Chapter 2

Has There Been Progress? The Historical Record

The history of civilization is the account of a progress which, in the short space of less than eight thousand years, has created nearly all that we regard as characteristic of human life.

F. A. Hayek

That there has been progress is obvious from the improvement in the basic conditions of mankind. Humans live longer, experience lower levels of morbidity, and suffer less infant mortality than at any time in history. They also enjoy more freedom than at any time since huntergatherer societies, which were probably quite restrictive for the eccentric; small groups often ostracize or otherwise make life difficult for non-conformists. Although inequality may have been less pronounced in primitive societies than in the modern world, it was the equality of poverty.

This chapter will consider the progress over the long sweep of history. We will treat the human record in protecting human rights, fostering literacy and education, and providing for a safe, sanitary, and comfortable living standard. Although mankind has normally been cruel to other humans and has paid little attention to helping their fellow man, improvement in the well–being of ordinary men and women have occurred over the millenniums.

Human Rights

For centuries humans treated other humans *inhumanely*. Slavery, which has been common in most societies throughout recorded history, was legally abolished everywhere only in the twentieth century. Human sacrifice may have originated with the first agricultural people. Virtually all ancient religions killed large animals or humans in religious rites. The story of Abraham and his son, Isaac, in the *Old Testament* exemplifies the practice of human sacrifice among early Jews. The Chinese, Japanese, the Indians, and early Greeks and Romans put to death for religious reasons fellow humans. We now look with horror at the brutal record of the Aztec world.

State Violence

Putting aside religion, the state, which has usually asserted the right to monopolize weapons, has most likely been the most significant source of violence both domestically and internationally. For centuries state officials have oppressed their people, attacked neighboring territories, and repressed any dissent. Government use of torture against its own citizens, although declining, is still widespread. By international agreement, many nations of the world have tried to

prohibited national authorities from treating people brutally. The Helsinki Accords, the Atlantic Charter, and the Universal Declaration of Human Rights are all twentieth century innovations reflecting modern concerns with the rights of man. Even countries that often violate contemporary norms take human rights seriously. Public opinion has become more sensitive to torture and wanton killing. A century or more ago, officials often whipped criminals or hanged them publicly. Only the nobility *enjoyed* the privilege of being executed in private; they could also elect to be beheaded rather than hanged. Today many nations have abolished capital punishment and those that keep it restrict its use to the most heinous of crimes and then normally execute the condemned in relative privacy. When the government publicly hangs a criminal as in Afghanistan in 1992, or has one stoned to death as in Saudi Arabia a few years ago, it makes headlines around the world and receives almost universal condemnation.

Over the last few centuries, public opinion has become less callous. Alexis de Tocqueville quotes, for example, a letter written in 1675 by Mme. de Sévigné to her daughter (1988: vol. 2: 563):

My word, dear daughter, how amusing your letter from Aix is! ... So you have kissed the whole of Provence? ... Do you want to hear the news from Rennes? ... The day before yesterday, they [soldiers] broke on the wheel the fiddler who had started the dance and the stealing of stamped paper; he was quartered ... and his limbs exposed at the four corners of the town ... They have taken sixty townsmen and will start hanging them tomorrow. This province is a good example to the others, teaching them especially to respect the governors and their wives.

Modern sensibilities find it is amazing that a woman of sensitivity would describe this to her daughter as if she were reporting on last night's dinner. Tocqueville asserts that Mme. de Sévigné was not "a barbarous person; she was passionately fond of her children and showed herself very sensitive of the sorrows of her friends ... she treated her vassals and servants with kindness and indulgence. But Mme. de Sévigné could not conceive clearly what it was like to suffer if one were not of noble birth."

The British navy in the eighteenth century dragooned (impressed) lower class males into a lifetime of slavery aboard military vessels. Other European countries also dragooned young men into the army. Today the British navy must attract recruits by offering competitive wages and working conditions; while those states that maintain compulsory service limit its active duration to a few years.

Empires, imperialism, and simple mundane conquests of other countries have fallen out of fashion. The public in Western countries has become wary of war as an instrument of politics, and governments must make a strong case for limited aims to convince voters of its necessity. Violence has diminished even in the brutal twentieth century. Jared Diamond, UCLA Professor of

physiology, contends that a smaller proportion of the population of industrial states died in the savage twentieth century wars than perished from violence in stone age societies (1992: 4). In earlier centuries, the Gulf war would have resulted in the United States occupying and controlling much of the Middle East. Niceties such as securing U.N. authorization would have been considered irrelevant. In fact, the twentieth century invented the United Nations, its predecessor, the League of Nations, and international law.

Although the history of mankind is one of almost constant warfare, a number of observers have claimed that these wars have promoted change and advancement for mankind. Without wars civilization would have stagnated. Robert Nisbet wrote recently (1989: 5):

Without wars through the ages, and the contacts and intermixtures of peoples they — and for countless eons they alone — instigated, human would quite possibly be mired in the torpor and sloth, the fruits of cultural and mental isolation, with which its history begins. Before trade and commerce broke down cultural barriers and yielded crossbreeding of ideas as well as genetic systems, wars were the sole agencies of such crossbreeding. Individualism, so vital to creativity, was born of mingling of peoples, with their contrasting cultural codes — the very diversity aiding in the release of individuals from prior localism and parochialism, always the price of cultural insularity. ... Despite its manifest illth, war, by the simple fact of the intellectual and social changes it instigates, yields results which are tonic to advancement.

Nevertheless, warfare is apparently becoming less fashionable. According to professor of government Jack S. Levy, an expert on war, Europe enjoyed peace for only five years during the entire sixteenth century (1983: 139). By the nineteenth century, those same countries were at war just 40 percent of the time. Although the twentieth century has experienced more combat — Europe has been at war 53 percent of the time — the time devoted to fighting has preempt many fewer years than in earlier centuries. On the other hand, warfare appears to have become more violent, especially in the twentieth century. It is significant that there has been no major conflict involving the major powers since 1945. Modern warfare has become too horrible and destructive to be fought.

Notwithstanding the limited years spend in warfare during the twentieth century compared to earlier eras, the record of man's inhumanity to man raises questions about progress. The Holocaust, the Killing Fields of Cambodia, the Soviet Gulags, and Stalin's deliberate mass starvation to force agricultural collectivism horrify the senses. Previous centuries provide few comparisons. In the Third Punic War, the Romans slaughtered 450,000 of the inhabitants of Carthage taking only 50,000 prisoners. The Mongols under Jenghiz Khan are said to have spent a week sacking, killing and burning the city of Herat, reportedly murdering 1,600,000 men, women, and children — a stunning number especially considering the size of the population early in the thirteenth century. William Manchester writing about the Spanish Inquisition asserts (1992:

35) that "If the pogroms of the time are less infamous than the Holocaust, it is only because anti-Semites then lacked twentieth-century technology. Certainly they possessed the evil will."

One of the factors that makes the Holocaust so horrible is that its was perpetrated not by a primitive warlord but by a modern, cultivated and sophisticated people who had bred Immanuel Kant, Johann Sebastian Bach, Carl Friedrich Gauss, and Friedrich von Schiller to list only a few. Moreover, the Germans executed their "final solution" with a frightening efficiency. I am tempted to dismiss the Nazi crimes as an aberration, but the twentieth century is littered with extraordinary cruelties and mass exterminations. At the same time, modern people are more sensitive to suffering and more willing to extend help to the less fortunate than were individuals of an earlier age.

Power no longer exclusively "grows out of the barrel of a gun." Without strong military forces, countries, such as Japan and Germany play major roles on the world scene. Industrial might is arguably now more important than military might. Trade, though it may seem contentious, benefits the world. Unlike military conflict, commerce is a positive sum game — that is, it produces benefits for all participants. Substituting trade "warfare" for military warfare represents real progress for mankind.

The spread of constitutional republics has conferred benefits on individuals, that is it has brought progress to the human race. Democracies, which require that the government go to the voters periodically for validation, limit the violence which governmental authorities can inflict on their own people. Under freely elected governments, police violence declines, as do arbitrary arrests, torture, and coercion. Liberal states also limit international violence. Michael Doyle, a political scientist, ascertained that, over the last two hundred years, no liberal democracy, as he defined it, had gone to war with another such government. A number of countries that many would consider relatively democratic have engaged in hostilities: for example, both Great Britain and the United States had elected governments during the War of 1812, both sides in the American civil war enjoyed representative governments, and arguably Spain was democratic during the Spanish American War. Nevertheless, constitutional states rarely make war on each other.

The concept of democracy has spread worldwide. Even countries that trample on their citizens' rights and repress political liberalism feel called upon to style themselves "democracies" — such as the *People's Democratic Republic of Ethiopia*, *Democratic People's Republic of Korea* (North Korea), or the *German Democratic Republic* (East Germany). When Eastern and Central Europe ousted forty years of communist tyranny, they did so in the name of democracy and moved quickly to validate that notion through contested elections. The former republics of the Soviet Union are all establishing what they characterize as democratic states.

Although many "democracies" fail any reasonable definition of a liberal state — that is a society permitting a wide range of freedoms — the concept is powerful. More and more countries are moving in that direction. Only three nations — the United States, Switzerland, and France —

qualified for some period during the eighteenth century as liberal democracies (Fukuyama 1992: 49). By the second half of the nineteenth century 13 countries, at least part of the time, met the test. In the period 1900 to 1945, 29 governments, for some period, offered liberal institutions. From the end of World War II to 1982, a total of 50 independent nations enjoyed, for a few years at least, liberal democratic government. The number of states with popularly elected legislatures is still growing. This evolution stems in part from the perceived ability of liberal democracies to spur economic prosperity and growth — see chapters 5, 6, and 7 for a discussion on this point. In addition democracies enjoy a legitimacy absent from all other forms of government. Moreover, as mentioned above, democracies are much more likely to guarantee human rights and freedoms.

Slavery and Discrimination

Throughout the Western world and in parts of Asia and Latin America, human rights, freedom, and equality before the law have spread. Governments, prodded by popular opinion and civic groups, have launched strong efforts to stamp out discrimination and injustice. Reacting to the horrors of the Holocaust and Nazi concentration camps, the public has strongly rejected any hint of racism.

The spread of egalitarian sentiments, which Alexis de Tocqueville recognized as early as 1830, has engendered a sharp reduction in inequality. For almost all of recorded history, the world has sanctioned slavery. Ancient Greece and Rome built their economies upon it. Today virtually all countries prohibit it, although some Moslem states are rumored to permit practices that resemble involuntary servitude. China, the last major country to sanction the practice, banned slavery in 1909 to encourage modernization of their economy (Chao 1986: 158).

Slavery, which frequently inflicted harsh conditions on those without freedom, was common in ancient Rome and Greece. In Rome, slaves who were forced to be gladiators lived short lives. Serfs on very large estates, *latifundia*, were often chained and driven cruelly. If a helot killed his master, all of the slaves on the estate were sometimes crucified, although this practice is likely to have been rare given the value of live workers. Bondmen carried the rich in litters through the cities, to and from dinner parties, and even on trips of a day or two. Neither Christians nor others agitated to free the serfs, bondage being accepted as normal.

Slavery continued until nineteenth century moralists moved to abolish it. Not only did the United States fight a very bloody war over the issue, but governments in Latin America and the Middle East legislated against the practice. Subsequently, haltingly, and too slowly, society has extended human rights to minorities. Since the Second World War, the United States government has sequentially prohibited discrimination in the workplace, public accommodations, and education on the basis of race, color, religion, sex, age, and handicapped status. Several states and communities have extended such prohibitions to sexual orientation, presence of children, and marital status.

Although feminists, and others championing equal rights, decry the failure of women to reach the highest levels of industry and commerce, females have achieved remarkable progress in education and in the labor force. Prior to the nineteenth century, "the weaker sex" could normally work outside the family only in convents or as maids, cooks, governesses, or prostitutes. Domestic work all but guaranteed poverty, however genteel; the "world's oldest profession" often promised disease as well. In the nineteenth century, schools began to employ women as teachers and manufacturing jobs, mainly in the textile industry, became available. By the end of the century, women increasingly found work in offices as secretaries, telephone operators, and nurses. In recent decades, the development of technology has led to a decline in the proportion of work that demands heavy manual labor, thus opening more occupations to women.

Until roughly the Second World War, very few young ladies attended college or received a technical or professional education. Today nearly one-fifth of all women have completed four years or more of college. Few if any jobs are closed to females and many institutions and colleges are actively attempting to attract coeds into traditional male occupations such as engineering, mathematics, and science. Even the military is now opening combat positions to women.

The contrast of women and minority rights today with those in classical Greece are stark. Only adult males in ancient Athens could be voters and allowed to participate in the government. In fact, it was incumbent upon citizens to take an active role in civic affairs; commerce was despised. In the fifth century BC, Athens contained about 40,000 citizens, 20,000 resident aliens with limited rights, and perhaps as many as 300,000 slaves. In addition approximately 140,000 women and children made their home in Periclean Athens (Flacelière 1959: 52). Consequently citizens, that is, those with voting rights, made up less than 10 percent of the population.

Women in ancient Athens possessed neither political nor legal rights. Those who were wives or daughters of citizens as well as females in prosperous alien families were closeted throughout their lives. Proper Athenian women in the age of Pericles were confined to their homes, virtually never to set foot in town or even to attend social functions. Young women scarcely ever left their apartments and were segregated even from brothers and other male relatives. In contrast, other Greek city—states, particularly Sparta, provided more freedom and permitted girls to mix in society. In Athens, however, they were sequestered and their mothers or female slaves provided all their education, which consisted normally of cooking, spinning, weaving and perhaps a little reading and arithmetic.

Their fathers or male guardians chose their husbands. Even after marriage, respectable middle or upper class women practically never left their homes or went outdoors. Slaves or husbands did the shopping. Within the walls, however, women managed the households with the help of their female slaves.

Women during the Roman Empire experienced more freedom, although they still enjoyed few legal rights. Neither society nor the state considered women to be citizens in Rome, and the census ignored them. Under Roman law women, like aliens, enjoyed few legal rights. Slaves had no rights at all (Dilke 1975: 30 & 49).

In that male dominated society, the extensive power of the father over his sons and their children lasted as long as he lived. His control of his daughters, however, remained only until they were married to husbands of *his* choice. Until the second half of the fourth century AD, the paterfamilias' authority included executing his children. A head of the family felt justified in executing his unmarried daughter for having intercourse (Gardner 1986: 6).

Men and women, however, could freely divorce each other and the wife could normally sue for her dowry successfully. If the woman's father were alive, however, he had to grant his permission to the separation. Women's control over money was quite limited. They could inherit only limited sums and, if their progeny were still under their husbands' protection, were prohibited from leaving an estate to their children. In that circumstance, the assets went to her spouse (Veyne 1987: 40; Gardner 1986: ch. 5).

In pagan Rome, infanticide, exposure of infants, contraception, and abortion were all legal. Fathers decided at birth whether a new child was to live. The handicapped or otherwise undesired were left to die in nearby fields. If another adult wished, he or she could take up the baby and rear it as his or her own. Fathers more often chose to expose young girls than boys (Veyne 1987: 9).

Instead of being closeted, as they had been in classical Athens, young girls attended school together with boys, at least up to a certain age. Formal education for most young females consisted of attending only the first level, the elementary school. Music and dancing were important in the education of schoolgirls, possibly because these skills made them more attractive to prospective bridegrooms. Parents normally married off their daughters between the ages of 14 and 16 to a groom of their choice. Formally the maiden must give her consent, but she could refuse only if the father chose a particularly unsuitable or undesirable mate (Friedländer: 231-232).

To proper young ladies, marriage brought considerable freedom. As youths, they had been excluded from the family dinner table and largely confined to the nursery. After marriage, women attended banquets and participated in activities outside the home, unlike Periclean Athens. By the time of Augustus, married women were almost totally unrestricted in their social activity. Except for the dowry, which the husband controlled, women had the right to their own property — an estate perhaps that they inherited or acquired from a previous marriage.

Even today, in many strict Moslem countries, women possess few, if any, rights. Although strictures against female infidelity have almost always been harsh, nowhere in the world was it illegal for a man to be unfaithful to his wife until in 1810 the French prohibited "a married man to keep a concubine in his conjugal house against his wife's wishes" (Diamond 1992: 95).

Twenty-three countries today still practice female circumcision or infibulation to eliminate pleasure from sex for women and to make sex outside of marriage impossible. In modern Western society, although women may still experience discrimination in some areas, law and custom have increasingly supported women's efforts to be treated equally.

Women's rights along with that of minority groups have gained strength especially in Western societies. Few countries would openly acknowledge that their society views women as inferior to man. Politicians in most places at least espouse rights for ethnic minorities. Even Moslem states claim that they provide respect and rights for women, although Westerners fail to see the benefits from Islamic practices. Japan which has been a notoriously male–dominated society has been slowly opening more opportunities for females to enter non-traditional roles. Nevertheless, on average women enjoy more rights and greater opportunity today virtually everywhere than they have at any time in recorded history.

Survival and Life Expectancy

Since modern man first walked on earth about 200,000 years ago, when according to genetic studies he evolved from hominids, *Homo Sapiens* have made substantial progress (Vigilant 1991). Over most of the intervening period, humans have been struggling to feed and house themselves. The population of the world has risen very slowly — about 0.01 percent per year — for most of those two hundred millennia. Until recently, most humans were operating near the subsistence level and poor harvests or a hunting failure led to a fall in the population. One scholar asserted that "As late as the 1690's a succession of poor and indifferent harvests created severe subsistence crises in almost all countries of Europe ... the population declined here and there, as death and starvation stalked through the lands from Castile to Finland, and from the Scottish Highlands to the foothills of the Alps" (Helleiner 1965: 79).

As mentioned in the previous chapter, the number of hunter-gatherers that can sustain themselves is fixed by the size of the area and the richness of fauna and flora. For a band of primitive people to stay within the limit requires either that the birth rate be low or the death rate, high. Anthropologists reports indirect evidence denoting that primitive hunter-gatherers experienced high mortality rates coupled with high fertility. Skeletons reveal that at least a few Cro-Magnons lived to the age of 60. Other evidence from primitive societies shows that few people reached half a century, while analysis of fossil remains also connotes that most died violently. The most common cause of death being infanticide, war, and head-hunting (Cipolla 1962: 73; Diamond 1992: 50).

Since so little is known about life in hunter-gatherer societies of 10,000 to 200,000 years ago, comparing modern life with that of primitive man requires speculation. Art in the form of cave paintings and jewelry — rings and earrings — first appeared about 30,000 years ago, almost simultaneously around the world. This development reveals that mankind had reached a point

where after providing for subsistence, time remained for pleasure and the *superfluous*. Thus with this "affluence" aboriginal man demonstrated his wealth and vanity through personal ornamentation and his ability to appreciate beauty.

Evidence from existing hunter-gatherer tribes substantiates the anthropological evidence that life expectancy was much lower than today, infant mortality higher, and morbidity more acute. Through-out most of the history of mankind, life expectancy was between thirty and forty years. (Rusting 1992: 132). Hunter-gatherer tribes enjoyed greater equality among males than most "more advanced" cultures. Women played a subordinate role; they were expected not only to care for the children and prepare the sustenance. but also to gather a great deal of the food. Judging from the practice among modern primitive tribes, men spent much of their time in leisure and hunted only sporadically. Freedom in the sense of choosing their leaders or expressing unorthodox ideas was limited.

Romanticists have idealized the "noble savage." Even today, it is "politically correct" to assert that the American Indian lived a life in harmony with nature, unpolluting, and caring for fellow tribesmen and the earth (Sale 1990: 311-324). No doubt primitive American Indian life embodied many attractive features, but their hunting practices contributed greatly to the demise of the buffalo. Moreover, native American tribes spent much of the eighteenth and nineteenth centuries warring among themselves, and the people lived lives that were primitive, unlettered, and short.

With the development of agriculture about 10,000 years ago, human populations could multiply and grow more concentrated. Cities arose and with them the development of complicated cultures made feasible through specialization. Some could bake bread, others fashion shoes, and still others trade in exotic products. Law givers, priests, and scribes could enrich lives, expand knowledge, and facilitate an exchange of ideas.

Although some may deprecate the growth of population that farming made possible, few would choose to eschew their own existence. Virtually all the men and women in today's world would prefer to be alive than never to have had the opportunity. On the down side, the domestication of plants and animals and the concomitant population upsurge and concentration may have spread infectious diseases, aggravated malnutrition, and brought a shorter life span (Diamond 1992: 139). Agriculture may have worsened the lot of women, and urban life certainly magnified income inequalities by empowering a few to enjoy previously unheard of luxuries.

Although the spread of the cultivation of the soil resulted in a population explosion, death rates remained high, especially among infants. Recent studies of bones in a cemetery in an ancient Greek colony from the period 600 to 250 BC indicate that malaria was widespread (Wilford 1992: B5-B7). This study of 272 individuals found that the people in this "prosperous agricultural colony" were "plagued with anemia and malnutrition" were physically small which suggests poor

nutrition and had a life expectancy of only 32 years. Carlo Cipolla, an economic historian, reports that infant mortality was typically between 200 and 500 per 1000, at least partly due to infanticide (1962: 77 & 80). Almost no place in the world today experiences such horrendous death rates.

At the height of the Roman Empire, the average standard of living for the denizens of the capital must have reached its greatest level of affluence, yet life expectancy and infant mortality were probably atrocious. Although data on infant mortality are nonexistent, as far as I know, the death rate among children must have been quite dreadful. Girls and deformed baby boys were often exposed to die alone on a hillside. Scholars believe that Romans on average enjoyed much shorter lives than modern Europeans. Classical historian O. A. W. Dilke judges that the average age of death was forty to fifty (1975: 84). Obviously slaves endured even shorter existences.

Carlo Cipolla estimates that life expectancy in farming communities in medieval Europe averaged between 20 and 35, down from what hunter-gatherers typically enjoyed. Women suffered extraordinarily high rates of deaths in childbirth. Manchester estimates that the average peasant girl would die by the age of 24 (1992: 55). For some unexplained reason, in the early part of the fifteenth century, one out of ten people in rural Tuscany were over sixty-five — an extraordinarily large number of elderly for that time, but by the middle of the century the proportion of old had declined. Normally the elderly made up less than one out of twenty of the populace.* Parents often smothered or abandoned unwanted infants, especially baby girls (de la Roncière 1988: 169, 223 & 228). The average length of life that Europeans could look forward to and the prospect of early death for their children failed to improve before the industrial revolution, but, as is well–known, have advanced remarkably in the last two centuries.

Literacy and Education

Primitive man was, of course, uneducated and uncultured. Without writing, only the simplest of knowledge could be passed on to future generations and even then error was prone to creep in. Science, which depends on a progression of observations and the elaboration of analysis, was unlikely to advance. Oral traditions, however, produced stories, which repetition embellished, that simple tribesmen often accepted as facts. Out of these sagas came the myths that underlay many primitive religions.

Not only did the absence of letters contribute to superstition and supernatural tales, but the lack of script made poetry, the theater, and elaborate music impossible. Writing, invented to facilitate commerce and taxation, led to an expansion of knowledge and an interchange of ideas. Jared Diamond wrote (1992: 56) that "the spoken word ... made us free," but it was the written word that permitted human knowledge and learning to accumulate, making science and literature possible.

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^{*} For comparison, those over 65 made up 12.5 percent of the U.S. population in 1989.

In the beginning, scribes devised writing to keep accounts for tax or business purposes. As early as 8000 BC, the Sumerians, living in the Mesopotamia region, contrived the first primitive pictographs using about 1200 symbols for names, numerals, cows, and cloth. In China, nearly 4,000 years ago, scribes had also invented characters and, by 1400 BC, the Chinese had created a script containing more than 2500 symbols. The initial beginnings of an alphabet originated in Mesopotamia circa 1500 BC. Around the eleventh century BC, the Phoenicians authored the first alphabet, but it consisted only of consonants. Not until the Greeks, in the eighth century BC, fathered vowels was a flexible, efficient method of conveying ideas available to spread and retain knowledge (Doren 1991: 10 & 25).

Prior to the development of Greek civilization, writing appears to have been used primarily for business and government. Literature appeared late. Letters and symbols were employed to codify law, keep records, propound on the virtues of the rulers, and keep track of trade. In early centuries, literacy was important not only for the wealthy, who could afford the luxury of buying handmade books, and for scribes, who earned their living writing and reading for others, but for those engaged in commerce. Bankers, traders, and merchants needed to keep accounts and records of their activities. Government officials had to be literate in order to maintain a register of taxes.

Little is known about everyday life in the earliest civilizations. In Mesopotamia, one of the first large urban cultures, perhaps less than one percent of the population was literate, but those that were held positions of power (Doren 1991: 10). In virtually every society since the development of writing, the power to read and write has been central to personal advancement.

After inventing a true alphabet, the Greeks bestowed on the world theater, great art, and the modern conception of science. Athenian thinkers contemplated a cosmos that mankind could understand, one governed by rational principles, rather than by the whims of Gods. The great philosophers proposed to study nature to unearth its roots and some — in particular, Democritus — even suggested that the world consisted of very small parts called atoms. The Pythagoreans invented mathematics, although they failed to develop the zero or a decimal system that makes arithmetic simple.

Greece introduced the first, as far as is known, widespread educational system. By the end of the fifth century, the families or the city financed an education for virtually all of the sons of Athenian citizens. Parents, except for the impecunious, sent their boys to schools and paid the fees themselves. Schooling consisted of learning to read and write, doing simple arithmetic — addition, subtraction, multiplication, division, and a few fractions — plus musical training. Any education for the children of resident aliens was somewhat more haphazard and undoubtedly that of slaves even more limited.

Ancient Athenians prized highly all forms of music. Most children learned to play the flute and/or the lyre. In spite of being sequestered, some young women studied singing and dancing in order to perform for certain religious festivals.

A form of higher education developed in Athens in the second half of the fifth century BC. The Sophists, who were itinerant lecturers, taught philosophy, geometry, physics, astronomy, medicine, arts and crafts, and rhetoric. These teachers charged for their services. Although ordinary teachers of young children seemed to have been poorly paid, the Sophists earned a good living. Plato in 387 BC established the first quasi-university in Greece and perhaps in the world where learned men and their pupils conducted dialectical discussions of various philosophies (Flacelière 1959: 115).

As early as the middle of the third–century BC, virtually all sons and daughters of Roman citizens from seven to twelve received an education. In the main, parents paid the cost of the schools themselves and the state played little role. The emperor Trajan, however, provided free education for nearly 5,000 children of poor Roman citizens. Other emperors hired teachers of Latin and Greek rhetoric to school the impecunious. As a consequence, in parts of the Roman Empire, even the poorest children of citizens could attend a secondary school (Dilke 1975: 125).

At the elementary level, the teacher taught simple arithmetic and reading and writing of both Greek and Latin. After the elementary schools, students often went on to a secondary school, the *grammaticus*, which concentrated mainly on literature. These schools also gave instruction in geometry and more advanced arithmetic, but the lack of the zero made multiplication and division difficult to learn or practice. The third educational stage consisted of rhetorical training, which the Romans much admired and valued. At the highest level of education, the equivalent of the university, students learned Roman law, Greek oratory, and philosophy. By the second century AD, regular law schools had been established.

During much of the Roman Empire, most citizens were literate, but many aliens and the great majority of slaves could not read. Undoubtedly, the level of literacy varied greatly over the history of classical Rome. In the 4th century AD, officials complained that army recruits were typically too ignorant to keep the books. The graffiti at Pompeii was often scrawled in ungrammatical Latin. On the other hand, the emperors founded splendid libraries which were open to all. The government also supported authors and literary men (Dilke 1975: 127; Breasted 1938: 603).

In the Dark Ages, when Europe was sliding backward, India, China, and Japan generated flourishing civilizations and great literatures. India, at least, had an extensive school system that may have been comparable to that of classical Rome. China conceived of many of mankind's most important inventions — the printing press and gun powder being two of the most significant. The Arabs devised the zero, a major accomplishment which greatly facilitated mathematics.

Since the earliest Chinese dynasties, history connotes that peasants throughout the Middle Kingdom have been illiterate and only in recent decades has the ability to read become widespread. One 1930's survey of a rural town in China revealed that about half of the boys between the ages of six and twenty were literate but only about one-quarter of the girls. A smaller proportion of adults could read a little: only one-third of the males were educated and less than 2 percent of the women understood some Chinese symbols. Literacy in China meant only that the individual recognized a relatively small number of characters. Few could actually read the average book. The scanty education of women over twenty reflected the peasant belief from earlier periods that reading and writing for women was a waste (Osgood 1963: 95 & 353).

In Japan, as in medieval Europe, monasteries perpetuated education and spread literacy, for monks were often the teachers of the nobility. Feudal lords in that island nation found it necessary to read, write and even to be able to compose poems; a talent much valued by the aristocracy. From the fifteenth century to the twentieth, education gradually spread. By the late eighteenth century, peasant land owners needed to read and to have some familiarity with arithmetic (Walthall 1986: 1-2). In 1800 a census counted about 400 primary schools; by 1883, this number had ballooned to 15,000. In the middle of the nineteenth century, perhaps 40 percent of the boys and 10 percent of the girls attended school ('Abd AliRahîm 'Abd Al-Rahmân & Wataru Miki 1977: 71). Today virtually all are literate and many are highly educated.

Before the printing press, books and manuscripts were expensive for each copy was hand made. Over time the cost of spreading the written word has plunged. Initially words or symbols were inscribed on stone, wood, drawn on clay tablets or painted on bark. Around the thirty-fifth century BC, the Egyptians discovered papyrus. Vellum and parchment, invented around 200 BC and fabricated from readily available animal skins, were an improvement. At the beginning of the second century AD, the Chinese started manufacturing paper from rags which reduced the cost further. In the middle of the fifteenth century, the printing press combined with paper lowered the cost of reproducing the written page dramatically. Now at the end of the twentieth century, the word processor, the copier, the FAX machine, and E-Mail have rendered the distribution of the written word cheap beyond the imagination of the classical world.

Not only has writing spread factual knowledge, but it has enriched mankind immensely by enabling talented individuals to author literary masterpieces. The world has become immeasurably wealthier through the works of Aeschylus; Aristotle; St. Augustine; Dante; Shakespeare; Wu Ch êng-ên, author of *Monkey*; Lady Murasaki Shikibu, creator of *The Tale of Genji*; and through the great Hindu literature of the *Rig-Veda*, the *Upanishads*, and the *Bhagavad-Gita*.

Those who deplore modern civilization should consider whether they would prefer to live in a society without Mozart, Beethoven, Verdi, Dickens, Molière, Cervantes, Rembrandt, Picasso, and Da Vinci. Music, art, writing are marvelous achievements of the human spirit. They are also examples of progress. The cave man drew on the walls of his caves; he no doubt sang and made music through primitive tom-toms and flutes. Pre-literate man told tales — many epics have come down to us in such works as the *Iliad* and the *Odyssey*, the Arthurian legends, or the *Satapathq-Brahmans*. Oral tradition alone, however, would have been unable to have preserved these achievements. The development of methods of perpetuating and extending these creations through writing, musical notation, and painting on canvases constituted a clear advancement for *Homo Sapiens*. Few critics of modern life would relish living without these monuments to human creativity.

The Standard of Living

The first great civilizations of the ancient world developed in Asia and the Middle East. Most historians would agree that ancient Egypt, Sumer, Assyria, and Persia exemplified archaic conditions with very limited education, science, and technology compared with the later Greeks and Romans. Our knowledge of education, health, living standard, and life expectancy for these early urban societies is virtually nonexistent before the Hellenic civilization. From at least the fifth century BC in Greece to the fall of Rome, nearly 1,000 years later, mankind in the Western world was considerably better off than for the next 1,000 years. Under the Roman Empire most people enjoyed peace, as well as adequate food and housing. They bathed; many were literate; an extensive literature evolved; the theater flourished.

Ancient Greece

Notwithstanding the glories of art, literature, and science in classical Greece, the people lived poorly when judged by modern standards. Robert Flacelière, a French historian, translated (1959: 9) a description of Athens in the third century BC as, "very drought-ridden: its water-supplies are inadequate, and being so ancient a town it is badly planned." The political situation, however, appeared to be remarkably modern (Flacelière 1959: 10; translated from Demosthenes, *Olynthiac* 3. 26 and 29):

Today, I am told, our public life may be somewhat in decline, but our civic amenities are vastly improved. What proof of such an assertion have we? Trumpery details such as repointed parapets on the city-walls, or repairs to fountains, or newly surfaced roads. Take a good look at the men who implement this kind of policy. Some have jumped from poverty to affluence, others from obscurity to the highest public honours. Some have built themselves houses that outshine our public edifices; and indeed their fortunes have risen in proportion as those of the city have declined.

As the earlier quote indicates, the water supply in ancient Athens as well as in the modern city presented a critical threat. To supply the growing population, the tyrants of the sixth century BC built several fountains. Over time other public outlets were constructed and a special government official was elected to tend them.

City officials, however, did little to ease the headaches of the naturally dry climate of Thessaly. Athenian streets were narrow and crooked; urban planners made no provision to collect rain water; denizens of the city emptied their sewage out the windows or doors into the street's open gutters. The importance of sanitation was unappreciated with the result that the unpaved paths often became a sea of mud, an open sewer, and a refuse heap. Some time during the 4th century, the city finally made improvements and built underground drains and sewers.

Although educated Athenians appreciated personal hygiene and bathed frequently either at home or in the public baths, they never cleaned their teeth, used handkerchiefs, and typically wiped their fingers off in their hair. They often died of tuberculosis or malaria. Living in crowded quarters without sanitation, life expectancy must have been low — probably equivalent to that of medieval Europe.

The poor occupied one story houses with two or three small rooms. With five or six people in the average family, privacy was impossible with parents, sometimes grandparents, and children all crammed together. Characteristically the walls were made of wood, brick or stones held together with dried mud. They were so flimsy that burglars typically broke them down rather than going through the doors or windows. Entry through the windows would have been difficult in any case, since glass was unknown and the openings were mere slits. The considerable number of homeless included those who were really poor, had lost their jobs and income, as well as those philosophers who chose to live without wealth or housing. During cold spells, the impecunious often took refuge in the public baths and would warm themselves by the furnaces (Flacelière 1959: 13 & 15).

Running water in the homes even of the well-to-do remained unknown and sanitation continued to be primitive. The chamber pot was used widely. Prior to the fourth century, few houses were equipped with kitchens and women cooked outdoors. During the winter, after kindling the fire outside and when it was red hot, the cooks would bring in the charcoal or wood and would open a tile in the roof to let the smoke out. Only the homes of the affluent contained chimneys. During the hot, dry summers, people slept outside on their roofs. Their blankets were frequently infested with lice and fleas. Indeed, rats, flies and mosquitoes were ubiquitous and contributed to epidemics.

Even though surveys of the population are an invention of the second half of the twentieth century, perhaps we can interpret the Greek satisfaction with life from their literature. Robert Flacelière summarizes Achilles in the *Iliad* consoling Priam over his son's death:

It was a great deal, indeed, to have been granted even a few years' happiness by this supreme deity — as Peleus and Priam himself had been — since many men know nothing but misery throughout their entire life.

He also quoted Theognis, a sixth century BC Greek poet:

Of all the good things on earth never to have been born is best, never to have seen the bright rays of the sun; or else, being born, to pass as soon as may be through the gates of Hades, and lie beneath a thick earthen shroud.

And also Euripides:

[W]e should weep for those entering the world, since such misfortunes await them, but raise joyful songs over the dead, whose sufferings are now ended.

Some Hellenes may have been more positive about human existence, but these passages hardly betoken that the ancient Greeks were as content with life as modern people.

Ancient Rome

Rome at its height was a magnificent city of marble temples, prodigious water works, and an enormous population of nearly one million, including women, children, and slaves. The capital was very crowded; somewhere between 166,000 and 208,000 people per square mile were jammed into the city, about three times the concentration of the most congested U.S. urban area, Manhattan and four to five times the population density of Rome today. Only Hong Kong, among major world cities, is more crowded with just under 250,000 souls stuffed in each square mile. Rome's extreme concentration of men, women and children living virtually on top of each other must have contributed to epidemics, squalid conditions and short life spans (Dilke 1975: 29).

Even with its magnificence, the capital of the empire was subject to periodic famines — mainly caused by the failure of the government organized supplies of grain. Due to narrow streets, tall wooden buildings, and inadequate urban services, major fires presented a constant threat and often decimated large areas of the city. Without an organized police, crime preyed on the people. Epidemics ravaged both Republican and Imperial Rome, leading to massive deaths. Much of the population suffered from Malaria; pollution from a multitude of cooking and heating fires and from clouds of dust contaminated the air; while the odors of animals and cooking constantly assaulted the nostrils. At the time of the eruption of Mt. Vesuvius (79 AD), an unknown but deadly disease brought registered deaths to 10,000 per day. In 162 AD, plague, which was brought to Italy from the East, devastated the camps of legionaries, depopulated villages and cities, and carried off extensive numbers in the capital itself (Friedländer: 20, 27 & 28).

Caesar Augustus established the first departments of police, fire and water. Compared to Europe before the nineteenth century, Rome offered good sanitation. The rich enjoyed bathrooms with toilets and warm water baths. By the first century BC, wealthy Romans had installed hot air pipes to make important rooms tolerable in cold weather — the first known example of central heating (Breasted 1938: 520 & 566; Dilke 1975: 99).

The city of Rome furnished hot public baths for all. Major cities of the Empire installed drainage systems to which latrines were connected. Aqueducts distributed fresh water to major urban centers throughout the Roman Empire. The capital city had built fourteen aqueducts by the

late Empire. Conduits brought water to reservoirs and lead pipes subsequently carried it into the homes of the wealthy.

Autopsies of Roman mummies indicate that lead poisoning was common, apparently from the plumbing and/or from drinking and cooking with lead vessels. Doctors knew only a little about medicine and had no understanding of germs. Malaria seems to have been a problem in Rome and in areas that were marshy. Dentistry consisted of pulling teeth, but at least the better off and better educated employed tooth picks and tooth powder (Dilke 1975: 29 & 100).

By modern standards, living conditions for the mass of people were terrible. According to German historian Ludwig Friedländer (1908: 145):

Their dark rooms, two hundred steps up, were not as high as a man's stature. Their hearth was cold, a jug with a broken handle, a mat, a heap of straw, an empty bedstead, was their furniture; a short *toga* by day and night their only protection against the cold; vinegar-wine and black bread their food. Bread, beans and turnips (the workman's lunch), lentils, onions, garlic, peas ... and fish, were their diet; leeks and a boiled sheep's head, or a smoked pig's head, was luxury.

The homeless were ubiquitous. Beggars lined the streets. The public provision of bread and circuses kept the bulk of the populace tranquilized most of the time. As special entertainment, the Roman state organized games where humans and animals were slaughtered en mass.

The absence of a rule of law made property rights insecure in Rome. The rich enforced their demands with private armies and their own prisons. Creditors seized debtors and took their goods or threw them into personal prisons. A rich landlord could and sometimes did simply take by force the property of smaller farmers (Veyne 1987: 166-167).

Asia

Comparisons of modern life to earlier periods in Japan and China demonstrate that most people are much better off today. Although communism has retarded economic advancement in mainland China, even in that misruled land one can note progress. More dramatically, in Taiwan over the last 40 years, the three major measures of progress confirm that the well—being of virtually all has improved materially: life expectancy is up sharply; infant mortality down; and literacy rates are very high.

Prior to the Maoist revolution, the distribution of wealth in China was extremely unequal. Cornelius Osgood, an American anthropologist, divided a village according to wealth and found that less than one out of five of the inhabitants were in the upper class while over half were in the lowest (1963: 359).* In parts of China, parents practiced infanticide well into this century, and allowing baby girls to die apparently continued under the communist regime. Women's principal

^{*} For comparison, in the United States less than 14 percent of the population are classified as poor.

function was to produce sons. Men venerated the mothers of their fathers but had no similar feeling about their mother's mother.

Chinese living standards and real wages gradually improved from the beginnings of the Han dynasty of 200 BC to around 1200 AD and then slowly declined. Economic historian Kang Chao attributes (1986) the fall in living standards to population pressures that reduced the value of labor. His figures (p. 219) indicate that the real wage around 1800 was less than 5 percent of its level during the extraordinarily prosperous Northern Sung dynasty (961-1127). The fall in living standards was accompanied by a sharp drop in the rate of technological change and in a shift from labor saving to labor employing technology. From around 221 BC to 1279 AD the number of agricultural inventions per century averaged slightly more than 4; between the later date and 1644, the number of improvements in farm implements totaled 7 for a rate of less than 2 per century (Chao 1986: 195). After the middle of the seventeenth century, Chao reports that Chinese agricultural technological change ceased. Moreover, the inventions in the three centuries earlier reflected declining labor productivity. Of the four innovations in the Ming period, two inventions were for plows pulled by men rather than animals. In addition plows which in the earlier period had been made of iron with steel edges deteriorated to include only some iron and frequently were constructed only of wood.

Osgood's anthropological investigations reveal that during the early part of this century in parts of China wheeled vehicles were nonexistent. In some areas, since animal labor was unavailable, human muscles supplied all power (Osgood 1963: 351). The well—to—do rode in sedan chairs in rural villages, while peasants plodded barefoot. Little is known today about conditions in remote parts of China, but in those areas where the government has relaxed its strictures against the market, conditions have improved greatly over circumstances a decade ago and even more dramatically over those prevailing early in this century.

Over the last 150 years, Japan has made astonishing progress. That small island nation has gone from a feudalistic society with extreme inequalities of income and power to a relatively egalitarian economy with the longest life span of any population in the world. In the Middle Ages, Japan was rife with war and violence. In the latter part of the eighteenth century, Japan suffered from famines, floods, and crop failures, which brought on peasant uprisings, urban riots, and massive protests (Walthall 1986: xi). Now Japan is one of the most peaceful and richest states on the earth.

Prior to its opening to the West, upper class parents in Japan chose the husbands for their daughters. Wives of the ruling feudal classes owed allegiance to their husbands' parents, their husbands, and their own adult sons. Historian Yoshiaki Shimizu gives the following description of the proper duties of a wife in a work entitled *Great Learning for Women* (44):

However many servants she may have in her employ it is a woman's duty not to shirk the trouble of attending to everything herself. She must sew her father-in-law's and mother-in-law's garments and make ready their food. Ever attentive to the requirements of her husband, she must fold his clothes and dust his rug, rear his children, wash what is dirty, be constantly in the midst of her household, and never go abroad but of necessity.

In the rest of Asia and Africa, progress lagged behind Japan and perhaps India as well. In sub-Saharan Africa, food production was wholly dependent on human muscle for digging in the fields, paddling canoes, and throwing spears. Prior to the arrival of the Europeans, the natives failed to harness wind, water or draft animals for production. A description of Egyptian life in the latter half of the eighteenth century reveals how many peasants lived in much of the world prior to the twentieth century ('Abd AliRahîm 'Abd Al-Rahmân & Wataru Miki 1977: 34):

... the Egyptian peasants formed the majority of the inhabitants. But they lived a humble life, their cottages were built of mud and mostly had only floor [sic], depending on the economic state of the peasants. Draft animals lived with them in a corner of the same cottage. Their clothes were woven from cotton and wool by hand ... they were subject to heavy financial burdens.

Peasants in parts of the Third World still live as those did, but many have managed to improve their lot. Except in very poor or remote areas, radios are common; the village may boast a working television set; and virtually all local stores stock some manufactured goods. Satellite broadcasting brings news and entertainment to even the most remote regions. Typically infant mortality is down; life expectancy is up; and the ability to read is spreading. In other words, progress has come to even the most primitive and poor societies.

European Progress since the Roman Empire

Only in the last few centuries has Western civilization made real progress over ancient Athens and Rome. After the decline and fall of the Roman Empire a great deal of knowledge, technology, and civic institutions were lost. Personal safety waned as might made right. Two thousand years ago, literacy, although not universal, was widespread, and the wealthy enjoyed such luxuries as indoor plumbing and central heating. Even the indigent had access to public baths. A few centuries later, running water in homes was unknown even for the most powerful; nobody bathed; and only a handful of monks could read. In Antiquity as well as during the Middle Ages, lives were short and uncertain; children died all too frequently. Medicine was crude and unscientific; public sanitation although meager during the Empire was unknown later; and, until the modern period, for the poor obtaining adequate nutrition must have been a struggle. Life expectancies probably failed to improve until the eighteenth or nineteenth centuries.

Literary descriptions of medieval European peasant societies depict lives that, if not solitary, were "poor, nasty, brutish and short." Manchester describes (1992: 3) the Dark Ages

between 400 and 1000 AD as "a mélange of incessant warfare, corruption, lawlessness, obsession with strange myths, and an almost impenetrable mindlessness." French historians, Dominique Barthélemy and Philippe Contamine, writing on northern Europe in the fourteenth and fifteenth centuries, estimate that the average peasant house measured about 350 square feet and sheltered five or six persons (1988: 450). Manchester quotes (1992: 53) Erasmus as describing peasant huts:

almost all the floors are of clay and rushes from the marshes, so carelessly renewed that the foundation sometimes remains for twenty years, harboring, there below, spittle and vomit and wine of dogs and men, beer ... remnants of fishes, and other filth unnameable.

Prosperous peasants enjoyed a huge bed in which all members of the family, guests and the odd hen and pig would occupy. The bedstead consisted of straw pallets, infested with insects, lice, mice and rats. Privacy was unknown. The houses of less prosperous inhabitants lacked even chimneys or shutters, but often had holes in the walls stuffed with rags to keep the cold winds out.

In northern Italian towns, many dwellings contained less than 300 square feet. Living space in the cities was somewhat more commodious with two-story houses totaling about 1,000 square feet for about 5 people. Running water was unknown. By the fifteenth century, however, private latrines with cesspits were common in the better houses and a number of cities built public ones.(de La Roncière 1988: 171; Barthélemy 1988: 463 & 464).

Since the Middle Ages, every stratum of society has enjoyed real progress. The elimination or reduction of subsistence crises in seventeenth century Europe, which must be assessed as major gain, led to a drop in mortality and a spurt in population in the eighteenth century. More people remained alive to enjoy and experience life. By the nineteenth century, famine afflicted the West only as the product of war or revolution.

For the whole world, Western technology has spawned sufficient food to supply even the enormous explosion of humanity that has occurred in the twentieth century. The United Nations Food and Agriculture Organization reported in July of 1992 that over the last two decades the proportion of "undernourished" people in "developing" nations has dropped from over one—third of the population to about one—fifth; moreover, even the absolute number of people with inadequate food has fallen. Who can claim that this is not progress? Moving from a situation in which most people's lives are precarious and subject to acute food shortages to one in which for virtually everyone, except those caught up in military conflicts, sustenance is no longer a major concern denotes an undeniable improvement for the human race. Even India, where famines a few decades ago were endemic, has virtually eliminated them. This is progress.

Technology, which has brought the "green revolution" to the world's agriculture, is based on a growth in scientific knowledge. The benefit of improved understanding of the universe and its basic laws is much greater than simply providing more bountiful farming. Over the last thousand

years but especially in the last two hundred, mankind's increased mastery of science has led, among other things, to improved medical technology and understanding of disease and health. The result has produced a sharp decline in infant mortality and an increase in life expectancy at all ages. The next chapter examines these gains in greater detail.

The findings of research have percolated down into the population leading in many cases to changes in behavior that have improved peoples' health and lives. Since the Second World War, for example, when about three-quarters of the male population smoked, tobacco use in the United States has declined sharply. Fifty million men and women have given up cigarettes, and the proportion who smoke has declined to less than one-third and is continuing to ebb. People have given up tobacco or refrained from taking it up because of their increased awareness of how the habit ravages health. Some 90 percent of the public report that they are aware that smoking contributes both to heart disease and to cancer. Although the requirement that cigarettes and their advertisements carry warnings has certainly helped to spread an understanding of tobacco's risks, no specific government sanctions have coerced smokers to abandon the addictive weed.

In the last century, as science learned about the causes of disease, cities installed sanitation facilities, people followed better personal habits, and businesses reduced contamination to food supplies. The public learned of the benefits of cleanliness — "cleanliness was next to Godliness." An understanding of germs and how they are spread led to better hygiene. This gain in knowledge accounts for a huge drop in infant mortality and women dying in childbirth, together with a decrease in mortality for all ages.

We can conclude that people in the modern Western world experience better lives, live longer, and enjoy a higher level of well-being than have human beings at any time in the past. Today even the homes of the poor are heated and possess running water and indoor plumbing. Literacy is virtually universal. Such diseases as typhoid, tuberculosis, and typhus, — scourges of earlier centuries — have been greatly reduced or nigh eliminated. Smallpox, once the curse of the world, has been eradicated.

Conclusion

Compared to his primitive ancestors, mankind has made great progress. Early man was a carnivorous, sometimes cannibalistic animal, having more in common with hyenas than with angels. He lived a life that was brutish and short, without education, and chiefly without art or music. Today even poor societies in Africa and Asia enjoy the luxury of song and local tunes from simple radios, live longer lives and suffer less from losing their children at early ages. They also possess the opportunity for more varied and healthful diets. Education and knowledge has spread while superstitious beliefs have been undermined. Wanton killings are largely deplored and increasingly deterred through legal remedies.

Finally the overwhelming success of the human animal in spreading over the entire globe and dominating all other forms of life exemplifies the progress of mankind. Although a population of over 5 billion appears excessive to many and certainly puts pressure on resources, these masses are better off alive than dead, and they enjoy better security and greater comfort today than the multitude did 200, 2000, or 10,000 years ago. Humans on average are better fed, better housed, enjoy more amenities of life, and experience longer and healthier lives than at any time in previous history. Truly there has been progress.

While acknowledging these gains, many critics of progress protest that the modern world has undermined the human condition. Man may have made progress through the nineteenth century, but the twentieth has delivered nothing but decadence. They point to two major cataclysmic wars, a destruction of the environment, a rise in crime, and a deterioration in the family and civil society. These topics and the modern world are taken up in the next chapter.