CHAPTER

11 Retrospect and Prospect

The Past 10,000 Years and the Next 100

In this final chapter we take a long look backward and a short look forward. Our look backward attempts to summarize the broadest changes in human societies over the past 10,000 years and their significance for the human condition and the quality of human life. The key question concerns the extent to which human societies have been, as popularly believed, making steady progress in the quality of human life. Our look ahead attempts to use our understanding of sociocultural evolution over the past 10,000 years to project the human future over the next century or so. The chapter and the book conclude by briefly considering the importance of a general theory of world history as a reliable guide to thinking about the future.

The Past 10,000 Years: Human Progress?

The most important evolutionary trends of the past 10,000 years in relation to the overall quality of human life concern the *standard of living*, the *quantity and quality of work*, *equality*, and *democracy and freedom*. To discuss these evolutionary trends in a meaningful way, an abstract concept known as the **average world person** is employed, and the implications of major evolutionary changes are judged from the perspective of this hypothetical individual. The average world person is the typical member of the typical type of human society prevailing in any given historical era. For example, 15,000 years ago, all humans lived in hunter-gatherer societies, and thus the average world person was a hunter or a gatherer. By contrast, some 3,000 years ago, the agrarian way of life had basically become the predominant form of social life on earth, and thus the average world person was a peasant farmer. Since most of the world's population currently lives in the underdeveloped nations, today's average world person is a Third World peasant or urban worker. It must be remembered that the employment of the concept of the average world person is a purely methodological device designed to simplify the discussion about the nature

and meaning of broad evolutionary trends. To talk about an average world person is to talk about how evolutionary trends affect the majority of the world's population, if not all individuals, groups, and societies.

The Standard of Living

Perhaps the best way of comparing different societies' standards of living is in terms of a universally desired good or state of affairs, something all humans need and desire and whose absence produces not only a subjective feeling of deprivation, but an actual objective condition of deprivation. The *quality of the diet* can be used as such a measure of the standard of living. Using this measure, we find an overall decline in the standard of living over the past 10,000 years, at least when judged from the perspective of our average world person. The most recent evidence suggests that ancient hunter-gatherers probably enjoyed diets that were abundant in calories, fully adequate in animal proteins, and highly nutritious. As argued in Chapter 3, hunter-gatherers probably constituted an "original affluent society"—a type of society in which people were able to satisfy their basic needs with a minimum of effort.

The decline in the standard of living began with the transition to the first agricultural (horticultural) communities. The real decline in the living standard, though, was brought about several thousand years later at about the time people were greatly intensifying their agricultural methods. By the time the average world person had become a peasant, the standard of living had dropped very sharply. The average peasant in the average agrarian society of the past had a diet markedly inferior to that of the average hunter-gatherer of earlier times. Peasant diets were notoriously deficient in calories, proteins, and nutrients, and they probably also had a stultifying monotony. As Lenski notes in regard to medieval England (1966:270–271), "The diet of the average peasant consisted of little more than the following: a hunk of bread and a mug of ale in the morning; a lump of cheese and bread with perhaps an onion or two to flavor it, and more ale at noon; a thick soup or pottage followed by bread and cheese at the main meal in the evening. Meat was rare, and the ale was usually thin." Things were just as bad or worse outside Europe (at least in the past few centuries). In China and Japan, little meat was eaten by the average peasant, and in India, virtually the entire population had been reduced to a state of obligatory vegetarianism. In China, even the rich mandarins ate little meat (Braudel, 1981).

Evolutionary trends in the standard of living can also be measured by *the level of health and the incidence of disease*. Here, a similar picture emerges. Hunter-gatherers were far healthier and freer from disease than commonly thought (M. Harris, 1977; Cohen and Armelagos, 1984; Cohen, 1989), and their life expectancies, although short, were comparable to those of horticulturalists and peasants. As Chapter 3 showed, paleopathological studies of ancient populations suggest that horticulturalists and peasants generally had poorer health than hunter-gatherers. Moreover, the great killer contagious diseases familiar to humankind were products of the high-density urban life of agrarian societies (McNeill, 1976).

There were two basic reasons for the overall decline in the standard of living as assessed in these ways. One was population growth. The increasing pressure of numbers compelled people to adopt more intensive methods of production. Yet, the adoption of such methods did not allow people to increase their living standard or even to maintain it, for the pressure of numbers drove the living standard ever downward. By intensifying their production methods, people were simply keeping their living standards from dropping to drastically low levels. The other basic cause of the decline in living standards was the rise of class stratification, itself due in part to the growth of population. As some individuals and groups gained control over productive resources, they were able to compel other individuals and groups to produce economic surpluses from which the members of dominant groups could live. In the preindustrial world, this process reached its peak in agrarian societies and contributed very heavily to the low living standard of the peasantry. In the modern world, exploitation remains severe in many Third World countries and is one of the most important causes of the low living standard of Third World peoples.

But what of the transition to modern industrial capitalist societies? People in these societies have experienced enormous improvements in the quality of the diet, and modern medicine has made great strides. Infant mortality rates have dropped dramatically and longevity has increased appreciably. Most of this improvement has occurred in the last century or so; the average life span in the United States in 1900, for example, was only 49 years. There have also been enormous advances in the standard of living as measured by the quality of housing (and all the conveniences that go with it, such as electric lighting, central heating, and flush toilets) and the possession of material goods, such as high-quality automobiles, elaborate labor-saving applicances, stereo systems, personal computers, and cell phones. With rapid technological advance, the quality of these products has continually improved, their prices have decreased, and they have become increasingly available to wider segments of the population. People seem to be very fond of these things and consume them eagerly when they have the means to do so. Even Marxist critics of capitalism consume these things and seem to enjoy them as much as the average person.

A very important question concerns whether or not people have some sort of innate desire for material possessions. In this book's predecessor, *Macrosociology: An Introduction to Human Societies* (4th ed. 1999a), the first author argued that they do not. But this argument was perhaps a bit hasty. Hunter-gatherers, horticulturalists, pastoralists, and agrarian peasants who know nothing of the existence of modern material possessions and conveniences do not necessarily feel deprived by not having them, but they usually accept them readily and enjoy them very much when given them. Humans desire things that allow them to reduce toil and to experience a wide range of comforts and pleasures. They do not *need* these things in any technical sense of that term, but they certainly seem to *want* them and feel that they improve the quality of life when they are available. So, the conclusion would seem to be that the standard of living, and the gratification it provides, has improved dramatically for the members of advanced industrial capitalist societies in recent centuries, especially the last century. This marks a reversal of the age-old trend of a declining standard of living.

The Quantity and Quality of Work

There is little doubt that the quantity of work has increased and its quality has deteriorated over the past 10,000 years. Hunter-gatherers seem to work less and enjoy more leisure time than the members of all other types of societies. Evidence from contemporary hunter-gatherer societies indicates that they are resistant to advancing their subsistence technology when their standard of living is deemed adequate because they realize this will bring increases in their workload.

The members of horticultural societies do indeed appear to work somewhat harder and longer than people in hunting and gathering societies. But, as with the standard of living, the truly marked change seems to have occurred with the emergence of agrarian societies. The workload in agrarian societies was markedly greater than in all previous forms of preindustrial society. In the modern world, work levels are still very high in both the industrialized countries and the Third World nations (Minge-Klevana, 1980). The average member of an industrial society may spend on the order of 60 hours a week in subsistence activities, if we add to the 40 hours per week spent earning a living the time spent shopping for food and preparing it, as well as the time spent maintaining a household. This is about three to four times the average weekly workload of many hunter-gatherers. The average Third World worker probably spends considerably more time than this in all subsistence activities.

A basic assumption of the preceding discussion is that people seem to obey what has been called a *Law of Least Effort* (Zipf, 1965; Harris, 1979; Sanderson, 2001). This law holds that, other things being equal, people prefer to accomplish activities with a minimum amount of energy expenditure. This seems to be a basic feature of human nature. Thus, increasing their workload is something people normally wish to avoid. Under what conditions will people work harder and longer than would otherwise be the case? There are perhaps three basic reasons why people will increase their energy expenditure: political compulsion, economic necessity, and psychological conditioning. People will work harder and longer when other people gain power over them and force them to increase their workload. They will also increase their work activities if compelled by a declining standard of living to intensify their productive efforts. Finally, people can be conditioned to believe that hard work is a moral virtue, laziness a moral defect (this idea has been basic to the Protestant work ethic of Western civilization in recent centuries). The first two of these have been the leading causes of the intensification of the workload over the past several millennia.

What, then, of the quality of work? Marx argued that work is the primary means of human self-realization. Humans realize their humanity and achieve meaning in life when they manipulate the world according to their own purposes and designs. The primitive hunter and the agrarian craftsman were classic examples of self-fulfilled workers. To a large extent the same was true even of agrarian peasants. Despite their exploitation and low standard of living, they had considerable control over their work activities and worked in harmony with nature and the seasons. In precapitalist and preindustrial societies, then, work was not what Marx called

alienated labor, or labor that lacked meaning, purpose, and satisfaction (Thomas, 1964). The real emergence of alienated labor began with the transition to modern industrial capitalism. Here, workers came to be reduced to instruments of production who performed routinized and fragmented tasks. They lost control over the means of production, had little control over their work activities, and had little sense of identification with the final product they produced. In the Third World, much work is also alienated labor, especially to the extent that capitalist methods of production and worker control have penetrated underdeveloped societies. Thus, the trend in the quality of human work—arguably one of the most basic of all human needs—has been negative.

The assertion that much work in modern industrial societies is alienated labor must be balanced by the recognition that changes in the occupational structure have also created extremely fulfilling forms of work for those talented enough and fortunate enough to obtain it. The work done by high-level business managers, computer technicians, scientists, and urban planners, for example, as well as by such learned professionals as physicians, lawyers, architects, and university professors is for the most part extremely rewarding in and of itself and has created a new kind of person—the "workaholic." Much manual work (especially its unskilled versions) and clerical work may be alienating and unpleasant, or at least not inherently rewarding, but these forms of work are not the only forms of work in modern capitalism. Marx hardly anticipated such things in his predictions about the future of capitalism.

Equality

There is no mistaking the overall trend in social and economic equality. It has been decidedly in the direction of greater *inequalities*, particularly those based on access to economic resources. Most band and tribal societies are egalitarian societies in which the only real inequalities are those of status and influence. These inequalities are generally not socially inherited, and they are unrelated to control over economic resources or to political power. Influential and prestigious leaders in band and tribal societies have no greater wealth than others, nor do they have any capacity to compel the actions of others. In other words, in such societies class stratification does not exist.

Class stratification tends to emerge in more intensive horticultural societies, where population pressure has already reached significant levels. It is here that societies first come to be divided into groups possessing unequal levels of power and wealth, although the first forms of stratification usually do not impose severe economic penalties on the members of subordinate classes. But in high-density agrarian societies, class stratification becomes so extreme that the members of subordinate classes generally suffer from marked economic deprivations. It is in such societies that a great social and economic gap between rich and poor emerges.

Although contemporary industrial societies have reduced some of the extremes of stratification compared to agrarian societies of the past, the economic inequalities among nations within the world-capitalist economy are probably greater

today than ever before. In the modern world, polarization in the world-economy has certainly been a prominent trend.

Democracy and Freedom

Although there is a strong tendency in Western capitalist society to use the concepts of democracy and freedom more or less interchangeably, the terms, though related, should really carry different meanings. Pure democracy is a process of self-government, one whereby people decide their own affairs through open discussion and debate and in the absence of any individuals or groups who can command their actions.

Given this definition, human societies over the past ten millennia have moved more and more away from democracy. Many band and tribal societies are fundamentally democratic in that they lack elite groups capable of commanding the actions of others. Headmen and big men are leaders of some influence and respect, but they have no genuine power. People are under no obligation to obey their wishes, and such leaders have no possibility of imposing penalties on those who ignore their suggestions. Democracy is undermined at the same basic point in social evolution at which class stratification emerges. With the growth of large-scale agrarian societies and their elaborate stratification systems, democracy drops to a very low point. In such societies tiny elites rule the actions of others and have the capacity to impose severe penalties on them for disobedience.

In the modern world, a form of democracy, *parliamentary democracy*, has been created. Under this political arrangement, people gain a great deal of protection against the arbitrary exercise of power that is so common in agrarian societies. However, democracy conceived as the direct participation of the populace in the affairs of government is more an illusion than a reality. (In the totalitarian Communist states, of course, it was not even an illusion.) Modern Western parliamentary democracies are governed by elite groups whose actions are self-serving and to a very great extent beyond significant control by the masses.

But what of freedom? Assessing the evolutionary history of freedom depends crucially on what is meant by the concept, which has been subject to rather diverse definitions. In the Western tradition of thought, freedom has usually been conceptualized as **individual autonomy.** Freedom in this sense involves the absence of external constraints on individual thought and action. Autonomous individuals are those who follow their own courses of action relatively unimpeded by others.

Alexandra Maryanski and Jonathan Turner (1992) assert that there is a curvilinear relationship between individual autonomy and social evolution. Greatest autonomy occurs at the ends of the evolutionary spectrum—in hunter-gatherer and industrial societies—whereas people in horticultural and agrarian societies have the least autonomy. Maryanski and Turner claim that the main external constraint on individual autonomy in horticultural societies is the web of kinship, whereas in agrarian societies the leading constraint is that of power. They argue, in addition, that the constraints of kinship are more severe than those of power. We agree with

Maryanski and Turner's overall argument, but we would question their claim that it is in horticultural societies that individuals are subjected to the most severe constraints. We would nominate agrarian societies for that dubious honor. In these societies, people are subjected not only to the constraints of kinship ties and obligations but also to severe class domination and the overwhelming power of the state.

Another difficulty with Maryanski and Turner's argument is that they overlook the constraining influence of custom and tradition. Individuals in hunter-gatherer societies have a great deal of freedom from direct coercion by others, and individual autonomy is highly prized (Gardner, 1991), but they are hardly free to set their own normative standards of behavior. People are, in fact, highly coerced by what the French sociologist Emile Durkheim called the *collective conscience*—roughly, the will of the group. There is extremely strong group pressure to conform to the norms and values of the group, and the penalties for failure to conform are often severe, including either death or banishment from the group. What is true of hunter-gatherers is also true of people in horticultural and agrarian societies. In fact, concerning this dimension of freedom, what might be called **individualism,** it is clear that people in all forms of preindustrial societies are relatively unfree, and that it is modern capitalism and industrialism that have generated the highest levels of individualism. In modern industrial capitalist societies, there is government protection of individual rights and liberties and strong encouragement of individual self-expression. This individualistic conception of freedom pervades all of the basic social arrangements of modern Western capitalist societies (but not non-Western capitalist Japan).

There is yet a third form of freedom, one that might be called freedom as **human self-realization.** This conception of freedom is associated with the Marxian tradition of thought (cf. Elster, 1985). Freedom in this sense involves the equal opportunity of all individuals to realize their basic nature as members of the human species. For Marx, freedom existed when everyone had the full opportunity to achieve meaning and purpose in life, especially insofar as this could be achieved through work. Marx thought that freedom could be achieved only in a classless society with a very advanced level of technology—in the future socialist society. He believed that modern Western capitalist societies, even though they granted certain *political* freedoms to individuals, failed to achieve true *human* freedom because most of the population was exploited by the capitalist class and had no genuine opportunity for the realization of their human nature. If we follow this tradition of conceptualizing freedom, we can see that freedom has not been increasing in human history, and in a sense has been decreasing inasmuch as the members of precapitalist societies generally do have considerable opportunity to realize themselves through their labor. Even in modern industrial societies, most work provides little opportunity for individual self-fulfillment.

The Concept of Progress Revisited

The preceding discussion suggests once again what was asserted early in the book: One must be extremely wary of using the concept of progress to characterize the

major changes of the past 10,000 years. Indeed, it seems apparent that much of what has been happening over most of this period has actually been a form of cultural *regression*. How else is one to regard a general decline in the standard of living, an increase in the quantity of and a deterioration in the quality of work, the emergence of marked social and economic inequalities, and the undermining of democracy? Of course, as we have noted, not all of these changes apply to all persons, groups, or societies. For many individuals and groups, and for a number of societies, the standard of living has increased and work has become lighter, easier, and more gratifying. Many societies have achieved much greater equality and democracy than anything even remotely found in the agrarian past.

Moreover, improvements have been occurring in other areas as well. Humans have made enormous scientific, technological, intellectual, artistic, and literary achievements. Such achievements—those of Einstein, Darwin, Hawking, Rawls, Picasso, Mozart, Shakespeare, da Vinci, and others—cannot be swept aside as insignificant. It is possible to say, then, that humans have actually been making certain forms of progress over the past 10,000 years in spite of the very significant regressions that have been occurring.

How to Judge a Society

This discussion gives rise to the basic question of whether or not we can truly judge societies, and, if so, how we can do it. If we can judge societies and rank them on a scale of moral worth and decency, what criteria shall we use?

Early in the twentieth century, anthropologists and sociologists developed a doctrine known as **cultural relativism.** It was developed to combat the problem of **ethnocentrism**—the common view that one's own culture is superior to all others and that other cultures can be judged only by reference to one's own. In its more extreme forms, ethnocentrism leads to intolerance, bigotry, and even hatred. Cultural relativism is the doctrine that no culture is inherently superior or inferior to others, but that, since every culture represents an adaptive solution to fundamental human problems, all cultures are "equally valid." Cultural relativists believe that there are no absolute or objective standards for judging cultures. Each culture can be evaluated only on its own terms—that is, by its own internal standards. If we were to apply this doctrine in judging the propriety of female infanticide (the selective killing of female infants) among the Yanomama, for example, all we could really say would be something like "Although it's wrong for us, it's right for them." And we would say this through recognition of the fact that infanticide "is right" for the Yanomama since it represents an adaptive solution to a problem of human living.

As a moral or ethical perspective, cultural relativism has been subjected to severe criticism, and it does not constitute a satisfactory system of ethics (Kohlberg, 1971; Patterson, 1977). The problems with it are fairly well known. For one thing, it can quickly collapse into "the disease of which it is the cure" (Kohlberg, 1971). That is, it easily leads to condoning or even approving practices that most people would consider inhumane and repellant (Hatch, 1983). For example, a strict cultural

relativist perspective would have us endorse such practices as the Nazi effort to exterminate the Jews, Soviet forced labor camps, Roman slavery or black slavery in the New World, Yanomama gang rape of women, and countless other cultural phenomena that seem morally repellant by most reasonable standards—all in the name of tolerance toward other ways of life. In addition, cultural relativism seems to perpetuate a kind of "tyranny of custom" by leaving little or no room for the autonomy of the individual (Hatch, 1983).

In fact, the limitations of cultural relativism have appeared obvious even to many of the cultural relativists themselves, some of whom have actually violated their own principles in practice. For instance, Ruth Benedict, one of the major architects of cultural relativism, consistently undermined her own relativist stance when she discussed cultural differences (Hatch, 1983). In her well-known book, *Patterns of Culture* (1934), Benedict clearly showed a preference for certain cultural traits over others, displaying, for example, a particular dislike for cultures in which force played a major role.

Elvin Hatch (1983) suggests a way around cultural relativism that overcomes its basic deficiencies while at the same time retaining what seems to be of value in it: its general plea for tolerance. Hatch proposes what he calls a "humanistic principle" as a means of judging other cultures. This principle holds that cultures can be evaluated in terms of whether or not they harm persons by such means as torture, sacrifice, war, political repression, exploitation, and so on. It also judges them in terms of how well they provide for the material existence of their members—the extent to which people are free from poverty, malnutrition, disease, and the like.

Hatch makes some excellent points, but one can go further. One could add that cultures are good to the extent that they provide for self-realization. Cultures that allow their members opportunities to pursue intellectual life, science, music and the arts in general, and so on are preferable to cultures that do not allow for these things—either because they suppress them, or because they do not provide material opportunities for their attainment.

The most famous moral theorist of the second half of the twentieth century was the Harvard philosopher John Rawls. In his celebrated book, *A Theory of Justice* (1971), Rawls set forth two basic moral principles. The first principle states that *each person is to have an equal right to the most extensive basic liberty compatible with a similar liberty for others.* This idea is already familiar to Americans and the members of Western industrial societies generally, for it is enshrined in our political constitutions and our basic values. The second principle involves economic equality and states that *social and economic inequalities are to be arranged so that they are both (a) reasonably expected to be to everyone's advantage and (b) attached to positions and offices open to all.* Regarding this second principle, Rawls went on to say that inequalities are justified only to the extent that they improve the economic position of those persons at the bottom of the society.

Rawls's moral theory is not without flaws, but it is probably the best that has been developed in moral philosophy so far. What does his theory say about capitalist society? How does capitalist society measure up in light of this moral theory? Industrial capitalism measures up extremely well in terms of the first principle, since

capitalism has, at least indirectly, promoted democracy in the form of liberties and rights. On this score, it is vastly superior to agrarian states and intensive horticultural chiefdoms, and certainly to the state socialist societies. It is also superior to hunter-gatherer and simple horticultural stateless societies because, although there is a great deal of individual autonomy in those societies, this is because of their very small scale—the inability of some to gain enough control to deprive others of autonomy—and, besides, such societies suffer from the constraints imposed by the web of kinship (Maryanski and Turner, 1992).

In terms of the second principle, industrial capitalist society also measures up quite well. Although it is true that industrial capitalist societies contain large inequalities of income and wealth, these are much smaller than in earlier agrarian societies and in contemporary less-industrialized Third World countries. Moreover, capitalism has led to a tremendous diffusion of income throughout the population and has improved the economic position of those at the bottom far beyond what it would otherwise be. The working class has lost all of its revolutionary potential in the United States, and nearly all of it in the other advanced capitalist societies, because workers have experienced a marked degree of *embourgeoisement* (to use that delightful French word)—they enjoy very high living standards and in many cases have adopted middle-class attitudes and lifestyles. Many social scientists would reply that income and wealth inequality have been increasing in recent years, at least in the United States. This is certainly true, but such increases in inequality have been associated with large increases in both income and wealth. In 1960, for example, total household assets in the United States amounted to approximately $8 trillion but had increased over sixfold, to $50 trillion, by 1999 (calculations are in constant 2000 dollars) (Keister, 2004).

But what of global capitalism? Peter Singer (2002) criticizes Rawls for focusing exclusively on nation-states, arguing that a just distribution of resources must be evaluated on a global level. Inequalities within capitalism are justified not simply if they elevate those at the bottom of any given nation-state, but only in terms of whether they elevate those at the bottom of the world capitalist system. How well has capitalism acquitted itself in this respect? As Chapters 9 and 10 were at pains to show, although the quality of life in the Third World continues to lag far behind its quality in the highly developed countries, major improvements were made in the twentieth century, and especially in the last three or four decades. Per capita GDP did increase dramatically, as did primary and secondary educational attainment, adult literacy, life expectancy, and access to consumer goods that reduced work and made life more pleasurable. By the same token, infant and child mortality fell dramatically, along with poverty, malnourishment, and starvation.

Truly democratic governments are much less common in the Third World than in the developed world, but they have become more numerous; real inroads against brutal dictatorships have been made in many less-developed countries. Moreover, less-developed societies that have chosen a socialist developmental path have fared far less well than those that have remained capitalist, and most who once chose socialism have abandoned it for capitalism. Despite many continuing problems, capitalism has acquitted itself in the Third World much better than was once thought.

Thus, industrial capitalism meets both of Rawls's principles fairly well, and even Third World capitalism meets his principles much better than agrarian societies of the past. Capitalism has elevated the level of the average member of most Third World societies, even if has yet to elevate the position of those at the absolute bottom. Despite the many critiques of it, capitalism has much to recommend it. Marxists and other radical critics of capitalism believe, however, that we can still do a lot better by developing a genuine socialist society—that socialism can create even more equality while maintaining the high standard of living capitalism has created. They have in mind not Marxian-inspired Communism Soviet-style, but socialist democracy. As we saw earlier, Boswell and Chase-Dunn (2000), for example, advocate the creation of a future society that will combine the strengths of both capitalist market principles and socialist command principles.

This is all very well and good in principle, but the actual record suggests that these critics may be unduly optimistic. As Peter Berger (1986) states, when judging capitalism in comparison with socialism we have to compare capitalism to the forms of socialism that have actually existed, not to some form of socialism that is purely imaginary and philosophical. We know that when the state takes total control of the means of production, the results are almost never good and usually a disaster, both politically and economically. Few would any longer advocate such a course of action. (Surprisingly, some still do, apparently oblivious to recent historical events!) But even the introduction of significant command principles into a market-based system may very well produce worse results, not better. It could move us back in the direction of the old state socialism, although, of course, stopping short of that. It might be best, then, to stick with capitalism. However, this should be "capitalism with a human face"—a form of capitalism that provides just enough state regulation of the economy to minimize poverty and to decommodify work (in Esping-Andersen's sense) as much as is feasible. To this point in history, this form of capitalism has been most fully achieved in northern Europe—in Sweden, Denmark, Norway, Finland, and the Netherlands.

As argued earlier, inequality per se is not always or necessarily bad. It is bad when it leads to a great deal of degradation and suffering, as in agrarian societies of the past, parts of the less-developed world of today, and industrial capitalist societies of the nineteenth and early twentieth centuries. Inequality can also be negative in that it can lead to much envy and political conflict. But there really is no reason to resent the rich and wealthy at the top if they create huge amounts of wealth whose fruits even those at the bottom can enjoy to some extent. You can be sure that the standard of living is exceptionally high when ordinary people will think little of paying $3 or more for a cup of coffee at Starbucks, or the same amount for an ice cream cone at Ben and Jerry's! Such a thing would have been unthinkable 50 years ago. This should demonstrate beyond any doubt how much the standard of living has increased just in recent decades.

Despite its deficiencies and drawbacks, capitalism is the best we have done so far in history in terms of the material quality of life and the possibilities for human self-realization. But we still must look at capitalism's future possibilities. As Marx pointed out, and as current Marxists never tire of reminding us, capitalism contains inherent *contradictions*—forces that continually inhibit its functioning and that may

ultimately make it less workable or even destroy it. What might the future of world capitalist civilization bring?

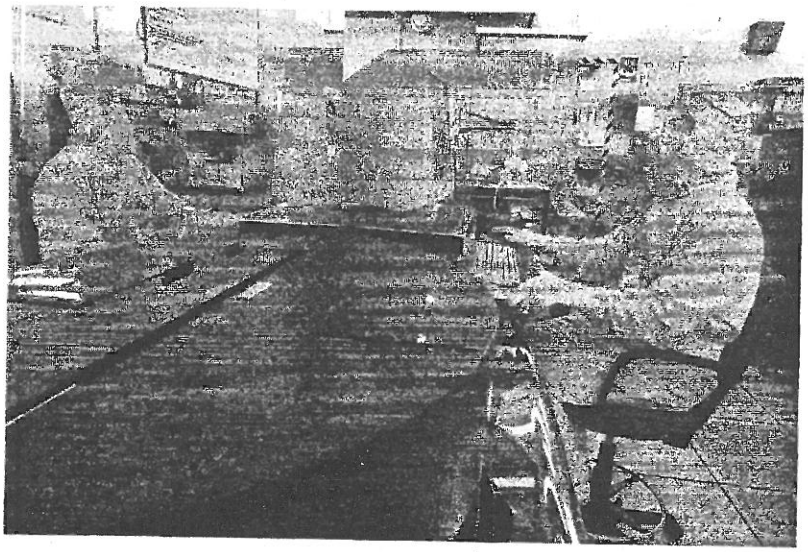
Future Trends: The Very Large Scale

Taking things on a very large scale, we predict the following major trends over the course of the next half-century to century.

1. *Technology will continue to advance, and to advance with increasing rapidity.* This prediction is a "no-brainer" if there ever was one, given the remarkable tendency of humans to engage in technological advance throughout social evolution and the enormous technological advances of the past century, and especially of recent decades. But what will the specific trends be?

The next major technological revolution will very likely occur at the molecular level, mostly in what is called *nanotechnology*. The prefix *nano* means one-billionth, and a *nanometer* is one-billionth of a meter in size, the size of the atom. Nanotechnology involves the manipulation of atoms one at a time in order to create a vast array of new, supersmall technological apparatuses. Its applications will be extraordinary. Douglas Mulhall (2002) summarizes the so-called nanotechnology revolution and speculates on the following developments sometime within the twenty-first century:

- The first nanocomputer will be built. It will weigh only a few ounces and can be carried in your hand or, more likely, worn on your body. Nanobased music players and other electronic devices will also become wearable.



Nanotechnologists at work. The nanotechnological revolution now in its early stages is likely to produce extraordinary consequences for human social life.

- Virtual reality will expand on a major scale. Virtual reality is based on the technology of holograms, which resemble photographs but with a dramatic difference. Photographs allow us to see only a flat image, but with a hologram we see in "3D." We are able to perceive depth and to see the "whole image." By wearing virtual reality helmets or suits, or by entering virtual reality rooms, people will have virtual offices that allow them to work from any location; will be able to attend virtual conferences and take virtual vacations; and will be able to experience virtual touch and extremely realistic virtual sex that will likely be more stimulating and pleasurable than regular sex. Some people—"virtual junkies"—will become addicted to virtual reality. This technology will revolutionize social relationships, and the difference between actual reality and virtual reality will eventually become blurred.
- Energy production and use will be radically transformed. Oil and gas will decline significantly as energy sources and will eventually disappear. Fuel cells using principles of photovoltaics will become widespread and will be used to heat and cool homes. Renewable energy sources will be easily renewed and will be extremely cheap.
- Nanocoatings and nanogears will eliminate the need for lubricants, and motors will shrink dramatically in size and become much more energy efficient. Nanocoatings will protect surfaces far better than ordinary paint, and their colors can be changed automatically as often as one desires. Nanosurfaces will be completely resistant to dirt, and so cleaning them will no longer be necessary.
- Dramatic changes in transportation will occur. Automobiles will be replaced by self-piloting flying cars that will maneuver through computerized air corridors. Worldwide supersonic tunnels will be built in which people can travel in pods at 2,500 miles per hour. Airplanes and airlines will become useless and disappear. It will be possible to travel from New York to London in 90 minutes, or from New York to Shanghai in five hours. People will simply give voice commands to their pods to tell them exactly where they want to go (city, hotel name, etc.). Self-replicating fractal robots will build these tunnels, and the capital cost will be only for software.
- The first molecular assembler or desktop fabricator will be built. This will allow most consumer goods to be made at home quickly, easily, and cheaply, and will spell the end of global manufacturing. Most things that are now consumer durables, such as washing machines or refrigerators, will become throwaway goods.
- Clothes will warm us up if we are too cold or cool us down if we are too hot. They will be able to change colors by voice command.
- Languages will become instantly translatable, thus eliminating language barriers. Every library in the world will become downloadable into a personal electronic book.
- Major developments in biotechnology will occur. These major advances in biotechnology, which are already beginning, are part of what has been called *biomedicalization* (Clarke et al., 2003). Biomedicalization involves not just in-

creasing control over conditions related to human health, but the actual transformation of the very bodies and lives of human beings in medical ways. Biomedicalization involves at its core such things as transplant medicine, DNA engineering, stem cell research, the mapping of the human genome, computer-based medical visualization technologies, and computer-assisted drug developments. Biomedicalization will soon allow heart disease and many cancers to be correctable before birth using gene therapy. We will eventually be able to grow our own organs from our own tissues to be used as replacement organs if and when we need them, and this will become outdated when artificial organs can be made. Nanobots will enter the body to clean arteries, make necessary repairs, and so on. And it is possible that we may soon be seeing life after complete heart failure, women giving birth many years after reaching menopause, walking without leg bones, the cloning of humans, and the capacity to genetically design life itself.

- Synthesized food will replace plant- and animal-based food, and the killing of animals for food, as well as for fashion, will end. Electronic paper that acts like a computer screen but looks like paper will be developed, thus helping to save our forests.
- Designer nanodrugs will be created that will be virtually undetectable and will be used extensively by both teenagers and adults. People may eventually spend much of their time taking nanodrugs and living in virtual reality.
- Instant communication with anyone at anytime and anywhere will become possible and will undoubtedly lead to major changes in social life. These technological advances will intensify globalization even more than it would have been intensified otherwise.
- Technology will be developed that can protect us against natural catastrophes, which may occur with greater frequency than we have thought. These include not only earthquakes but also asteroid collisions with the earth and tidal waves.
- Robots that can see, hear, feel, smell, and taste, as well as tell us about their experiences, will be created. These robots will be used for specialized purposes, such as household work, sex, or companionship. This will eventually lead to the development of a new species, *Robo sapiens*, that will be as intelligent as humans and highly autonomous. By using the same type of gene sequences that humans have, *Robo sapiens* will become self-replicating and eventually ask for rights.
- Advanced humans with genetically enhanced intelligence and bodies will become common. These humans, which Mulhall calls *Homo provectus*, will marry some *Robo sapiens*, and robot-human hybrids will emerge.

Although Mulhall says he is speculating rather than predicting, it seems clear that much of what he suggests will eventually happen, and probably sooner rather than later. Nanocomputing already exists. It made a dramatic advance in 2001 and now seems to be very close to the industrial production stage. In 2000, the United States government established the National Nanotechnology Initiative, and nano-

technology centers have been developed at a number of major U.S. universities. Europe and Japan are even slightly ahead of U.S. efforts. Venture capitalists are starting to enter the nanotechnology market, and the first nanoproducts are starting to become available. A nanotoothpaste, for example, has already been developed that contains enamel-like particles intended to fill nanocavities in teeth (Mulhall, 2002).

If even half of these technological possibilities become reality, social life may be transformed in extraordinary ways (Mulhall, 2002). Advances in biotechnology could make romantic and sexual relationships between 70-year-olds and 20-year-olds relatively common, because the 70-year-olds will have aged very slowly. Since women tend to seek men who have high status, intelligence, and wealth and other resources, young women may be highly attracted to biologically "young" older men who have had many decades to accumulate wisdom, status, and wealth. If people spend much of their time taking designer drugs and living in virtual reality, then social relationships could be radically altered, and largely in highly undesirable ways. This would undoubtedly increase the individualistic tendencies of modern societies, reducing social bonding even further than it has already been reduced. And what will happen to "real" relationships when they become increasingly virtual—that is, when people interact with each other mostly in virtual reality?

The end of global manufacturing through the widespread use of molecular assemblers will create massive unemployment on a scale heretofore unimaginable. What will people do? How will they spend their time (more designer drugs, more virtual sex)? How will capitalism be reorganized when few people do any work, when most resources are extremely cheap, and when people can produce almost every product that they need? And there will be enormous implications for government and for the military. As Mulhall notes (2002:248), "What are the military implications of having to fight individuals with the power of an army generated from a desktop factory, when biological weapons can be made and released at the flick of a switch"? And with people living much healthier lives for much longer, generational conflict will intensify as older people who have jobs fail to retire. Instant communication with anyone anywhere, combined with extremely rapid transportation all over the globe, have dramatic implications for social and cultural change. And the creation of intelligent and autonomous robots and "posthumans" will undoubtedly have enormous implications for the emergence of new forms of stratification. One could go on and on.

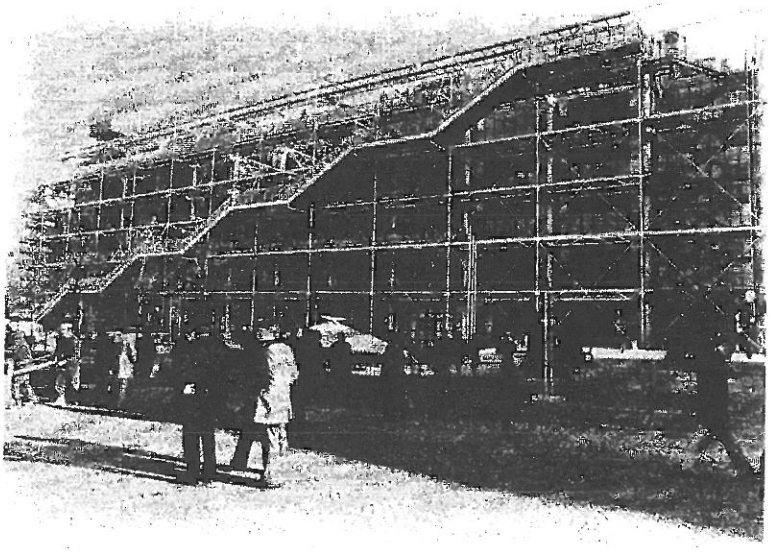
2. *Substantial democratization will occur throughout the semiperiphery and parts of the periphery.* Given the "new democratization" occurring throughout the Third World and the postsocialist societies in the 1980s and 1990s, and given the continued evolution of forces that are favorable for democratization—industrialization, mass education, and literacy—democratization will be a substantial evolutionary trend in many currently undemocratic or marginally democratic societies. However, this trend could be counterbalanced by what Robert Kaplan (2000) calls "the coming anarchy." Kaplan argues that, for a variety of reasons, we are beginning to witness increasing lawlessness, the erosion of nation-states and international borders, and increasing social disorder. Seeing contemporary sub-Saharan Africa as the leading

edge of these trends, he predicts they will intensify and spread more widely in the decades ahead. To the extent that Kaplan is right—and that is very much an open question—then on the heels of increasing democratization may arise a new authoritarianism designed to deal with rising and spreading disorder. Increasing democratization may be a short-lived process, or at least interrupted for a significant period of time.

3. *There will be increasing ethnic conflict on a global scale.* A major dimension of globalization has been a tremendous acceleration of international migration. There was a huge increase in immigration flows into the United States in the 1970s, 1980s, and 1990s, and annual immigration is now on the order of 4 to 5 million people. Most of the immigrants are coming from Latin America (mostly Mexico), the Caribbean, and Asia (Held, McGrew, Goldblatt, and Perraton, 1999). Many European countries, such as France, Germany, and Sweden, have also experienced considerable immigration in recent decades, as has Australia. In fact, as noted in the last chapter, there is now an enormous amount of immigration all over the world, mostly from less-developed to advanced industrial countries, and this is producing increasing ethnic heterogeneity. Tatu Vanhanen (1999) shows that the degree of ethnic heterogeneity in a society and its level of ethnic conflict are very closely related, and a high level of ethnic heterogeneity is far and away the major cause of ethnic conflict. Moreover, the greater the differences between ethnic groups (especially the extent to which the differences are physical as well as cultural), the greater the conflict. Given these facts, the increasing ethnic heterogeneity of societies is likely to cause an intensification of ethnic conflict in the future.

4. *Globalization will continue and will intensify to mind-numbing levels.* Although there is certainly nothing inevitable about continued globalization, as noted in the last chapter, it is very likely that globalization will continue on all levels: economic, political, and sociocultural. There will be increasing integration of world production and finance, increasing domination of the world-economy by a few gigantic corporations, an increasing number and importance of organizations devoted to international political regulation, and increasing destruction of local cultural traditions and the spread of a world culture. The world will increasingly become "one world," although of course there are limits to this as well. Anthony Giddens (2002) says that, because of globalization, we are already living in a "runaway world"; this world will continue to runaway faster and faster as time goes by.

In his book *The Condition of Postmodernity* (1989), David Harvey argues that increasing globalization has led to a continual shrinking of the psychological experience of time and space, a phenomenon he calls *time-space compression*. Harvey argues that in the history of capitalism there have been several surges of time-space compression. The latest episode began in the early 1970s, Harvey declares, and this episode, like the earlier ones, has psychologically disturbed and destabilized the individuals who have been experiencing it. The enormous acceleration in the global scale and pace of capitalist production in the past 30 years has led to a dramatic increase in the pace of social life more generally. This period of time-space



The Pompidou Center in Paris. This building is thought to be a major example of postmodern architecture, which physically signifies what David Harvey calls the postmodern condition.

compression has been accompanied by dramatic changes in personal life of a very disruptive nature. The continual acceleration of production has led to (Harvey, 1989:285–286)

> parallel accelerations in exchange and consumption. Improved systems of communication and information flow, coupled with rationalizations in techniques of distribution . . . , made it possible to circulate commodities through the market system with greater speed. . . .
>
> Of the many developments in the arena of consumption, two stand out as being of particular importance. The mobilization of fashion in mass (as opposed to elite) markets provided a means to accelerate the pace of consumption. . . . A second trend was a shift away from the consumption of goods and into the consumption of services—not only personal, business, educational, and health services, but also into entertainments, spectacles, happenings, and distractions. . . .
>
> Of the innumerable consequences that have flowed from this general speed-up in the turnover times of capital [two stand out]. . . .
>
> The first major consequence has been to accentuate volatility and ephemerality of fashions, products, production techniques, labour processes, ideas and ideologies, values and established practices. The sense that "all that is solid melts into air" has rarely been more pervasive. . . .
>
> In the realm of commodity production, the primary effect has been to emphasize the values and virtues of instantaneity (instant and fast foods, meals, and other satisfactions) and of disposability (cups, plates, cutlery, packaging, napkins, clothing, etc.). . . . It meant more than just throwing away produced goods (creating a monumental waste-disposal problem), but also being able to throw away values, life-styles, stable relationships, and attachments to things, buildings, places, people, and received ways of doing and being. . . . Individuals were forced to cope with disposability, novelty, and the prospects for instant obsolescence. . . . And this im-

> plies profound changes in human psychology. . . . The bombardment of stimuli, simply on the commodity front, creates problems of sensory overload.

Globalization has thus been having major psychological consequences. If Harvey's theory is correct, then the implications for the future are ominous. Time-space compression is built into the very logic of capitalist development, and the pace of production, consumption, and social life constantly increase. Future waves of time-space compression would be expected to be even more intense, and as such would likely produce even more severe forms of psychological destabilization. If this were to occur, then the time-space compression of the late twentieth and early twenty-first centuries may turn out in retrospect to seem relatively mild. As hardly needs to be said, that is not an enticing prospect.

5. *A world-annihilating war is a very real possibility.* Because of the extremely competitive interstate system that parallels the modern world-economy, and due to the presence of nuclear weapons of mass destruction, we could blow ourselves up. Many (e.g., Chase-Dunn, 1989b, 1990) think we will unless dramatic steps are taken immediately. If such a war were to occur, when might it happen?

Several scholars have been struck by the association between **Kondratieff waves,** or **K-waves,** in the history of capitalism and the incidence of war. In a major study of this problem, Joshua Goldstein (1988) shows that K-waves since 1495 have been remarkably correlated with the outbreak of major wars. Goldstein identifies 10 K-waves since 1495 and finds that a major war between powerful states has almost always occurred in the second half of the upturn phase of the cycle. The only exception to this striking regularity is World War II, which occurred at the beginning of an upturn. However, World War II may not be a genuine exception. Some social scientists regard World Wars I and II as really being two phases of one great war, not as two separate wars. If this is a valid interpretation, then the pattern identified by Goldstein is perfect. Although there are several possible ways of interpreting this empirical finding, Goldstein theorizes that powerful states fight truly major wars with one another only when they can bear the expense of doing so. Major wars occur near the end of an upswing, then, because it is only at that time that states are financially capable of undertaking such military efforts.

On the basis of his findings, Goldstein goes on to predict the timing of the next major war. The world-economy has been in a downturn phase since about 1970, and the next upturn should begin anytime. If it begins soon, this upturn will crest in approximately 2030, which would mean that the next major war can be expected to occur during the decade between 2020 and 2030. This prediction depends on the validity of the assumption that the basic features of the world political system will not change appreciably in the years ahead. Some world-system theorists, however, think that this assumption is not likely to hold (Wallerstein, 1982; Arrighi, 1982). They think that the presence of nuclear weapons changes everything. Since core states now have these weapons, war becomes unthinkable because it is recognized by all parties as unwinnable. But not all world-system theorists take such an optimistic position. Christopher Chase-Dunn and Kenneth O'Reilly (1989) examine a number of factors that they believe strongly bear on the likelihood of a major war in the near

future, what they call a "core war." These factors include the K-wave, intensifying ecological problems, the declining position of the United States in the world-economy, efforts at nuclear disarmament, and the emergence of new international organizations designed to reduce the threat of war. They conclude that "developments that lower the probability of a core war are not great enough to offset those factors that will increase the chance of war in the coming decades. The probability of serious war among core states over the next four decades may be as much as fifty-fifty" (1989:61).

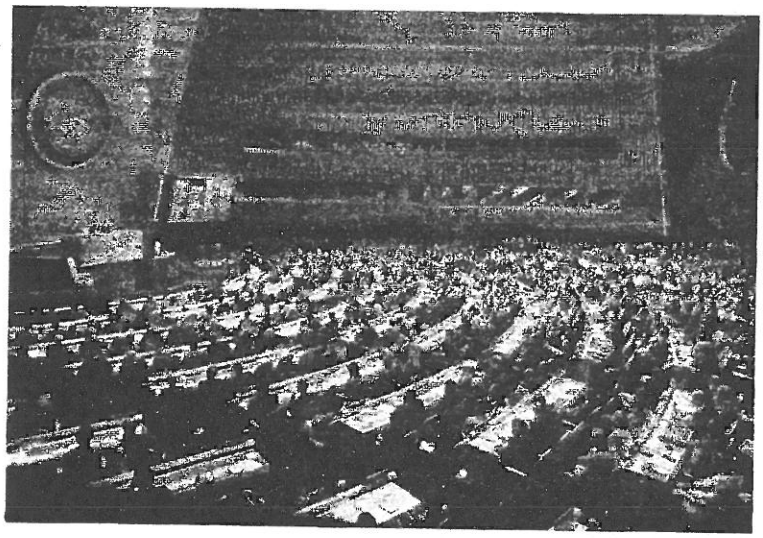
6. *Numerous efforts will be made to establish a world state.* If a major core war were to break out early in this century, it would not necessarily have to be a nuclear war, but in all probability nuclear weapons would be involved. What might be done to avert the unprecedented catastrophe that would result from such a war? Chase-Dunn (1989b, 1990, 2003) argues that the answer lies in the creation of a world state, or what he likes to call a "collectively rational democratic global commonwealth" (cf. Singer, 2002). This would be an overarching political system that would centralize political and economic decision making on a world scale. It would eliminate the system of competing and conflicting nation-states—the interstate system—that has characterized the capitalist world-economy for approximately 500 years. In Chase-Dunn's thinking, such a state would reduce if not eliminate the threat of world-destroying war; it could also be an extremely effective tool in eliminating gross inequalities in the worldwide distribution of economic resources, and thus could do much to promote economic development in the Third World.

Chase-Dunn suggests that a future world state should contain a centralized system of political and economic decision making, but at the same time be sufficiently decentralized to allow for local and national preferences and for important cultural differences. What Chase-Dunn really has in mind is a kind of federation that eliminates the worst and most dangerous forms of conflict between nation-states while simultaneously permitting them to retain a good deal of their identity. Thus, the world state is not a single political society, but an artificially imposed structure that oversees the political and economic functioning of various individual societies.

A number of scholars have predicted the eventual emergence of a world state, and there undoubtedly will be serious efforts made by various individuals and groups to create such a state. However, the creation of a world state seems highly unlikely. As Randall Collins notes, a world state is a contradiction in terms, since to some extent what we mean by a state is a political entity that engages in competition with other political entities. Moreover, humankind's obviously very strong nationalist tendencies, themselves rooted in powerful and often fierce ethnic attachments, mitigate against the formation of such a state. But even if, by chance, a world state were to emerge, it has clear potential for disaster. It would concentrate so much political and military power that it would be an extreme threat to human liberty. It could lead to the creation of a type of world empire similar to the classical empires of the past, and as such would greatly undermine the capitalist character of the modern world and lead to severe economic stagnation and a return to some of the economic characteristics of the classical empires (Snooks, 1997).

To his credit, Chase-Dunn recognizes that there are grave dangers inherent in the creation of a world state; he realizes that such a state could become a kind of Orwellian monster. He believes, nevertheless, that the risk is worth taking because the alternative risk—complete destruction of the human species—is just as great and so much more appalling. Moreover, if we know in advance the risks to freedom that a world state can pose, then we can take strong steps to try to avert this eventuality. Chase-Dunn's view, however, seems unduly optimistic. Nuclear weapons have existed for some 60 years, and the world has used them only once, and then on a small scale. (Two nuclear bombs were dropped on Japan by the United States in late 1945 as a means of ending World War II, killing 100,000 people and injuring many more.) It seems that we must know how to control them, or are afraid to use them because of their huge dangers. Therefore, the threat of nuclear war is probably not as great as Chase-Dunn believes. But the evidence is clear that when a state is able to concentrate enormous political and military power, it will not hesitate to do so. The negative consequences of a world state, then, seem to be more likely than what it is designed to prevent.

But even though a world state may not be created, it seems fairly clear that world-scale political organizations will play an increasing role in social life. Indeed, they already do and have for the past couple of decades. Alongside sovereign states, we have such IGOs and INGOs as the UN, the WTO, NATO, the EU, NAFTA, the G7 (seven advanced industrial countries: the United States, Canada, Germany, France, Italy, the United Kingdom, and Japan), APEC (Asia-Pacific Economic Cooperation), ACC (Arab Cooperation Council), and MERCOSUR (Southern Cone Common Market Organization). The growth in the importance of such groups was dramatic throughout the twentieth century. Early in that century there were 37 IGOs and 176 INGOs, but by 2000, the numbers had soared to 6,743 and 47,098, respec-



A session of the United Nations General Assembly. The UN is the world political organization that most closely approximates a world state, but it lacks the "teeth" that a true world state would have. Some scholars doubt that a world state is either possible or desirable.

tively (Held and McGrew, 2002). There is every reason to expect that such organizations will grow in both number and importance in the years ahead.

7. *An ecological and economic collapse does not appear likely; especially given technological advances, the environment seems sustainable throughout the twenty-first century.* Some years ago, the senior author predicted an ecological and economic collapse of world capitalist civilization (Sanderson, 1995). Few predictions work out very well, and this one now seems highly dubious. As we saw in Chapter 10, our environmental problems do not appear as ominous as many have thought. Population growth is declining significantly throughout the less-developed world, fossil fuels are still highly abundant, and pollution has been reduced in the industrialized world and is likely to be reduced in the less-developed world. The world appears sustainable for a very long time even without a great leap forward to a dramatically new technology. And, as discussed earlier in this chapter, that great leap forward may be only a few decades away. Even though we have enough fossil energy sources for some time to come, it is likely that these will play less and less a role in our energy use. The nanotechnology revolution to come will provide us with much cheaper sources of renewable energy. As the use of fossil fuels declines, global temperatures will rise only modestly and global warming will not become a serious problem.

Future Trends: The Merely Large Scale

Now we turn to another set of predictions, but in this case on a somewhat smaller (although still very large) scale.

1. *There will be continuing economic development throughout the core, in much of the semiperiphery, and in parts of the periphery, but it will be very uneven.* Castells (1996) notes that the new global economy in which we now live is highly dynamic, strongly exclusionary, and very unstable in its boundaries. It is an exacting taskmaster that suffers no fools gladly. To succeed in this extremely competitive world, four basic traits are necessary: technological capacity; access to a large, well integrated, and affluent market (e.g., the European Union, the North American trade zone); a significant differential between cost of production at the production site and prices in the destination market; and the capacity of governments to steer the growth strategies of the economies that they regulate.

Societies that have these traits must use them to integrate themselves centrally into the global economy (or, as the case may be, to keep themselves centrally integrated). Those that can compete will do so, and those that cannot will be brutally excluded and marginalized. And to refuse to play the new global game is no option, for that will bring certain disaster. Many of the old patterns of domination and dependency will be perpetuated. The core will continue to thrive and to develop ever higher standards of living. Most of the semiperiphery, and parts of the periphery, will also develop economically. In the semiperiphery, much of South America, especially Brazil and Mexico, will improve, and substantial development will take place

in southeast Asia, especially in Malaysia, Indonesia, and Thailand. Korea—a single Korea resulting from the reunification of the old North Korea and South Korea—will make its way into the core, as will a reunified China consisting of the old Mainland China, Taiwan, and Hong Kong. In the periphery, some of Central America might move into the semiperiphery. Most of Africa and parts of Latin America and Asia will continue to be marginalized, and their suffering may increase.

2. *Sub-Saharan Africa will continue to deteriorate and may eventually implode.* Despite continuing economic development throughout most of the world, some societies and regions within the world-economy will become completely marginalized, the most prominent of which will be sub-Saharan Africa (Castells, 1998). Not only will it become totally marginalized but it will likely implode. Sub-Saharan Africa no longer has anything to offer to the core and the richer semiperipheral countries. It is so poor that its level of demand is extremely low, and its extremely low literacy rates, predatory states, poor educational systems, extremely high levels of AIDS, and constant ethnic violence, make it an extremely poor choice for capitalist investment. Manuel Castells (1996:135–136) states,

> The systematic logic of the new global economy does not have much of a role for the majority of the African population in the new international division of labor. Most primary commodities are useless or low priced, markets are too narrow, investment too risky, labor not skilled enough, communication and telecommunication infrastructure clearly inadequate, politics too unpredictable, and government bureaucracies inefficiently corrupt. . . . Under the dominance of free market conditions, internationally and domestically, most of Africa ceased to exist as an economically viable entity in the informational/global economy.

As a result, Africa is largely being ignored and the situation can only get worse. Already virtually a basket case at the present time, it is difficult to imagine what the further deterioration of Africa will look like, but this deterioration will most surely continue. And none of this is even considering the continuing rapid spread of AIDS throughout the continent, the region that is by far the world leader in the incidence of this disease (it has an AIDS rate some 20 times higher than the rate of western Europe and North America and nearly 90 times higher than the rate of east Asia). This will only intensify what Manuel Castells calls "the human holocaust that threatens Africa."

3. *The economic decline of the United States will continue for decades to come.* As noted in Chapter 6, the United States lost its hegemonic position in the world-economy around 1970. It has remained the number-one economic and political power in the world, but it has not gone unchallenged. It helped to rebuild western Europe and Japan after World War II, but both became major economic competitors. It now faces the challenge of the European Union (see item number 4). The United States played a major role in facilitating the astonishing development of South Korea and Taiwan, and they too have become competitors. Russia and eastern Europe have reentered the sphere of market capitalism, and, although they cannot become strong competitors for some time, they will become competitors nonetheless. But the real

competitor will be China, which is already undergoing stunningly rapid capitalist development. In the decades to come it will become the chief economic antagonist of the United States.

As capitalist accumulation and commodification intensify to ever higher levels, the United States will continue to maintain a strong position, but will it stay where it is, decline even further, or rise again to a new hegemonic position? Wallerstein expects that it will continue to decline, although slowly. This is certainly a very real possibility. Chase-Dunn, Jorgenson, Reifer, Giem, Lio, and Rogers (2003), however, argue that it could experience a new hegemonic phase. They point out that the U.S. decline seemed to bottom out in the 1990s, and there are indications of a slight upturn. They also point to scholars (e.g., Rennstich, 2001) who think that the U.S. advantage in such leading economic sectors as information technology and biotechnology will likely lead to a "second American hegemony." On the other hand, Chase-Dunn and colleagues note that the United States continues to experience larger and larger trade deficits—it is buying more goods from abroad than it is selling—and that foreign investment in the U.S. economy is huge and continues to grow. This latter consideration suggests to us that a renewed U.S. hegemony is extremely unlikely, especially when we recognize that no hegemon has ever lost and then regained hegemonic status. The world-economy just does not seem to work this way.

4. *There will be growing conflict between the United States and the European Union as the latter struggles for economic dominance.* In 1993, the European Union (EU) was formally created, although its beginnings go all the way back to 1951 and there were several steps along the way (Snooks, 1997). The EU included 15 members for the decade beginning in 1993: Germany, France, Austria, Finland, Sweden, Belgium, Luxembourg, the Netherlands, the United Kingdom, Denmark, Italy, Spain, Portugal, Ireland, and Greece. On May 1, 2004, it added 10 more states from eastern and southern Europe: the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia, and Slovakia. Eventually, Bulgaria, Romania, Turkey, and possibly even Russia will likely join. The EU has a parliament consisting of 626 members that the individual states elect every five years, a single European passport, a European flag and anthem, and a common economic policy that led to the adoption of a common currency, the Euro, in January of 2002 (Bradshaw and Wallace, 1996).

The real intent behind the creation of the EU is the establishment of a more powerful economic entity than each of the member countries themselves. The EU wants to compete more effectively with the United States and Japan and, possibly, to make a bid for hegemonic status in the world-economy. However, it is very doubtful that it can achieve this latter aim (Bradshaw and Wallace, 1996; Weede, 1999; Tausch, 2003). York Bradshaw and Michael Wallace (1996) identify three serious obstacles in the EU's path.

First, there are *economic obstacles*. There are major differences between the European economies, with some being very strong and others weak. Such differences make it very difficult if not impossible to create a unified policy that all the member states can agree on. Second, there are *language obstacles*. Some 20 different languages [illegible] EU countries. Is there going to be an official language, and which

one would it be? People have a natural preference for their own language, none more so than the French, who seem convinced that they have the greatest language of all time. Given the world dominance of English, and the historic antagonisms between the English and the French, one can see a significant conflict here. Finally, *national obstacles* loom large. These national differences between countries, along with ethnic differences and conflicts within the member states, create the most severe obstacle to unification. Recent survey research shows that less than 5 percent of respondents who were Europeans said that being European was their foremost identity, and 45 percent said they felt no European identity whatsoever. A full 88 percent claimed that their foremost identification was with their nation or a region within their nation (Reif, 1993; Held, McGrew, Goldblatt, and Perraton, 1999). On the basis of these considerations, it is extremely difficult to imagine that the EU could ever become a culturally or politically unified body even if it solved the first two problems.

As Manuel Castells (1998) points out, to achieve any degree of unity at all Europe must have a sense of common identity, but this will be very difficult to achieve. What would give Europeans a sense of common identity? It cannot be Christianity, as was the case in the Middle Ages, given the much more limited role of religion in general and the Church in particular in contemporary Europe. It cannot be a democratic mode of government or democratic ideals, since both of these extend far beyond Europe. It certainly cannot be ethnicity, as already noted. And, given the economic differences among European countries and the economic reality of continuing globalization, it cannot be economics. If Europe cannot achieve a sense of common identity, "and if identity remains exclusively national, regional or local, European integration may not last beyond the limits of a common market" (Castells, 1998:332–333). We suspect that this will more than likely be the outcome. As for the much more ambitious aim of achieving hegemony, that is far less likely; a hegemon requires a single state and a single, powerful military apparatus, and it is virtually impossible to imagine the EU ever developing these.

It is not even clear that EU membership is good for its individual members. Arno Tausch (2003) notes that belonging to the EU has many negative consequences for its member states. He presents statistical data to show that the longer a country has belonged to the EU, the higher its unemployment rate, the larger its prisoner population, the greater its consumption of alcohol, the lower its GNP growth rate, and the less its expenditure on health and education, among numerous other negative indicators.

Nevertheless, it is clear that most European countries think that EU membership is a positive thing, and the EU wants to achieve as much unity as possible and become as much of a competitor to the other leading core societies as it can. The first strong signs of a break between the United States and Europe came in 2003 in the debate over the intent of the United States to invade Iraq. The two most powerful members of the EU, Germany and France, strongly opposed this invasion, and this led to a substantial increase in U.S.-European tensions that may prove difficult to resolve. There are large cracks in the so-called Atlantic Alliance between the United States and Europe, and many observers expect these to grow in the years to come. The United States is clearly worried about the EU and the financial effect of its

common currency and regards it as a serious economic competitor. However, the growing EU/US conflict could be substantially moderated by the rise of China (see item number 6). They could become significant allies again to counteract this trend.

5. *The remaining Leninist societies will collapse and the two Koreas will be reunified.* There are only five Leninist regimes left in the world (six if you count Ethiopia, which is officially a federal republic but still controlled by the Ethiopian People's Revolutionary Democratic Front). Given the collapse of Communism in eastern Europe in 1989 and the Soviet Union in 1991, these regimes have little future and will eventually give way to non-Leninist regimes leading essentially capitalist societies. Cuba, for example, will very likely abandon Leninism with the death of Fidel Castro, and the industrialization and rapid capitalist development occurring in China will eventually—within 20 years probably—undermine its Leninist regime. These developments will put an end once and for all to the state socialist experiment in its twentieth-century form.

Within the context of the collapse of the remaining Leninist societies, the two Koreas will sooner or later—probably sooner—reunify into a single Korea, as many Koreans fervently desire already. This will create a formidable state, because it will inherit the high level of economic development of South Korea and the tremendous military apparatus of North Korea. If this unified Korean state has nuclear weapons, China and Japan will be forced to respond accordingly, which may create a very dangerous world geopolitical situation.

6. *The center of the world-economy will shift from the United States and western Europe to East Asia, and a reunified China will emerge as the next great world power.* Andre Gunder Frank's (1998, 2003) prediction that the world-economy will shift back toward Asia in the twenty-first century will come true. Within the next 25 to 50 years, the dominant society in Asia—indeed, in the entire world—will be China. China has the world's largest population; with the exception of India, which is a close second, no other society comes even close to its huge size. With such a huge population, combined with the enormous economic strides China has made in recent years, it is poised to become the next great economic power. This will necessitate the throwing off of the current Leninist state that governs China, and that is likely within 20 years as China develops the internal conditions for democratization. Once China begins to democratize and to develop an increasing number of truly private enterprises, the antagonism toward it of Taiwan and Hong Kong will greatly diminish and the "three Chinas" will become a unified superstate. This superstate will probably become impossible to stop once it reaches a certain developmental threshold, and will become the next great hegemonic power.

Conclusions: The Future from the Perspective of a General Theory of History

In a celebrated book, *The End of History and the Last Man* (1992), Francis Fukuyama offers a completely different scenario from any of those previously presented.

Fukuyama draws on Hegel's philosophy of history to argue that free-market capitalism and liberal democracy represent the final stage of human history, the grandest of all human achievements. Hegel argued that history was unfolding in a rational and progressive manner, and that ultimately a society would be achieved that was perfect, or at least as close to perfect as was possible. Fukuyama thinks we are there now, and thus that history has come fundamentally to an end. Any further changes will be mere fine-tuning of liberal capitalism.

Although Fukuyama is, politically speaking, a thinker of a completely different stripe than Marx and the Marxists, they all agree that history has an end. But, of course, this cannot be so. Liberal capitalism is simply what we have come to so far, and it has only been around for a century or two. It will undoubtedly be replaced by something else at some point, but no one knows, or can possibly know, what this might be. We cannot really know the future in any grand sense. But one thing is certain: If we do not have a good general theory of the past, then we have absolutely no hope of speculating intelligently about what is ahead.

This book has offered a materialist and evolutionary perspective in order to understand the past, and it may be suggested that such a perspective is our most reliable guide to the future. No one can know whether the predictions of Heilbroner, Goldstein, and Chase-Dunn, plus all the other ones we have made in this chapter, are good ones, but they do try to come to grips with the factors that are likely to be most centrally involved in shaping the future. Today, we live in a capitalist world-economy that has been expanding and evolving for half a millennium, and that is closely intertwined with an interstate system. Together, the two make up the modern world-system. It is the evolution of this world-system that is the principal driving force of the modern world, and, more than anything else, it is its dynamics that will determine what lies ahead.

There is an old Chinese saying: "May you live in interesting times." We do indeed live in extremely interesting times, since the world is changing in dramatic ways at an increasingly accelerating pace. Intelligent citizens have a special obligation to learn about the times in which we live, especially about the dangers and opportunities they present, in order to maximize the opportunities and minimize the dangers. We hope that this book has contributed in some way to this learning process.

FOR FURTHER READING

Mark Cohen's *Health and the Rise of Civilization* (1989) provides an extremely detailed analysis of health, nutrition, and disease among many different types of societies. Cohen makes a persuasive case for the relatively good health and nutrition of ancient hunter-gatherer societies compared to the agricultural societies that evolved later. Minge-Klevana (1980) provides very useful data on workloads in various types of societies.

Galtung, Heiestad, and Rudeng (1980) compare the current state of the capitalist world-economy with that of the Roman Empire during the beginning of its decline. This is a provocative comparison, perhaps with considerable merit, but one that must be approached with caution. Stirring defenses of capitalism have been written by Berger (1986) and Seldon (1990). Fukuyama (1992) is another defense of capitalism, but in this case, with a provocative

theoretical and historical backdrop and the argument that it is "the end of history." Maryanski and Turner (1992) argue for the superiority of industrial society as a form of social life based on the individualism it promotes, which they believe is consistent with human nature and human needs.

Elvin Hatch (1983) provides an excellent critique of the serious limitations of cultural relativism as a way of judging other cultures. John Rawls's *A Theory of Justice* (1971) is the best-known and probably the mostly widely accepted ethical theory of the last century. Rawls has recapitulated his argument in *Justice as Fairness: A Restatement* (2001a) and extended it in *The Law of Peoples* (2001b). Peter Singer's *One World: The Ethics of Globalization* (2002) accepts Rawls's basic principles but argues that Rawls has limited them unnecessarily by applying them to nation-states rather than to the world as a single moral community.

A stunning work on technological advance is Robert Mulhall's *Our Molecular Future* (2002). Mulhall focuses in particular on advances in nanotechnology and makes a number of extraordinary predictions for the next 50 to 100 years, some of which seem stranger than science fiction. See also Gross (1999). Christian (2004) makes bold predictions concerning the near, middle-range, long-range, and very long-range future.

Joshua Goldstein (1988) analyzes the relationship between economic cycles in the history of capitalism and major wars. This allows him to predict the timing of the next major war. Many have argued for the necessity of a world state to prevent nuclear annihilation and to create a more just world. See, in particular, Chase-Dunn (2003).

George Ayittey's *Africa in Chaos* (1998) is an excellent work on Africa's current problems and their likely causes. Ayittey, himself an African, is extremely critical of African state structures and puts most of the blame on them for Africa's failures. See also Castells (1998).

David Harvey (1989) has written an extremely influential book on the psychologically destabilizing consequences of globalization. Arrighi and Silver (1999) contains important essays on U.S. hegemonic decline. Castells (1998) looks at the European Union and its prospects, as do Bradshaw and Wallace (1996) and Tausch (2003). On the shift to Asia as the center of the world-economy, see Frank (2003). A popular work that makes very pessimistic predictions about the economic, ecological, and political future of the Third World is Robert Kaplan's *The Coming Anarchy* (2000). Kaplan foresees potential catastrophe in much of the Third World occurring in the near future.

Boswell and Chase-Dunn (2000) make about as good a case for socialism as can be made. Warren Wagar's *A Short History of the Future* (1999) uses world-system theory as the basis for an extraordinary work of fiction in which a historian from the twenty-third century narrates world history from the late twentieth century to his own time. By 2015, the world has fallen under the control of 12 megacorporations. Devastating nuclear war in 2044 leads to the creation of a socialist world commonwealth that regulates world affairs for the better part of a century, only to yield to the formation of thousands of tiny statelets and the reestablishment of some elements of capitalism.