Yet the plague did not suffice to disrupt European or Islamic society and seems to have had even less effect on China. A single new disease, even one as lethal as the plague, was not enough to reduce population so sharply as to endanger urban continuity. It required a battery of new diseases, one following hard on the heels of the other, to produce the sort of disaster that had come to the Roman and Chinese worlds in the first Christian centuries, and the even more severe catastrophe that destroyed Amerindian civilizations after 1500, when European explorers brought their own as well as African tropical diseases to the New World.

The group that suffered most severely and persistently from the plague was, in all probability, the nomad tribesmen of the Eurasian steppe itself. For the bubonic bacillus apparently spread throughout the grasslands in the four-

teenth century, establishing permanent foci of infection in the nests of burrowing rodents. This put nomads at risk as never before; and there are clear signs that drastic depopulation of the Eurasian steppe ensued. As a result, the millennial migratory current that had carried so many nomad invaders onto agricultural ground ceased to flow after the fourteenth century with anything like its accustomed force; and by the sixteenth century, encroachment on the grasslands by pioneer settlers became the dominant trend instead. This was assisted by gunpowder weaponry, which allowed civilized states to counter nomad arrows more successfully than before; but a profound demographic shift also forwarded the change by emptying out some of the best pasture lands of Eurasia in advance of settlement.

One reason why the disease consequences of the Mongol unification of the Old World were more hurtful to the nomads than to civilized populations was that the pace of long-distance commerce had increased markedly since the classical age, linking all of the regions of the Old World more and more closely together and assuring that no considerable human population could long remain unexposed to any of the diseases circulating within the system as a whole.

The increased importance of interregional and transcivilizational commerce was part of a more general commercial transformation of society that altered human relationships fundamentally after about A.D. 1000 and inaugurated a new phase of civilized history. It affected patterns of migration by greatly expanding the scope for infiltration, on the one hand, and for enslavement on the other. As conquest of one population by another was the hallmark of early civilized history—the basis on which most, and perhaps all, civilizations arose—so infiltration and enslavement became the special characteristics of migration into civilized societies during this second, commercialized phase of civilized history.

Today market exchanges govern everyday lives almost completely. We no longer produce what we consume, but instead obtain the necessities of life by purchase and sale. This is now so much a matter of course that we have some difficulty in remembering how recent and, historically speaking, exceptional this mode of life actually is. Before about A.D. 1000, something like 90–95 percent of all families produced nearly everything they needed to sustain life, and very rarely bought anything made by someone else. In cities this was of course not so; but cities were the exception. In the countryside, self-sufficiency was the rule and the market scarcely mattered. Taxes and rents sustained the cities, but brought nothing back to the countryside other than protection from some other and perhaps even more ruthless predator.

To be sure, in a few places where transport was unusually cheap, rural populations had sometimes been able to enter into urban exchange networks. This became true in parts of the Aegean coastlands, for example, where selling olives and wine in exchange for grain imported from across the seas sustained the bloom of early classical culture. But even in that favored landscape, this commercial system proved precarious and never penetrated inland. Moreover, citizen farmers who entered the market as autonomous buyers and sellers gave

way, by the second century B.C., to great estates staffed with slave labor; and the cities of the Roman empire drew their sustenance from rents and taxes extracted from rural populations that had too little left over after paying their dues to landlords and publicans to be able to buy and sell much of anything on their own account. So even in the Mediterranean lands, where commerce was favored by geography, the involvement of the agricultural majority in market relations remained exceptional in ancient times, however important the exceptions were in shaping our cultural heritage.

In Europe, the medieval revival of commerce was associated with improvements in shipbuilding and navigation that cheapened water transport markedly and made seafaring a year-round business for the first time. Winter storms no longer halted shipping; even the northern seas presented no more than manageable risks. This technical advance sustained and undergirded the remarkable upthrust of commerce that transformed medieval Europe from A.D. 1000 onward.

Simultaneously, an even greater change affected China in unexpected and radical fashion. There the hydraulic engineering associated with rice paddy cultivation created—incidentally, as it were—a network of canals and canalized rivers that cheapened internal transportation very greatly. Eventually, even small differences in local costs of production allowed boatmen to transport goods of common consumption across scores and even hundreds of miles from regions of low to regions of higher prices, and still make a profit. This opened up all the advantages of specialization of labor that Adam Smith was later to analyze so persuasively in *The Wealth of Nations*.

To be sure, it took time for commercial skills and organization to take root within Chinese society; but during the eleventh century a tip point came when millions of ordinary peasants began to enter the market as a matter of course, buying and selling so as to secure an optimal assortment of goods for their own consumption. At about midcentury, taxes were commuted into money, and this greatly accelerated the shift from rural self-sufficiency to market organization of massed human effort. The resulting specialization of labor exploited differences of soil, climate, and human skills more rationally than ever before. The efficiency of rural production increased dramatically. The whole society, in a sense, became urbanized by becoming commercialized; and the fundamental advantage that civilized social structures had always enjoyed over undifferentiated communities was enormously magnified.

A rough index of the resulting increase of wealth and productivity is the fact that China's population doubled under the Sung dynasty (960–1279), while Chinese skills surged far ahead of all other parts of the civilized world. Marco Polo's report of what he saw in Cathay is eloquent testimony to China's lead over the rest of the ecumene at the end of the thirteenth century; and 50 years later, an equally well-informed Muslim, Ibn Battuta, confirmed the Venetian's report.

When everyday activity of ordinary people—that is, of the peasant majority itself—came to be keyed to buying and selling in the marketplace, older

social hierarchies altered considerably. A new form of power—money power—entered the scene. Landowners, military commanders, and government officials had to cope with new competitors, that is, with the bankers and merchant capitalists who ordered human activity not by the straightforward method of issuing commands and compelling obedience by punishment and threat, but by taking advantage of human greed and need. They merely offered and withheld credit, niggled over prices, bought cheap and sold dear, while keeping a sharp eye out for some new way to make money, whether justly or unjustly.

Nearly everyone regarded such behavior as immoral, and in the better governed parts of the world capitalists were in fact kept carefully in check. This was conspicuously the case in China, for example. In the Indian and Muslim lands military and bureaucratic managers achieved the same result more crudely by capriciously confiscating private accumulations of wealth, or asking such heavy bribes as to stunt large-scale commercial integration of the societies over which they presided. Throughout Asia, therefore, market relations escaped inhibiting official attention only at the level of the artisan and peddler. But from the eleventh century onward, China's massive commercialization reinforced the more ancient virtuosity with which Middle Eastern bazaar dealers chattered over prices while concealing their wealth from tax collectors. Thereafter, the activities of Chinese together with Middle Eastern merchants and peddlers sufficed to give the market far greater control over ordinary everyday human activity than it had ever had in earlier times.

The almost uninhibited impact of the market was, however, initially concentrated in Europe. In that remote, ill-governed, and politically fragmented part of the ecumene, capitalists could play one local ruler off against another, and were able to betake themselves and their wealth wherever protection costs were least. Sovereign and independent city-states governed by merchants and artisans arose in favored parts of the continent in the eleventh century, and the richest of them played the military and diplomatic roles of great powers for the ensuing 400 years. To get loans, territorial rulers and lords of high degree in the rest of Europe granted economic rights and privileges to capitalist entrepreneurs with a lavish hand; and though such deals were often broken off, and even though European bureaucrats and kings, like their Asian contemporaries, often resorted to confiscatory taxation, those who did so saw commerce flee their domains while neighboring realms prospered.

Europe's political fragmentation, in other words, allowed a loose market in protection costs to sustain itself, even in territories not directly governed by men of the marketplace. As a result, by the sixteenth century the greatest states of the age found themselves irretrievably entangled in a web of credit and commerce spun by Europe's businessmen. A more secure *modus vivendi* emerged in the seventeenth century, when rulers and officials of Europe's strongest states decided that forwarding the interests and activities of merchants and bankers was sound policy, because it enlarged tax revenues and thus permitted the maintenance of larger armies and navies.

The greater scope European institutions thus offered for private pursuit of profit improved economic efficiency and eventually allowed Europe to out-

strip China and become the world's leader in technical skills, especially those requiring large-scale investment, like shipbuilding, mining, and metallurgy. Enhanced wealth and power thus came within Europe's grasp, and with them the means for world dominion. That predominance inaugurated the distinctive modern period of world history—an era which in all probability is now coming to a close.

The effect of the commercial transformation on migration was as profound as on other aspects of human activity. First of all, it gave far greater scope to infiltration of strangers into civilized communities. Persons coming as merchants and traders, along with their attendant caravan and seafaring personnel, were only an entering wedge. In a commercially articulated society, any stranger possessing some exotic skill could hope to make a living by selling his particular goods and services. The limits to this sort of specialization were extremely elastic. New services and occupations, introduced initially by strangers, often came to be conventionally assigned to outsiders, being deemed beneath or above any ordinary person's capacity. Consequently, humble roles like garbage collector and restaurant keeper as well as highly respected professions were often permanently assigned to strangers and outsiders. Variegated trade and skill diasporas thus appeared in every civilized land. Sometimes these diasporas disappeared after a few generations when the relevant skills had been acquired by persons of local birth, or when descendants of the original immigrants assimilated themselves into the environing society. But some diasporas were very long lived, either because the skills involved were somehow repugnant to the environing society, or because a continued connection with some distant land was necessary for the maintenance of the activity in question.

A circumstance that often acted to maintain a trade or skill diaspora over long periods arose when some conspicuous cultural markers—usually canonized into a religious code of behavior—separated the newcomers from the rest of society. The role of Jews in Christendom and Islam is especially noteworthy, of course; but there have been other religious sects and diasporas that resembled the Jewish case: Parsees in India, Greeks and Armenians in the Ottoman, Romanov, and Hapsburg empires, nonconformists in seventeenth to nineteenth century England, Old Believers in Russia, and the like.

Such people infiltrated other societies peaceably by providing goods and services otherwise unavailable. Mistrust and dislike often surrounded them; toleration was only half-hearted. Moneylenders, especially those involved in giving credit to and withholding credit from poor people with little experience of the market, were obvious targets for popular violence. Yet local pogroms and more systematically organized holy wars against infidels and intruders, though they might destroy or drive out a hated group of people, did not often succeed in permanently eliminating the kinds of services such strangers had provided. The reason was that the outsiders performed an important function for the community as a whole, connecting it with the world's trading network. Doing without such connections was costly, and few communities were really prepared to revert from commercial production to local self-sufficiency, with all the constrictions of supply and consumption that such a reversion implied.

So exposure of diaspora peoples to sporadic crowd violence became a cost of doing business in commercially marginal communities. Soon after popular outbreaks of violence had damaged or destroyed storehouses and workshops, together with their owners, the old relationships usually resumed, *faute de mieux* on both sides.

Missionaries, teachers, and foreign experts who deliberately set out to impart new knowledge and skills to local inhabitants constitute an important variant of the diaspora pattern. Such persons came sometimes invited, sometimes uninvited. Their ability to transmit what they meant to impart to the host society varied enormously. Often the most significant interaction took place at a level no one intended. Still, religious missionaries, secular teachers, and especially medical and military experts commonly had far greater impact on their host societies than the trifling number of such migrants would of itself suggest. However imperfectly their purposes were achieved, the simple fact that they set out to change people's minds and habits meant that they made more of a difference than other strangers living in diaspora were likely to do.

Despite the many frictions and failures surrounding the mingling of diverse groups of people, it is clear that the overall effect of the diaspora phenomenon was to improve skills and increase wealth at the cost of diminishing the coherence of society as a whole. Civilization itself involved paying that cost to achieve that result. From the beginning, alien populations had met and mingled in the seats of civilization. The enhanced scope for such intermingling that the commercial transformation of society gave in the second millennium of the Christian era therefore represented no more than an intensification and enlargement of the diversities of skill and culture that were characteristic of civilization itself.

Similarly, the scope for involuntary migration incident to the commercial transformation was no more than an intensification of older aspects of civilized social dynamics. Economically unrequited and at least quasiforcible collection of rents and taxes was the way early civilizations had sustained specialists. Rural populations were not usually enslaved in law, but the legal practice of taking from them part of what they had produced assimilated their status to that of slaves. Slavery, both ancient and modern, differed inasmuch as it operated within the context of a commercial system, so that slaves themselves, the food they ate, and the goods their labor produced all alike entered a market. That difference was not trivial; yet we should remember that the appropriation by some of the product of others' labor was the unjust price of all early civilization.

Slave migrations affected far larger numbers of persons than ever entered willingly into trade and skill diasporas; but since some forms of slavery did not encourage biological reproduction while others depleted the slave community by accepting offspring of mixed marriages as full members of the environing society, the traces left behind by forced migrations are weaker than historians' recent efforts at head counts might lead one to expect.

As we saw above, in ancient times recruitment of slaves from afar allowed cities to repair their numbers without depopulating taxpaying villages near at hand. Middle Eastern cities seem to have been especially active in this respect, in ancient as well as in modern times. Between the ninth and nineteenth centuries, they drew slaves from the north in vast numbers—Turks and Russians mainly—as well as importing enormous numbers from Africa.

Slaves were usually wanted for domestic service in private households. Some became wives and concubines; others served the great and mighty as bodyguards, and could then sometimes usurp power and become rulers in their own right. The slave dynasty of Delhi and the Mamelukes of Egypt are well-known examples of this surprising twist that enslavement sometimes took. The Ottoman ruling institution, manned by slaves who were recruited mainly from Balkan villages of the mountainous wild west, was an even more remarkable example of how the promotion of slaves to the political apex of society could be institutionalized.

In all these cases, slaves originated in regions beyond the borders of the state over which they presided, or else came from backward localities where failure of commercial development made ordinary taxes uncollectible. Middle Eastern cities, in other words, organized their hinterlands into a closely administered inner zone whence came food and other supplies, and a remoter circle whence came the manpower (and also animals for transport and slaughter) needed to sustain the urban complex. This sort of differentiation was an example of how the commercial transformation of society rationalized human relations by geographical specialization. It gave a particularly dramatic and visible form to the longstanding pattern of human recruitment into urban hierarchies.

The Mameluke regime in Egypt lasted until Napoleon invaded in 1798; but the Ottoman system wore itself out, interestingly, when demographic changes within the empire's heartland began to provide an eager reserve of candidates for admission to the privileged ranks of society. Such persons were no longer content to see outsiders monopolize the top levels of administration, and were willing to accept nominal slavery if such was the price of power. As this occurred during the latter half of the seventeenth century, the peculiarities of the Ottoman polity became residual. Older, less formalized patterns of urban recruitment resumed their sway.

The specially privileged roles assigned to slaves and strangers in Islamic society perhaps reflected the depth of alienation between rulers, their diverse urban subjects, and the rural taxpaying populations. To exercise power securely in such an environment, princes desperately needed trustworthy agents and subordinates. Men utterly detached from their social origins and dependent entirely on status within a militarized slave hierarchy constituted a more coherent and dependable group than any alternative body from which officials might be drawn. Military discipline and esprit de corps, supplemented by the power of bureaucratic ambition to direct the behavior of men eager for promotion, gave such structures more stability than persons who have never served

in an army nor experienced the group bonding inherent in military life may be ready to believe. Emotionally vibrant forms of sectarian religion offered the only alternative; and that, too, was frequently tried in Islamic lands, most notably in Iran.

Domestic slavery also existed in China, India, Europe, and Africa, though it never had the political and military significance that it attained in the Muslim world. Whether these various slave cultures increased in importance after the commercial transformation of society is impossible to tell in the absence of any sort of statistical indices. Indeed, historians have been so preoccupied by the transatlantic slave trade as to pay scant attention to other kinds of slavery. We therefore do not know enough even to guess at the overall importance of domestic slavery in non-Muslim Eurasia.

On the other hand, we do know that slaves working outside the household did become much more numerous and more important economically as the commercial transformation proceeded. Plantation agriculture and mining were the two activities most often staffed by slaves. These became so prominent in the seventeenth and eighteenth centuries that we tend to equate slavery with this particular organization of labor. Yet even at the height of the West African slave trade, it is not certain whether more Africans crossed the Atlantic to work on plantations and mines in the New World than continued to filter into the Muslim world as domestic servants. The number involved in both flows was substantial: about 8 million moved in each direction between the seventeenth and nineteenth centuries.

Together with white indentured servants, who also crossed the ocean in comparatively large numbers, African slaves constituted the overwhelming majority of immigrants to the New World before 1840. Only persons of wealth could pay the cost of passage for themselves, and few of them wanted to leave home. As a result, most of those who crossed the ocean before steamships transformed conditions of transatlantic travel did so at someone else's expense and against their own will.

Those who paid the cost of transport for slaves and indentured servants did so because other sources of labor were unavailable in the New World. That in turn was largely due to the inadvertent destruction of Amerindian populations by sudden exposure to unfamiliar Old World diseases. Isolated populations always ran that risk when contact with civilized, disease-experienced populations was inaugurated. In earlier ages such contacts had usually come by stages, and affected relatively small populations at any one time; but the opening of the oceans after 1500 meant that enormous territories and large populations, of which the Amerindian was by far the greatest, were suddenly put at risk. Not one but dozens of epidemics followed, one fast upon the other, each compounding the death-dealing damage its predecessors had wrought.

The result was to empty out fertile lands on a scale never seen before. The "open" frontier of American history was the result. Similar emptying occurred in northern Siberia, southernmost Africa, and in Australia, New Zealand, and other islands of the Pacific. A great frontier was thus created by

the global homogenization of diseases. Europeans were uniquely able to respond to the opportunity created by this demographic disaster, since they alone controlled transport and possessed information about conditions overseas. Slave populations suffered heavy death rates and often failed to reproduce themselves on new ground. By contrast, even small initial settlements of European freemen multiplied rapidly in temperate climates—for example, the well-known doubling of the population within one generation in the American colonies. This provided the manpower for the westward movement that prevailed during early American history. Argentina, Australia, Brazil, Canada, and South Africa had similar histories. In moist tropical lands, however, where African diseases flourished, Europeans faced crippling attrition. There Africans fared better. As a result, the Caribbean eventually became predominantly black, while adjacent semitropical lands came to be populated by varying blends of black, white, and red, with a significant addition from Asia deriving from nineteenth century coolie gangs.

Improvements in transportation in the mid-nineteenth century cheapened ocean travel and made it far safer than before. This coincided with a swarming of rural populations in most of Europe that taxed the absorptive capacity of European cities. The result was a vast exodus overseas, totaling something like 46 million persons between 1840 and 1920.

This vast movement dwarfed all earlier migrations. For that reason and because of its recency, we are apt to take it as a norm. Yet the conditions that permitted such an intercontinental outpouring were altogether exceptional when measured against the circumstances of the deeper past. Both the depopulation of lands of immigration, opening fertile land for occupancy, and the upsurge of numbers within the disease-experienced centers of civilization in the Old World were without earlier parallel, and are unlikely to recur. It is therefore quite unwise to suppose that patterns of migration that prevailed for 80 years, from 1840 to 1920, constitute a pattern to which humanity can be expected to adhere.

In closing, I would also like to suggest that the barbarian ideal of an ethnically homogeneous nation is incompatible with the normal population dynamics of civilization. The fact that Europe's achievement of high civilization between the ninth and thirteenth centuries coincided with a swarming of population in northwestern Europe, and that modern European expansion and nation-building also coincided with population growth of quite exceptional character meant that throughout the nineteenth century Europeans were able to combine the barbarian ideal of a single ethnos—a nation of blood brothers—with the reality of civilized specialization and urban living. To be sure, the blood brotherhood of European nations was largely fictitious; but a real cohesion of language and culture was achieved within each nation's boundaries that far exceeded civilized norms.

Only since World War II have European nations begun to experience the ethnic mingling that was usual in civilized lands of the deeper past. Die-off at the center (or at least a rate of reproduction inadequate to fill all available

jobs) and recruitment from ethnically diverse peripheries again prevail in post-1950 Europe and America. Consequently, polyethnic lamination—clustering different groups in particular occupations and arranging them in a more or less formal hierarchy of dignity and wealth—is again asserting itself in the Soviet Union as much as in France, Germany, Great Britain, and the United States.

This constitutes a reversion to the civilized pattern of the deeper past when the world's great empires comprised a small ruling group—itsself often recruited from a multiplicity of ethnic backgrounds—presiding over a hierarchy of specialized occupations, each of which tended to be dominated by a particular ethnic group. Such social arrangements do not accord well with liberal theory, which recognizes no significant differences among citizens. When such differences do in fact exist, theory gets into difficulty.

Surely, the gap between theory and practice is growing among us with respect to migration and the status of ethnically diverse immigrants. It is high time we thought about it carefully. Acquaintance with migration patterns of the deeper past will help us do so with better effect than is likely without a world historical perspective of the sort sketched here.

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### **Note**

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