AMERICAN SOCIOLOGICAL REVIEW

February, 1969 Volume 34, No. 1

THE CHAOTIC SOCIETY: PRODUCT OF THE SOCIAL MORPHOLOGICAL REVOLUTION *

PHILIP M. HAUSER
University of Chicago

SOCIETY as a whole has been viewed historically from many perspectives. It has been envisaged among other ways as "the great society" (Wallas, 1916), "the acquisitive society" (Tawney, 1920), and "the affluent society" (Galbraith, 1958). Contemporary society, whether observed globally, nationally, or locally, is realistically characterized as "the chaotic society" and best understood as "the anachronistic society."

Contemporary society is realistically characterized as chaotic because of its manifest confusion and disorder—the essential elements of chaos. On the international scene, to draw upon a few examples, consider the situation in Vietnam, Czechoslovakia, the Middle East, and Nigeria. On the national level consider the United States, France, the United Kingdom, China, and almost any country in Asia, Latin America or Africa. On the local level, in the United States, consider New York, Chicago, Los Angeles, Detroit, Cleveland, Memphis, Miami, and over 100 other cities which have been wracked by violence.

Contemporary society can be best understood when it is viewed as an anachronistic society. To be sure, society at any time, at least during the period of recorded history, has been an anachronistic society. For throughout the millennia of the historical era, society, at any instant in time, comprised layers of culture which, like geological strata, reflected the passage and deposits of time. Confusion and disorder, or chaos, may be viewed in large part as the resultant of the dissonance and discord among the various cultural strata, each of which tends to persist beyond the set of conditions, physical and social, which generated it.

In some ways chaos in contemporary society differs from that in earlier societies only in degree. But there are a number of unique factors in contemporary chaos which make it more a difference in kind. First, contemporary society, as the most recent, contains the greatest number of cultural layers, and, therefore, the greatest potential for confusion and disorder. Second, contemporary society, by reason of the social morphological revolution, possesses cultural layers much more diverse than any predecessor society and, therefore, much greater dissonance. Third, contemporary society, unlike any predecessor, contains the means of its own destruction, the ultimate weapon, the explosive power of nuclear fusion. Fourth, fortunately, contemporary society possesses the knowledge, embodied in the emerging social sciences, including sociology, that affords some hope for the dissipation of confusion and the restoration of order before the advent of collective suicide. It is a moot question, however, as to whether society yet possesses the will and the organization to utilize available knowledge to this end.

* Prepared as Presidential Address, 63rd Annual Meetings of the American Sociological Association, Boston, August 28, 1968.

By reason of these considerations, the theme of this annual meeting of the American Sociological Association is most appropriate—"On the Gap Between Sociology and Social Policy." [1] For sociology, as well as the other social sciences, provides knowledge, even though limited, permitting an understanding of society, contemporary and historical, and, in consequence, offers some hope for rational action towards the resolution of the chaos which afflicts us (Hauser, 1946).

It is my central thesis that contemporary society, the chaotic and anachronistic society, is experiencing unprecedented tensions and strains by reason of the social morphological revolution. The key to the understanding of contemporary society lies, therefore, in an understanding of the social morphological revolution. Moreover, it is a corollary thesis that comprehension of the social morphological revolution points to the directions social engineering must take for the reduction or elimination of the chaos that threatens the viability of contemporary society.

I am mindful of the fact that "the social morphological revolution" is not a familiar rubric to the sociological fraternity—nor to anyone else. It is a neologism, albeit with a legitimate and honorable ancestry, for which I must plead guilty. I offer two justifications for injecting this abominable rhetoric into the literature. First, I am convinced that it contains useful explanatory power that has not yet been fully exploited in macro-social considerations, or in empirical research, or in social engineering activities. Second, it is appropriate that the discipline of sociology possess a revolution of its own. After all, the agronomists have the "agricultural revolution"; economists, the "commercial" and "industrial" revolutions; natural scientists, the "scientific revolution"; engineers, the "technological revolution"; and demographers, the "vital revolution." Each of these revolutions is obviously the invention of scholars seeking a short and snappy chapter for a book title to connote complex and highly significant patterns of events. Sociologists, even if they have not formally recognized it, have the "social morphological revolution," and perhaps it is in order formally to acknowledge and to christen it.

[1] The thematic sessions and their organizers are:
Conformity and Social Change—Stanton Wheeler, Organizer
Socialization and Education—Ernest Q. Campbell, Organizer
Sociology and Environmental Planning—Scott Greer, Organizer
Law and the Administration of Criminal Justice—Lloyd E. Ohlin, Organizer
The Polity and the Academy—Leonard S. Cottrell, Jr., Organizer
Population and Population Control—Charles F. Westoff, Organizer
Sociology and Social Development—Arthur L. Stinchcombe, Organizer
Sociology and Socialist Countries—George Fischer, Organizer
Sociology and Systems Analysis—Frederick F. Stephan, Organizer

THE SOCIAL MORPHOLOGICAL REVOLUTION

What is this social morphological revolution and what are its antecedents?

To answer the second of these questions first, I must repeat that its ancestry is legitimate and honorable. Durkheim (1897–1898), encapsulating earlier literature, provided in a focused way insight into the implications of the most abstract way of viewing a society, namely, by size and density of its population. In his consideration of the structure of the social order Durkheim (1938:81) used the term "social morphology." Wirth (1956) in his classical article "Urbanism as a Way of Life," drawing on Aristotle, Durkheim, Tonnies, Sumner, Willcox, Park, Burgess and others, explicitly dealt with the impact of size, density and heterogeneity of population on human behavior and on the social order.

The social morphological revolution refers to the changes in the size, density and heterogeneity of population and to the impact of these changes on man and society. As far as I know, the term was first published in my Presidential Address to the American Statistical Association (Hauser, 1963). It was used in conjunction with my explication of the "size-density model." This model provides a simplistic demonstration of the multiplier effect on potential human interaction of increased population density in a fixed land area and, therefore, can appropriately be described as an index of the size and density aspects of the social morphological revolution.

The essence of the size-density model, drawing on my earlier writing, is briefly given as follows: (Hauser, 1965:11–12)

> Let us consider the implications of variation in size and density of population, confining our attention to a fixed land area. For purposes of convenience, consider a circle with a radius of 10 miles. Such a circle would have a total area of approximately 314 square miles. The size of the total population in such a circle under different density conditions is shown below:

Assumed Population Density (persons per square mile)	Area with Approximate Density Assumed	Number of Persons in Circle of 10-Mile Radius
1	U.S. in 1500	314
50	World in 1960	15,700
8,000	Average central city in metropolitan area in U.S.	2,512,000
17,000	Chicago	5,338,000
25,000	New York	7,850,000
75,000	Manhattan	23,550,000

> The population densities shown are not unrealistic ones. The population density of 1 may be taken as an approximation of the density of the United States prior to European occupancy. Actually, the Indian population was approximately one-third as dense as this, but 1 is a convenient figure with which to work. The density of 50 is approximately that of the United States in 1960, and approximately the population density of the world as a whole. The density of 8000 in round numbers is not too far from the density of the average central city in metropolitan areas of the United States in 1960. The density figure 17,000 is approximately that of Chicago, the figure of 25,000 approximately the density of New York, and the figure of 75,000 approximately the density of Manhattan Island.
>
> In aboriginal America a person moving within the ten-mile circle could potentially make only 313 different contacts with other human beings. In contrast, the density of the United States as a whole today would make possible 15,699 contacts in the same land area. The density of the average central city in the United States would permit over 2.5 million contacts, the density of Chicago over 5.3 million contacts, the density of New York City over 7.0 million contacts, and the density of Manhattan over 23.5 million contacts in the same land area. The potential number of contacts, when considered as a measure of potential human interaction, provides, in a simplistic way to be sure, a basis for understanding the difference that city living makes.

This explication is not only simplistic but greatly curtailed, for it does not consider the effects on potential human interaction of contacts in diads, triads and other size groupings which, obviously, would generate high orders in exponentials. Nor does the size-density model encompass the impact of heterogeneity, which is affected by population size and density as well as human migration.

Elements

The social morphological revolution is the product of three developments, energized by, and in interaction with, a fourth. The three developments may be described in dramatic terms as the "population explosion," the "population implosion," and "population diversification." The fourth, and interrelated development, is the acceleration in the tempo of technological and social change.

The "population explosion" refers to the remarkable increase in the rate of world population growth, especially during the three centuries of the modern era. In the long view world population growth rates have increased from perhaps two percent per millennium during the Paleolithic Period to two percent per annum at the present time —a thousand-fold increase (Wellemeyer and Lorimer, 1962).

Since mid-17th century world population has increased over six-fold, from about one-half billion to 3.4 billion at the present time. In quick summary, it took most of the two to 2½ million years man, or a close relative, has occupied the earth to generate a world population of one billion persons—a number not achieved until about 1825. It required only 105 years more to reach a population of 2 billion, by 1930; and only 30 years more to reach a total population of 3 billion, by 1960 (United Nations, 1953:11 and 1966:15).

The population explosion is still under way and, in fact, has achieved a greater magnitude since the end of World War II

with its extension to the two-thirds of mankind in the developing areas of the world—in Asia, Africa and Latin America. Despite growing efforts to dampen rates of population growth, and contrary to the wishful thinking of some family planners, the facts indicate continuing acceleration of world population. Certainly, short of the catastrophic, there is little prospect of significant reduction in world population growth between now and the end of this century. Present fertility and mortality trends would beget a world population of 7.5 billion by the year 2000, and even the relatively optimistic preferred projection of the United Nations gives a world total of 6.1 billion by the century's end (United Nations, 1966:15). Despite efforts to reduce fertility, then, the realistic prospect is that continuing mortality declines, as well as stubbornly high birth rates, will continue to produce explosive world population growth for at least the next two human generations.

The "population implosion" refers to the increasing concentration of the world's peoples on a small proportion of the earth's surface—the phenomenon of urbanization and metropolitanization. Again, in the long view, this is a relatively recent development. Permanent human settlement was not achieved until the Neolithic Period. Such permanent settlement had to await the great inventions, technological and social organizational, of the Neolithic Revolution—including domesticated plants and animals, the proliferation of the crafts, and forms of collective behavior and social organization (Turner, 1941; Childe, 1941; Braidwood and Willey, 1962; Mumford, 1961). Clumpings of population large enough to be called towns or cities did not emerge until after about 3500 B.C., and mankind did not achieve the technological and social organizational development to permit cities of 100,000 or more until as recently as Greco-Roman civilization. With the collapse of the Roman Empire, the relatively large urban agglomerations in the Roman sphere of influence diminished in size to small towns providing services to rural hinterlands together with which they constituted almost autonomous subsistence economies.

With the emergence of Europe from the Dark Ages and the series of "revolutions"—the Agricultural Revolution, the Commercial Revolution, the Industrial Revolution, the Scientific Revolution, and the Technological Revolution—man achieved levels both of technological and social organizational development that permitted ever larger agglomerations of people and economic activities. In consequence, the proliferation of cities of 1,000,000 or more inhabitants became possible during the 19th century, and the emergence of metropolitan areas and megalopolis, the coalescence of metropolitan areas, during the second half of the 20th century. In 1800 only 2.4 percent of the world's people resided in places of 20,000 or more; and only 1.7 percent in places of 100,000 or more. By 1960, 27.1 percent were located in places of 20,000 or more, and 19.9 percent in places of 100,000 or more (Davis, 1955; Breese, 1966).

The trend towards increased urban and metropolitan concentration of population is likely to continue. The reasons for this are to be found in the advantages of clumpings of population and economic activities. As Adam Smith noted, the greater the agglomeration, the greater is the division of labor possible; and this permits increased specialization, easier application of technology and the use of non-human energy, economies of scale, external economies, and the minimization of the frictions of space and communication. In brief, the population implosion is likely to continue because clumpings of people and economic activities constitute the most efficient producer and consumer units yet devised. Moreover, such population agglomerations generate a social milieu of excitement and lure which add to the forces making for larger aggregations. Projections of world urban population indicate that by the end of the century 42 percent of the world's peoples may be resident in places of 100,000 or more, as contrasted with 20 percent in 1960, 5.5 percent in 1900, and 1.7 percent in 1800 (Davis, 1955; Breese, 1966).

"Population diversification" alludes to the increasing heterogeneity of populations not only sharing the same geographic area but also, increasingly, the same life space—economic, social and political activity. And the "same geographic area" and "the same life space," with accelerating technological and

social organizational developments, have expanded during the 20th century virtually to embrace the entire world. Population heterogeneity involves diversity in culture, language, religion, values, behavior, ethnicity and race. These characteristics are obviously not mutually exclusive categories, but they constitute foci of problems of communication, conflicts of interest, and frictions of interaction. Population diversification connotes not only the physical presence of a heterogeneous human aggregation but also social interaction among the diverse elements. It involves not only physical density but also "moral density," as used by Durkheim—social contact and social interaction (Durkheim, 1933, Book II, Ch. 2).

Finally, the accelerated tempo of technological and social change requires little elaboration. Suffice it to say that technological change has, in general, preceded and necessitated social change, and that the difference between rates of technological and social change and differential rates of social change have originated great cultural strains and dissonance (Ogburn, 1922).

The four developments discussed are, needless to say, highly interrelated and constitute the important elements of the social morphological revolution. The population explosion has fed the population implosion. Both have fed population diversification. And the accelerated tempo of technological and social change have operated as both antecedents to, and consequences of, the other three developments. Each in its own way, and all four in concert, have precipitated severe problems: chronic and acute; physical, economic, social and political; domestic and international.

The social morphological revolution incorporates the vital revolution and is closely interrelated with the other revolutions—agricultural, commercial, scientific, technological, and industrial. It is both antecedent to, and consequent of, the other revolutions and, as such, should be, on the one hand, better understood when considered in relation to them and, on the other hand, should be helpful in explaining them.[2]

[2] This is a matter which cannot be elaborated in this paper but will be treated further in a subsequent publication.

THE SOCIAL MORPHOLOGICAL REVOLUTION IN THE UNITED STATES

The United States constitutes the world's most dramatic examples of all four of the developments described. These developments are reaching climactic proportions, have precipitated major crises, and constitute a framework for comprehending and dealing with America's urban difficulties. Virtually all of the urban problems which are increasingly and urgently requiring national attention, whether they be physical, personal, social, ethnic and racial, economic or governmental problems, may be viewed as frictions of the social morphological revolution which is still under way—frictions in the transition from an agrarian to an urban and metropolitan order.

The Population Explosion. In 1790, when the first Decennial Census of the United States was taken, the United States had a total population of less than 4 milion persons. By 1960 the population of the nation numbered more than 180 million; during 1967 it reached 200 million.

The U.S. Bureau of the Census has from time to time made projections of U.S. population on varying assumptions about the future course of fertility and mortality. Such projections made in 1967 indicate that, despite the declining crude birth rate, the United States will continue to experience large absolute population increase in the decades which lie ahead. These projections show that by 1990, only 22 years hence, the population of the U.S. may reach a level of from 256 to 300 million. One of these projections, based on a fertility assumption that takes the current slump in the birth rate into account, would produce a population of 206 million by 1970, 232 million by 1980, and 267 million by 1990. The same projection gives a population of 308 million by the year 2000 and 374 million by 2015 (U.S. Bureau of the Census, 1957, 1962, 1967).[3]

The Population Implosion. In 1790, 95 percent of the population of the United States

[3] The statistics for the United States are drawn or calculated from publications of the U.S. Bureau of the Census. Specific sources are not shown to avoid unnecessary footnote detail. Reference is made only to general sources which contain much of the data.

lived in rural areas, on farms, or in places having fewer than 2500 persons. The 5 percent of the population which lived in cities were concentrated in 24 such places, only two of which (New York and Philadelphia) had populations of 25,000 or more. By 1850, population in urban places was still as low as 15 percent. By 1900, however, almost two-fifths of the population lived in cities. But it was not until as recently as 1920 that the U.S. became an urban nation in the sense that more than half of the population (51 percent) lived in cities. That many critical problems affect cities and urban populations should not be too surprising in light of the fact that it will not be until the next Census of Population is taken, in 1970, that the United States will have completed her first half century as an urban nation, a period shorter than a lifetime.

The speed of the population implosion becomes clear in an examination of developments since the turn of the century. In the first sixty years of this century the increase in urban population absorbed 92 percent of the total population growth in the nation. In the decade 1950 to 1960, the increase in urban population absorbed more than 100 percent of total national growth; that is, total rural population, including nonfarm as well as farm, actually diminished for the first time.

The increase in the population of metropolitan areas is equally dramatic. The increase in the population of the Standard Metropolitan Statistical Areas (SMSA's) absorbed 79 percent of total national growth between 1900 and 1960; and the 24 largest SMSA's, those with 1,000,000 or more, absorbed 43 percent in the first sixty years of this century.

The population implosion in this nation is still under way. Recent projections I have made with a colleague indicate that if present trends continue the metropolital population, between 1960 and 1985, will increase by some 58 percent, while the non-metropolitan population increases by less than 12 percent (Hodge and Hauser, 1968). By 1985, then, 71 percent of the people in this nation would reside in metropolitan areas as compared with 63 percent in 1960.

Population Diversification. The United States has been one of history's most dramatic examples of population diversification as well as of the population explosion and the population implosion. Although the original European settlers were predominantly from the United Kingdom, the infusion of African Negro population began during the seventeenth century and was followed by waves of diverse European stocks during the nineteenth and early twentieth centuries.

The Census of Population first counted "foreign born" whites in 1850. At that time they constituted 9.7 percent of the total population. Although successive waves of immigration were heavy, the foreign-born whites never exceeded 14.5 percent of the total, a level reached in 1890 and again in 1910; they have been a dwindling proportion of the total ever since. By reason of restrictions on immigration, the foreign-born will become a decreasing proportion of the population of the nation in the decades which lie ahead.

In 1850, native whites made up 74.6 percent of the population of the nation, and "nonwhites," mainly Negroes, 15.7 percent. By 1900, the proportion had changed little, 75.5 percent being native white and 12.1 percent nonwhite. As recently as 1900, however, little more than half the American people were native whites of native parentage. That is, about one-fifth of the population was "second generation" white, or native whites born of foreign or mixed parentage.

By 1960, native whites constituted 83 percent, foreign whites 5.2 percent, and Negroes 10.6 percent of the total. Native whites of native parentage made up 70 percent of the total, the remaining 13 percent of native whites being second generation. Thus, in 1960 "foreign white stock," foreign born plus second generation, still made up over 18 percent of the total population.

Although the foreign white stock will become a dwindling part of the population in the decades which lie ahead, the proportion of nonwhites, mainly Negroes, is likely to increase. In 1960, there were 20.7 million nonwhites in the U.S., or 11.4 percent of the total. By 1990 it is estimated by the U.S. Bureau of the Census that nonwhites will double, increasing to 41.5 million. By 1990, nonwhites may, therefore, make up some 14.5 percent of the American people.

By reason of the "Negro Revolt," the most acute present manifestation of chaos in the United States, a closer examination of Negro population trends is required. In 1790, as recorded in the first census of the United States, there were fewer than 800,000 Negroes in the nation, but they made up about 20 percent of the total population. By that date they had already been resident in the colonies for 175 years, mainly as the property or indentured servants of their white masters.

Negro Americans remained about one-fifth of the total population until 1810. From then to 1930 they were an ever declining proportion of the total, as slave trafic ceased and white immigation continued. By 1930 the proportion of Negroes had diminished to less than one-tenth of the total. Since 1940, however, the Negro growth rate has been greater than that of the white population, and their proportion had risen to 11 percent by 1967.

In 1790, 91 percent of all Negroes lived in the South. The first large migratory flow of Negroes out of the South began during World War I, prompted by the need for wartime labor and the freeing of the Negro from the soil, with the diversification of agriculture and the onset of the delayed industrial revolution in the South. This migration of Negroes from the South was greatly increased during and after World War II. As a result, the proportion of total Negroes located in the North and West almost quadrupled between 1910 and 1960, increasing from 11 to 40 percent.

The migratory movement of Negroes from the South to the North and West effected not only a regional redistribution but also, significantly, an urban-rural redistribution. In 1910, before the out-migration of the Negro from the South began, 73 percent lived in rural areas. By 1960, within fifty years, the Negro had been transformed from 73 percent rural to 73 percent urban, and had become more urbanized than the white population.

The great urban concentration of Negro Americans is also revealed by their location in metropolitan areas. By 1910, only 29 percent of Negroes lived in the Standard Metropolitan Statistical Areas. By 1960, this concentration had increased to 65 percent. By 1960, 51 percent of all Negroes lived in the central cities of the SMSA's. Moreover, the 24 SMSA's with one million or more inhabitants contained 38 percent, and their central cities 31 percent, of all Negro Americans.

Again I draw on my recent projections estimating nonwhite population in metropolitan areas (SMSA's) by residence in central city and ring (Hodge and Hauser, 1968). They show that present trends may well take the nation farther down the road toward a *de facto* "apartheid society." By 1985 the concentration of nonwhites in central cities (as defined in 1960) would increase to 58 percent from the level of 51 percent in 1960, while the concentration of white population in central cities would diminish by almost a third to 21 percent in 1985 from 30 percent in 1960. In consequence, by 1985, 75 percent of all nonwhites within metropolitan areas would be resident in central cities and only 25 percent in the suburbs. In contrast, by 1985, 70 percent of the whites would inhabit the suburbs and only 30 percent live in central cities. Thus, of the total population in SMSA's, the proportion of nonwhite would increase from 11.7 percent in 1960 to 15.1 percent by 1985. But the proportion of population in central cities which would be nonwhite would increase by about 73 percent, rising from 17.8 percent in 1960 to 30.7 percent in 1985.

Negro population changes, past and in prospect, have resulted in greatly increased sharing with whites of the same geographical local areas, accompanied by increased pressure for social contact and social interaction. The acute tensions which characterize white-black relationships in the United States today represent a compounding of the impact of the social morphological revolution. For within the framework of the general population explosion and implosion in the entire nation, there has occurred an even more dramatic population explosion and implosion among Afro-Americans. These developments have greatly exacerbated the problems of inter-group relations. The large increase in the population of Afro-Americans in urban and metropolitan areas over a relatively short period of time, and the contrast in background and

life-styles between blacks and whites by reason of the disadvantaged position of blacks over the years, have combined to produce tensions that may well constitute the most serious domestic problem in the United States for some time to come (Hauser, 1966; Hauser, 1967a; Hauser, 1968a).

CONSEQUENCES OF THE SOCIAL MORPHOLOGICAL REVOLUTION

The combined effects of the population explosion, the population implosion, and population diversification have produced in the realm of the social the equivalent of a mutation in the realm of the genetic. The social morphological revolution has profoundly altered human nature and the social order. In broad overview the social morphological revolution has modified the human aggregation as a physical construct and as an economic mechanism; it has transformed human behavior and social organization, including the nature of government; it has generated and aggravated a host of problems—physical, personal, social, institutional, and governmental.

Examples of the physical problems are given by the problems relating to housing supply and quality, circulation of persons and goods, solid and human waste removal, air and water pollution, recreational facilities, urban design, and the management of natural resources.

Examples of personal, social and organizational problems are given by the incidence of delinquency and crime, alcoholism, drug addiction, and mental disorder. It is evident in the current revolt of youth, which at the extremes include the "hippie," who resolves his problems by retreat, and the "activist," who resolves his problems by beating his head against the doors of the Pentagon, or police clubs at the University of California at Berkeley and at other universities. It is revealed also in unemployment, poverty, racism, bigotry, inter-group conflict, family disorganization, differential morbidity and mortality, labor-management conflict, the conservative-liberal debate, the maladministration of criminal justice; and in corruption, malaportionment and inertia in government, and the fragmentation and paralysis of local government. It is further revealed by continuing resort to physical force as a means for the resolution of conflicts of interest. No matter how laudable the goals, when force is employed by labor and management, by students, by advocates of peace, by minority groups, or in most extreme form by nations at war, it is a mechanism incompatible with the continued viability of contemporary society. In fact, if society is to remain viable, when there is disorder, it has no alternative to the use of overwhelming collective force for restoration of order. Of course, upon the restoration of order, the causes of disorder must be investigated and removed, or tensions may mount and produce even greater disorder. The point is that contemporary society, by reason of unprecedented interdependence, is highly vulnerable and easily disrupted—a fact which is increasingly perceived and exploited by dissident persons and groups.

These types of problems may be viewed sociologically as consequences of the social morphological revolution which generated secondary group, as distinguished from primary group association; inter-personal relations based on utility from emotion and sentiment; the conjugal or nuclear, from the extended family; formal from informal social control; rational from traditional behavior; enacted from crescive institutions; and bureaucracy from small-scale and informal organization. Especially significant have been the changes in the elements and processes of the socialization of the child—the transformation of the helpless biological specimen, the infant, into a human being or member of society. In brief, the social morphological revolution transformed the "little community" (Redfield, 1955), which has characterized predecessor societies, into the "mass society" (Mannheim, 1940:61).

It is my contention that the confusion and disorder of contemporary life may be better understood and dealt with as frictions in the transition still under way from the little community to the mass society; and that the chaos of contemporary society, in large part, is the product of dissonance and conflict among the strata of culture which make up our social heritage. The problems or frictions are often visible manifestations of what my former teacher and colleague,

William Fielding Ogburn, termed "cultural lag" (Ogburn, 1922:200ff).

Permit me to provide a few concrete examples of cultural lag in contemporary society—examples of special significance and impact. I do so, as a sociologist, to illustrate the use of the analytical framework provided by the social morphological revolution in the consideration of specific social problems.

Governance. Focusing on the United States, consider the example of cultural lag in our system of governance. Needless to say, confusion and disorder in government has a multiplier impact on other realms of chaos.

Consider some of the elements involved in the raging "conservative-liberal" debate. In the ongoing political context, the polemic centers on the role of government in the social and economic order. It is evident in the attitudes toward "big government," and, in general, in anachronistic political ideology (Hauser, 1967c). Three illustrations of "cultural lag" in ideology help to explain the paralysis which afflicts this nation in efforts to deal with the acute problems which beset us.

One is the inherited shibboleth that "that government is best which governs least." The doctrine made considerable sense when our first census was taken in 1790. At that time, 95 percent of the American people lived on farms or in towns having fewer than 2500 persons. What was there for government to do, compared with the situation in 1960, in which 70 percent of the American people lived in urban places and about 63 percent were residents of metropolitan areas? Can you visualize a United States today without a Social Security System, without a Public Health Service, without a Federal Reserve Board, without the Interstate Commerce Commission, and without the Civil Aeronautics Administration? The slogan "that government is best which governs least" is a good example of a cultural survival which has persisted beyond its time.

Or contemplate next the shibboleth each man in pursuing his own interest, "as if guided by an invisible hand," promotes the interest of the entire society. This also made sense in the United States in 1790. Each person pursuing his own interest and supporting his family on a farm or in a small town was, to be sure, automatically acting in the interest of society. But can you imagine a United States today without a Food and Drug Administration, a Securities and Exchange Commission, a Federal Trade Commission, and a Federal Communications Commission? The recent Federal intervention into automobile safety is a timely reminder of the fact that what is in the best interest of the Detroit automotive manufacturer is not necessarily in the best interest of the American people. The chasm between reality in economic behavior and extreme forms of classical and neo-classical economics grows broader and deeper with each passing year as the social morphological revolution continues in its inexorable course.

Consider, also, the shibboleths that taxes are what governments take away from the people and that government expenditures must be kept to a minimum. The Ways and Means Committee of the 90th House of Representatives and the majority in both Houses afford an excellent example of cultural lag and its consequences in their vestigial behavior in respect to the income tax surcharge. The critical question that the Congress should have asked is, "What are the essential needs of the United States to maintain this nation as a viable society?" And the next step should have been to arrange to finance the necessary programs. Taxes in a mass society are not what the government takes away from people, but rather what the people pay for essential services required for collective living in an interdependent society which, among other things, generates needs which cannot be met by the free market. Congress, exemplifying cultural lag, cut deeply into essential programs already pathetically inadequate to provide desperately needed services to many millions of Americans. Perhaps the highlight in the insensitivity and anachronistic character of the 90th House of Representatives was given by its Marie Antoinette type of performance which, in respect to the Afro-American urban slum residents, in effect said "Let them have rats."

Furthermore, apart from these examples of ideological atavisms, consider the irony in the national political situation, in which by reason of seniority provisions for com-

mittee memberships and chairmanships in the Congress and the one-party system in the post-bellum South, this most underdeveloped region of the United States, which is still in the early stages of the social morphological revolution, maintains a vise-like grip on the national legislative process—a grip bolstered by the filibuster which permits tyranny by a minority.

There are many other evidences of cultural lag in the Federal government and on the state and local levels of government. The rapidity with which this nation has become urbanized has produced serious malapportionment in the House of Representatives in the Congress, in state assemblies, and in municipal councils. For example, in 1960, there were 39 states with an urban population majority, but not a single state in the Union where the urban population controlled the state legislature (David and Eisenberg, 1961). This condition accelerated Federal interventionism. For it was the insensitivity to urban problems, the problems of the mass society, by the malapportioned rural-dominated legislatures that drew the Federal government into such realms as public housing, urban renewal, highways and expressways, civil rights, mass transportation, and education. To the addicts of the outmoded slogans discussed above, these programs are viewed as the violation of "states rights." But it is an ironic thing that the most vociferous advocates of states rights have played a major role, by their ignoring of 20th century mass society needs, in bringing about the increased centralization of governmental functions.

A final example of cultural lag in the American system of governance is given by the chaos in local government (Hauser, 1961). The framework for the structure of local government in the United States is the local governmental structure of 18th century England. The Constitutional fathers did not, and could not have been expected to, anticipate the emergence of population agglomerations of great size, density, and heterogeneity, which transcended not only municipal and township lines but also county and state boundaries. In consequence, our metropolitan clumpings of people and economic activities are characterized by governmental fragmentation which paralyzes local efforts to deal with metropolitan area-wide problems, such as those relating to air and water pollution, traffic congestion, crime, employment, housing, and education.

By reason of its implications for the socialization of the child, the consequences of governmental fragmentation for public education at the primary and secondary levels are especially worthy of attention. It may be argued that public school education is today converting this nation into a caste society, stratified by race and by economic status. I illustrate this with another neologism for which I apologize. I refer to the "pre-conception IQ," the IQ of the child before he is conceived (Hauser, 1968a). The child with a very high pre-conception IQ, high enough to select white-skinned parents who live in the suburbs, has by this astute act guaranteed unto himself an input for public school education two to ten times that of the child with a miserably low pre-conception IQ, stupid enough to select black-skinned parents in the inner-city slums. The child with an intermediate pre-conception IQ, bright enough to select white-skinned parents but too stupid to pick parents living in the suburbs, gets an intermediate education. This is a way of saying that the child in the suburbs gets a first-class education, the white child living toward the periphery gets a second-class education, and the child in the inner city, black or white, gets a third or fourth rate education. As a result, education is no longer performing its historic mission in this nation in contributing to national unity and to the maintenance of an open society. On the contrary, the kind of education we now have in our slums and ghettos is recycling the present chaotic situation into perpetuity. Our metropolitan areas today have blacks who were born in the city, reared in the city, educated in the city, and who have not acquired the basic, the saleable or the citizenship skills prerequisite to their assuming the responsibilities and obligations as well as the rights of American citizenship. Quite apart from other factors operating, it is clear that the failure of local governmental structure to keep up with the social morphological revolution is a major element in this disastrous situation.

Racism. Without question, the most seri-

ous domestic problem which haunts the United States today is the Negro Revolt. There are only three considerations necessary to understand the "why" of this situation. First, the Afro-American has been on this continent for three and a half centuries. He involuntarily spent two and a half centuries in slavery; he spent a half century in the rural slum South under the unfulfilled promises of the Emancipation Proclamation; and he has spent an additional half century in the slum ghettos of metropolitan America, in the North and South.

Second, since World War II the entire world has been swept by what has felicitously been called "the revolution of rising expectations." This is the first generation in the history of man in which no peoples are left on the face of this earth who are willing to settle for second place in level of living and who do not insist on freedom and independence if not already achieved. This revolution of rising expectations has not bypassed Afro-Americans. In a fundamental sense the Negro Revolt is simply America's local manifestation of the revolution of rising expectations.

Third, there is a shorter-run and a more immediate consideration. With the Johnson administration and the success of previous Congresses in the passage of civil rights legislation, new vistas of opportunity and new expectations were aroused in the black community. It is an ironic thing that the Negro Revolt and the riots are not in spite of these advances but in a sense because of them. Blacks were led to believe that they were finally achieving full equality in the American scene. But what happened in reality? There was little to match the Federal leadership on the state front in terms of gubernatorial leadership, or on the local front in terms of mayoralty leadership, or in leadership in the private sector. Nothing substantial happened to change the reality of living in rat-infested slums and of unemployment rates two to three times that of whites. Little was done to change the character of the segregated communities in which the Negro lived, and little was done to change the character of the woefully deficient educational opportunities for the black child. As the gap between expectation and reality increased, so did frustration, alienation, and bitterness which have led to violence.

Underlying all three of these factors which account for the present restiveness, hostility, and violence of Afro-Americans is "white racism," the major cause of the present crisis, the term appropriately designated as such by the Kerner Commission (National Advisory Commission on Civil Disorders, 1968:91). Although immigrant newcomers to the United States have, on the whole, also been greeted with prejudice and discriminatory practices, the Negro, since his involuntary importation as a slave, has been the victim of a much more widespread, persistent, and virulent racist theory and practice.

Racist doctrine may be understood as a negative and extreme form of ethnocentrism, the product of the isolated little community of relatively small size, density and cultural homogeneity. The persistence of racist attitudes and behavior constitutes another example of cultural lag—the survival of a little community into the mass society. A prejudicial attitude towards other human beings, whether in the positive form of ethnocentrism or its negative counterpart as hostility towards others on a categoric basis, is a cultural atavism—an anachronistic set of attitudes incompatible with the requirements of cooperative association in a mass society. In the context of large, dense and heterogeneous population agglomerations, racism necessarily spells trouble and conflict. It should not be too surprising that white racism is now breeding or exacerbating black racism, and, therefore, intensifying hostility and conflict. Furthermore, the paralysis of government in the United States, as described above, further compounds the crisis and offers little hope of any short-run resolution of tension and conflict. This nation, on its present course, may well be in for an indefinite period of guerilla warfare on the domestic as well as on the international front (Hauser, 1968a:4–10).

Other Examples of Cultural Lag. There are many other examples of cultural lag in American society ranging from the trivial to the significant. In the trivial category is the persistence of the string, designed before the advent of the pin and the button to keep collars closed against inclement

weather. This string has become the necktie, a relatively harmless, if not always asthetic vestige which has acquired a new function, i.e. decoration. But other vestiges are not as harmless. They include the constitutional right to bear arms—admittedly necessary in 18th century America but a dangerous anachronism in the last third of 20th century America. They include also the inalienable rights of labor to strike and of management to shut down and employ the lockout, often through trial by ordeal of the public. In twentieth century mass society, labor's right to strike and management's right to lockout may be described as the rights of labor and management to revert to the laws of the jungle—to resolve their conflicts of interest by means of brute force. The same can be said of the so-called right of the students to impose their views through the employment of force, or of any person or group who fails to resolve conflicts of interest in a mass society by an adjudicative or democratic procedure.

Cultural atavisms are replete, also, in the administration of criminal justice, for many of the governing codes and procedures are of pre-social morphological revolution origin and constitute a menace to mass society.

Finally, and by no means to exhaust the universe of cultural lags, mention should be made of organized religion as a living museum of cultural atavisms adding to the confusion and disorder of contemporary life. Sunday morning Christians have learned to honor and revere the messenger, his mother and his colleagues; they have learned to observe the ritual and practices of their churches which have endured for two millennia; but they have not received, or certainly they have not heeded, the message. For the message of the Judeo-Christian tradition is found in the concept of the Fatherhood of God—which implies the brotherhood of man. And comparable things can be said of the adherents of the other religions, the Jews, the Moslems, the Hindus, the Buddhists, etc..

Interestingly enough, the concept of the brotherhood of man, apart from its supernatural context, is an excellent example of an ancient ethical principle which has great applicability to contemporary as well as to previous societies. Although I have pointed to cultural survivals which create confusion and disorder, this is not to be interpreted to mean that all that is the product of the past is incompatible with the present. In fact, it may be argued that the increased interdependence and vulnerability of the mass society place a greater premium on this moral principle than any earlier society ever did. This is an example of a principle of mass living that has not yet taken hold despite its longevity, yet the adoption of which in deed, as well as in word, may be prerequisite to the continued existence of mankind.

Before departing from the subject of religion, I cannot, as a demographer, refrain from calling attention to the cultural dissonance represented by Pope Paul VI's recent encyclical "Of Human Life," which ignores the findings of empirical demography (*New York Times,* 1968:20–21). This example of cultural lag closely parallels that afforded by the Roman Catholic Church during the reign of Pope Paul V, which, some three centuries ago, similarly ignored the findings of empirical astronomy and produced the Galileo incident.

Among the most serious consequences of the failure of contemporary American society to keep pace with the social morphological revolution is the deficiencies in the process of socialization. Bronfenbrenner (1968, forthcoming) illuminates this problem in his comparative study of education in the United States and the Soviet Union. In the USSR the child is so inbred with a sense of belonging and obligation to the society of which he is an infinitesimal part that he tends to lack initiative and creativity. In the United States, in contrast, the child is so little the recipient of a sense of membership in, and responsibility to, the social order that, although he develops great initiative and creativity, his attitude is essentially one of concern with how he gets his and unconcern with others. We have yet to achieve the golden mean in order to produce a harmonious mass society consisting of people with a balance of initiative, creativity and social responsibility.

On the international front, there is similar evidence of cultural lag. Most grave in its consequences, obviously, is the failure to achieve the resolution of national conflicts

of interest by means other than physical force. Vietnam, the Middle East, and Nigeria are but a few timely reminders of this fact. The social morphological revolution has generated a highly interdependent, vulnerable and shrunken world, increasing the probability and intensifying the nature of conflicts of interest. But the traditional means of resolving international tensions and hostilities, namely, war, in a society which possesses the hydrogen bomb, carries with it the threat of the ultimate disaster, even the extinction of mankind. Nevertheless, contemporary diplomatic policies and contemporary military postures are more the product of societies of the past than of the present.

To be sure, some progress has been made in the evolving of machinery for the peaceful resolution of international disputes as exemplified by the League of Nations, the World Court, the United Nations and the Specialized Agencies. But it is not yet certain that the United Nations will not follow the League of Nations into oblivion as is actually desired by some of our most anachronistic organizations, such as the Daughters of the American Revolution and the John Birch Society. If the plague of deleterious cultural survivals which afflicts contemporary society cannot be effectively dealt with, it may well be that nuclear holocaust will be the means to undo both the process and the products of the social morphological revolution.

Finally, again on the international front, mention must be made of the cleavages between the have and have-not nations, between the socialist and communist nations, and between the factions within these blocs. The great disparities in levels of living among the nations of the world and the great international ideological differences, in part products of the differential impact of the social morphological revolution, constitute the most serious threats to peace and are harbingers of potential disaster. It remains to be seen whether contemporary society can muster the will to utilize available knowledge in a manner to override ideological, structural and procedural atavisms to cope with these problems. In this year, officially proclaimed by the United Nations as the International Human Rights Year, it is a sad commentary on the role of this nation that the Congress has reduced foreign aid appropriations to an all-time low. And it is an even sadder commentary on the state of international affairs that the world spends well over 100 billion dollars annually for the military, while the developing nations, after a disastrous "Development Decade," still starve for capital and other resources to achieve their economic development goals.

THE ROLE OF THE SOCIAL SCIENCES INCLUDING SOCIOLOGY

In contemporary society the approach to the solution of our problems, whether on the international or on the national front, is characteristically bifurcated, reflecting deep ideological cleavage. The approach to problem solution tends to be "conservative" or "liberal," or variations from "reactionary" to "revolutionary." It is my contention, again utilizing the social morphological framework, that the conservative and the liberal reflect the ideology of the social morphological conditions in which they were reared or to which they were exposed. It is not an accident, for example, that Barry Goldwater comes from a state which as recently as 1940 had a population density about the same as that of the United States in 1790—4.4 persons per square mile, and only 6.6 in 1950 and 11.5 in 1960. Nor is it a mere coincidence that Senator Jacob Javits, in contrast, comes from a state with population densities of 281.2 in 1940, 309.3 in 1950, and 350.1 in 1960 (Hauser, 1967c).

Needless to say, in a society such as that of the United States, in which the State of Alabama and the State of New York are simultaneously present, there is an extreme range in social morphological conditions. Furthermore, "urbanism as a way of life" is neither confined to the boundaries of a city nor ubiquitous and pervasive within it. That is, rural residents in a complex mass society may, by reason of their own life paths, take on urban patterns of thought and action and *vicè versa.*

The conservative, including the reactionary, is the person socialized in a milieu, which although contemporary by the calendar, is essentially that of eighteenth and

nineteenth century America. The liberal, including the revolutionary, in contrast, is the person who has been reared in a milieu more the product of the social morphological revolution. The conservative is essentially the representative of the past in the present; the liberal is more clearly the representative of the present.

This does not necessarily mean that the liberal has the answers for the solution of contemporary problems. The liberal, who is sure that he has the right answers because they are non-traditional or different from that of the conservative, is subject to the same basic blindness as is the conservative. The basic point is that the "right" answer is neither to be found in the "old," as old, nor the "new," as new. It is to be found rather in the specific analysis of a specific problem situation to which the application of knowledge and wisdom finds possible solutions quite independently of whether they are "old" or "new," or "conservative" or "liberal," or any variation of these postures.

Both the conservative and liberal approaches *per se* are as inconsistent with the contemporary urban and metropolitan order as the horse and buggy or any other outmoded artifact. The unprecedented problems arising as frictions of social change can be resolved by neither the conservative nor the liberal approach.

If the approach to the resolution of contemporary social problems is neither to be conservative nor liberal, what is it to be? The answer is the "social engineering" approach. The social engineering position, as distinguished from the conservative or liberal one, represents an utterly new approach to contemporary problems. It is an approach born of the social morphological revolution to cope with the problems engendered by it.

It is not possible here fully to trace the emergence of the social engineering approach. It may be briefly stated that it is a recent product of the whole series of developments which distinguishes the post-Newtonian from the pre-Newtonian world. The more recent of these developments has led to the application of the method of science to social, as well as to physical and biological phenomena; and to the emergence of social-engineering activities to parallel the engineering activities based on the physical and biological sciences. That is, the social engineer, as yet represented by a pathetically few professions—e.g., the public administrator, the city manager, the social worker, the educator, the criminologist, the planner, the professional businessman—is emerging to apply the knowledge of social-science to the solution of social problems, in the same manner as the electronics engineer applies the knowledge of physics to electronics problems, or the biological engineer, the physician, applies the knowledge of the life sciences to problems of ill health.

Only by the adoption of the social-engineering approach can we get beyond the conservative-liberal approach. Only in this manner can we avoid the blindness of both the conservative and the liberal—the one convinced that the past contains the answers to the present; the other that the past does not. That both the conservative and liberal approaches are blind may be argued on the basis of two generalizations, validated by the evidence produced by social science. The first is that if you find what is right and stick to it, you are bound to be wrong. For the world does not stay put; it changes. The second is that no degree of disillusionment with the past, no level of good intentions, and no amount of zeal by themselves necessarily provide an appropriate answer to anything.

The social-engineering approach is an approach as independent as possible of existent stereotyped postures or attitudes. It is neither conservative nor liberal, Republican nor Democratic, any more than is an electronic engineer's approach, or the approach of any expert, confronted with a problem which requires an effective and efficient solution. It is a twentieth-century approach consonant with twentieth-century metropolitan life and adapted to the resolution of twentieth-century problems.

The social-engineering approach is dependent on knowledge, drawn from social science, and wisdom, based on experience in problem solution. It is the role of the social sciences, in general, as well as sociology in particular, to provide the necessary knowledge. That is the object of research, data collection, data processing and analysis.

The practical purpose of social data is to permit social accounting (Hauser, 1967b). Accounting first was a set of principles and practices for collecting, collating, and reporting information relating to the activities of an organization, so that they could be evaluated in relation to the organization's objectives. In contemporary language, accounting is an information-control system, designed to serve the needs of administrators of an organization or a program.

Accounting procedures evolved in the development of private business and have only relatively recently been applied to the evaluation and control of an entire economy. The Employment Act of 1946 in the United States, which created the President's Council of Economic Advisors and requires an anuual Economic Report to the nation, represents a major institutional invention to cope with the economic problems of the 20th century American economy.

A hopeful indication that the social morphological revolution is producing mechanisms for the resolution of the social problems it has precipitated lies in the bill introduced in the 90th Congress, calling for the establishment of a parallel Council of Social Advisors and an annual Social Report to the nation (Subcommittee on Government Research, 1968). Furthermore, the Department of Health, Education and Welfare, through its Advisory Panel on Social Indicators, and upon instruction from the President of the United States, has been engaged in the preparation of a prototype Social Report.[4]

The unprecedented period of high level economic activity, uninterrupted by depression or recession, that this nation has recently experienced is certainly related to the existence and activities of the Council of Economic Advisors. We are now experiencing a costly inflation, and we are now threatened by a possible recession mainly because the Congress, a repository of cultural lag, has not heeded, or tardily heeded, the recommendations of the Administration based on the findings of the Council of Economic Advisors.

It is my judgment that had this nation possessed a Council of Social Advisors since 1947, along with the Council of Economic Advisors, and had the recommendations of such a Council been heeded by the Administration and the Congress, the "urban crisis" which sorely affects us would not have reached its present acute stage.

It is the role of the social sciences, including sociology, to generate the knowledge on the basis of which social policy and social action may be directed to the solution of our problems. The primary function of the social scientist is research, the production of knowledge. It is not the function of the social scientist, *qua* scientist, to be a social engineer (Hauser, 1949). To be sure, many of us social scientists have been called upon to perform both roles in the early stage of the development of the social sciences, but there can be no question about the fact that the two roles are distinct and that each, in the long run, will be better performed as separate and specialized activities.

More specifically, it is the role of the social scientist, including the sociologist, to develop and produce the "social indicators" which will permit effective social accounting. Fortunately, the social morphological revolution has generated much in the way of social statistics and other types of knowledge, which are already quite impressive even if still deficient and in relatively early stages of evolution (Raymond M. Bauer, 1967; Hauser, 1967b; Hauser, 1963).

Social accounting will become possible only after consensus is achieved on social goals. The development of social goals is neither a scientific function nor a social engineering function. It is a function that must be performed by society as a whole, acting through its political and other leaders. In a democratic society it presumably reflects the desires of the majority of the people.

Although a majority of the people must fix the goals of a society, the social scientist and the social engineer are in a strategic position to participate in goal formation. They must work closely with political and other leaders to help develop a broad spectrum of choices, which will reflect, insofar as possible, the requirements and consequences of specific goals. I have elsewhere

[4] This panel was appointed by Secretary of Health, Education and Welfare, John W. Gardner, and has continued its activity under the incumbent Secretary Wilbur J. Cohen. Daniel Bell serves as Chairman of the panel.

proposed one set of social goals for consideration—published in a recent report of the Joint Economic Committee of the Congress (Hauser, 1968b).

CONCLUDING OBSERVATIONS

Man is the only significant culture-building animal on earth. He not only adapts to environment, he creates it as well. He has created a world in which mankind itself is the crucial environment—a mankind characterized by large numbers, high densities and great heterogeneity. He is still learning how to live in this new world he has created. The product of the chief components of the social morphological revolution—the population explosion, the population implosion and population diversification—together with rapid technological and social change—is contemporary society, a chaotic society, an anachronistic society. It is a society characterized by dissonant cultural strata—by confusion and disorder. It is also a society which for the first time in human history possesses the capacity to destroy itself—globally as well as nation by nation.

In addition to the acceleration in the rate of technological and social change, and partly in response to it, society has acquired a greater capacity for social change.[5] Virtually instantaneous world wide social interaction is possible with modern means of communication; and the mass media, bolstered by communication satellites and new educational hardware, create new opportunities for the modification and creation of attitudes and behaviorisms consistent with the realities of the contemporary world. But, although the capability for social change has undoubtedly increased, adequate and effective mechanisms for the control of social change, for accommodation and adaptation to the changing social milieu, as well as to the changing material world, have yet to be evolved. Planning as a mechanism for rational decision-making is still in its infancy and has yet to develop an integrated approach with apposite administrative, economic and social planning, along with physical planning. Progress is being made in this respect, however. In this nation, for example, planning has become a respectable word now if modified by the term "city"; but when modified by such terms as "metropolitan," "regional," or "national," it is still considered a dangerous thought in some quarters. But planning, in ever broader contexts, will undoubtedly be a first step in the dissipation of confusion and the restoration of order.

That we live in a chaotic world should not be too surprising in view of the perspective provided by calendar considerations. Only twelve human generations have elapsed since the "modern era" began. Only seven human generations have elapsed since this nation was founded. Only six generations have elapsed since mankind acquired the means to permit the proliferation of cities of a million or more inhabitants. Only two generations have elapsed since the onset of significant internal migratory flows of Afro-Americans. Fewer than two generations have elapsed since the United States became an urban nation. Less than one generation has elapsed since the advent of the explosive power of the atom. Little more than a decade has elapsed since the Supreme Court decision outlawing *de jure* segregation in schools—and a clear-cut judicial decision on *de facto* segregation is yet to come.

Furthermore, only two human generations have elapsed since Durkheim and Weber and, to confine my attention to my own teachers and colleagues, less than one since Burgess, Ogburn, Redfield, and Wirth. The social sciences, in general, and sociology in particular, are still emergent sciences. It was only during the century roughly from about 1750 to 1850 that the physical sciences achieved the respectability and acceptance that paved the way, through engineering, for the transformation of the physical and material world. It was only during the century roughly from 1850 to 1950 that the bio-medical sciences achieved a similar status that paved the way, by means of bio-medical engineering, for the remarkable increase in longevity and health. It is to be hoped that the century from 1950 to 2050 will be the period during which the social sciences, including sociology, will achieve a level of respectability and acceptance that will pave the way for social engineering to eliminate the chaos that characterizes contemporary society. The question is whether mankind

[5] I am indebted to my colleague, Robert W. Hodge, for his discussion of this point.

can muddle through without collective suicide before rational decision-making overtakes the confusion and disorder of our tottering transitional society.

It is to be emphasized that a modern Armageddon is not mankind's only alternative to continuing national or international chaos. For the social morphological revolution has also produced a material world, a social milieu, and an emancipated and reflective man who has the capacity to dissipate confusion and restore order. The social morphological revolution has initiated and nurtured the social sciences, including sociology; it has required the collection and funding of social knowledge in various forms, including social statistics; it has evolved a number of social engineering professions which are still proliferating, including planning; and it has opened up the new vistas of social accounting.

With the stress I have placed on the need for the restoration of order, I should make it clear that I recognize that disorder cannot, and should not, be entirely eliminated. For disorder betokens the need for change, often desirable, as well as necessary. Order as such is not by itself a discrete goal of high priority. Hitler, for example, achieved a high degree of order in his Third Reich; and Stalin, in his version of a communist society. The task is rather to welcome disorder, both in Durkheim's sense of helping to define the limits of order and as a symptom of needed change, but to control the levels of disorder, while effecting change, so that it does not threaten the viability of society.

In the United States, at the present time, "law and order" has become a political slogan with many overtones. But the disorder which afflicts American society by reason of the Negro Revolt and that of other minority groups, including the poor, points to the inadequacies of the slogan. The slogan is but a half-truth; and as Oliver Wendell Holmes once observed, "A half-truth is like a half-brick—it can be thrown a lot farther." The entire slogan, to meet the needs of our society, should be "law, justice, and order." For until justice is achieved by our minorities, we will not have order, unless we choose to make ourselves over into a repressive society.

I am aware that I have tread perilously on the border between social science and social engineering. I may be accused of polluting the science of sociology with the stigmata of social policy and implied, if not explicit, proposals for social action. I am sensitive, as well as open, to such criticism because I firmly believe in maintaining a sharp boundary between science and engineering, as I have indicated above. But the theme of this annual meeting, I repeat, is "On the Gap Between Sociology and Social Policy," and it is in an effort to close this gap that I have chosen to take the course I have followed. I may have failed, but I have tried to diagnose rather than to prescribe, to illuminate rather than to exhort, to point to the hiatus between sociology and social policy, rather than to persuade the scientific members of this Association, as scientists, to fill the gap.

At the annual meetings of this Association in March, 1946, after the shock of the first atomic bomb and the first radar contact with the moon, I delivered a paper entitled, "Are the Social Sciences Ready?" It was a question raised by the then only prospect for the creation of a National Science Foundation, which might include provisions for the support of the social sciences as well as the natural sciences.

I stated at that time: (Hauser, 1946):

> Much has been said or written by social scientists, philosophers of science and others to explain the disparities in the roles of the natural and the social sciences in human affairs. Whatever the reasons may be, we might well at this juncture be impressed with the two outstanding facts: First, that the social sciences have provided more knowledge and understanding about our social, political and economic life than society has actually used; second, that the social sciences have not produced enough. . . .

My purpose in dealing with policy matters as social facts in this paper is now, as it was 22 years ago, not to persuade sociologists or other social scientists to enter the realm of policy formation and social action *qua* scientists. It is rather my twofold purpose to stress what you already know: one, that sociology has accumulated more knowledge than is yet being utilized by society; and two, that there is a great and increasing need

for more knowledge—and for more solid knowledge of the type outlined in my 1946 paper.

I conclude with a variation on my major theme. The chaotic society when understood as an anachronistic society can be transformed into a coeval or synchronous society. The first step in this direction lies, necessarily, in the comprehension of the nature and consequences of the social morphological revolution—which will be the product of research. More knowledge than we now possess is needed. But we have sufficient knowledge, even now, to state that the remediation of our chaotic society can be accomplished by bridging the gap between the social sciences, including sociology, and social policy and action.

REFERENCES

Annals of the American Academy of Political and Social Science.
1967 *Social Goals and Indicators for American Society*. Volume I, May 1967 and Volume II, September 1967.

Bauer, Raymond M. (ed.)
1967 *Social Indicators*. Cambridge: M.I.T. Press.

Braidwood, Robert J. and Gordon R. Willey (eds.)
1962 *Courses Toward Urban Life*. Chicago: Aldine.

Breese, Gerald.
1966 *Urbanization in Newly Developing Countries*. Englewood Cliffs: Prentice-Hall.

Bronfenbrenner, Urie.
1968 *On the Making of New Men* (manuscript to be published by Russell Sage Foundation).

Childe, V. Gordon.
1941 *Man Makes Himself*. London: Watts.
1946 *What Happened in History*. London: Penguin Books.

David, Paul T. and Ralph Eisenberg.
1961 *Devaluation of the Urban and Suburban Vote*, Volume I. Charlotteville, Virginia: University of Virginia Press.

Davis, Kingsley.
1955 "The origin and growth of urbanization in the world." *American Journal of Sociology*, 60(March):433.

Durkheim, Emile.
1897–98 *L'annee Sociologique*. Volume II.
1933 *On the Division of Labor in Sociology*. New York: Macmillan.
1938 *The Rules of Sociological Method*. Glencoe: The Free Press.

Galbraith, John Kenneth.
1958 *The Affluent Society*. Boston: Houghton Mifflin.

Gras, N. S. B.
1922 *An Introduction to Economic History*. New York: Harper & Row.

Hauser, Philip M.
1946 "Are the social sciences ready?" *American Sociological Review*, 11(August):379–384.
1949 "Social science and social engineering." *Philosophy of Science*, 16(July).
1961 *On the Impact of Population and Community Changes on Local Government*. (Seventh Annual Wherrett Lecture on Local Government) Pittsburgh: Institute of Local Government, University of Pittsburgh.

Hauser, Philip M.
1963 "Statistics and Society." *Journal of the American Statistical Association*, 58 (March):1–12.
1965 and Leo F. Schnore (eds). *The Study of Urbanization*. New York: Wiley, Chapter 1.
1966 "Demographic factors in the integration of the Negro." Pp. 71–101 in Talcott Parsons and Kenneth B. Clark (eds.), *The Negro American*. Boston: Houghton Mifflin.
1967a "Environmental forces shaping our cities." Pp. 31–45 in The National Conference on Social Welfare (ed.), *The Social Welfare Forum*. New York: Columbia University Press.
1967b "Social accounting." Pp. 839–876 in Paul F. Lazarsfeld, William H. Sewell and Harold L. Wilensky (eds.), *The Uses of Sociology*. New York: Basic Books.
1967c "Lao-Tze, Confucius and the conservative-liberal debate." *Proceedings of the American Philosophical Society*, 3(October):259–267.
1968a "After the riots, what?" *The University of Chicago Magazine*, 60(May):4–10.
1968b "Twentieth century national goals in the development of human resources." Pp. 38–51 in *Federal Programs for the Development of Human Resources* (90th Congress, 2nd Session, Joint Committee Print, Subcommittee on Economic Progress, Joint Economic Committee, Congress of the United States). Washington, D.C.: U.S. Government Printing Office.

Hodge, Patricia Leavey and Philip M. Hauser.
1968 *The Challenge of America's Metropolitan Population Outlook—1960 to 1985*, Chapter I (Research Report Number 3). Washington, D.C.: The National Commission on Urban Problems.

Mannheim, Karl.
1940 *Man and Society in an Age of Reconstruction: Studies in Modern Social Structure* (trans. Edward Shils). London: K. Paul, Trench, Trubner, Ltd.

Mumford, Lewis.
1961 *The City in History*. New York: Harcourt, Brace & World.

National Advisory Commission on Civil Disorders.
1968 *Report of the National Advisory Commission on Civil Disorders*. Washington, D.C.: U.S. Government Printing Office.

The New York Times.
1968 July 30:20–21.

Ogburn, William F.
1922 *Social Change.* New York: The Viking Press, Inc.
Redfield, Robert.
1955 *The Little Community: Viewpoints for the Study of a Human Whole.* Chicago: University of Chicago Press.
Subcommittee on Government Research of the Committee on Government Operations.
1968 "Full Opportunity and Social Accounting Act," (S843). Introduced by Senator Walter F. Mondale and ten other Senators. See *Hearings Before The Subcommittee on Government Research of the Committee on Government Operations,* First Session on S843, Parts I, II, III, Washington, D.C.: U.S. Government Printing Office.
Tawney, Richard Henry.
1920 *The Acquisitive Society.* New York: Harcourt, Brace & Howe.
Turner, Ralph.
1941 *The Great Cultural Traditions,* Volume I, *The Ancient Cities.* New York: McGraw-Hill.
United Nations.
1953 *The Determinants and Consequences of Population Trends.* New York: United Nations.
1966 *World Population Prospects.* New York: United Nations.
U.S. Bureau of the Census.
1960 *Historical Statistics of the United States, Colonial Times to 1967,* Washington, D.C.: U.S. Government Printing Office.
1962 *Historical Statistics of the United States, Colonial Times to 1957: Continuation to 1962 and Revisions,* Washington, D.C.: U.S. Government Printing Office.
1967 *Statistical Abstract of the United States, 1967,* Washington, D.C.: U.S. Government Printing Office (annual).
Wallas, Graham.
1916 *The Great Society: A Psychological Analysis.* New York: Macmillan (latest edition in 1967 by the University of Nebraska Press, Lincoln, Nebraska).
Wellemeyer, Fletcher and Frank Lorimer.
1962 "How many people have ever lived on earth." *Population Bulletin,* 18(February).
Wirth, Louis.
1956 *Community Life and Social Policy.* Chicago: University of Chicago Press.

IDEOLOGICAL BELIEFS ON THE DISTRIBUTION OF POWER IN THE UNITED STATES *

WILLIAM H. FORM
Michigan State University

JOAN RYTINA
University of Notre Dame

Although dominant ideologies represent a vindication of societal power arrangements, we hypothesized that specific belief systems vary by social strata. Annual family income, a major reward, was used as the chief indicator of stratal position. In a community study, we found that although the pluralistic model of power was selected most frequently as an accurate description of the way the system works, it was embraced most strongly by rich and middle-income strata. The poor and Negroes favored elitist and economic models of power more than other strata. When confronted with an interest-group model of power in Congress, all strata selected "big business and the rich" as the most powerful groups. Yet the higher the income and education of the respondents, the less they believed that all groups should *have equal political power. The poor and Negroes gave most normative support to political pluralism. These findings cast doubt on current theory concerning political authoritarianism of the poor and suggest that all strata differentially select existential and normative beliefs concerning the distribution of societal power. Stratal differences in such beliefs may play an important role in class political movements.*

INTRODUCTION

STRATIFICATION systems perpetuate inequalities which are maintained by a wide variety of mechanisms. Whatever mechanism is used, every system of stratification develops an ideology to legitimize or justify its presence and persistence. Ideologies presumably describe the world as it

* We are very grateful to John Pease for a critical reading of the manuscript and for his many suggestions to improve it. The material in this project was prepared under a Grant from the Office of Manpower Policy, Evaluation, and Research, U.S. Department of Labor, under the authority of Title I of the Manpower Development and Training Act of 1962. Researchers undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment. Therefore, points of view or opinions stated in this document do not necessarily represent the official position or policy of the Department of Labor. We are grateful for the Department's support through Grant No. 91-24-66-45.