

**INDUSTRIAL
RELATIONS
RESEARCH
ASSOCIATION**

THE AGED AND SOCIETY

**A SYMPOSIUM
ON THE PROBLEMS
OF AN AGING POPULATION**

DECEMBER, 1950

**THE
AGED
AND
SOCIETY**

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Industrial Relations Research Association

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P R E F A C E

For the first time in the history of the world, the aged and the aging constitute a basic social problem. The United States is experiencing the impact of greater life expectancies more than any other nation, for the typical life span of its population is the longest; but the problem is not confined within its borders. If greater length of life, so avidly desired by the individual, is not to become a curse to society, effective accommodations must be made to it.

The Industrial Relations Research Association chose the topic of "The Aged and Society" for its first research symposium in recognition of the importance of the issues involved. But beyond this, the topic is of concern alike to the business manager, the union representative, the government official, and the academician, whether engaged in economics, political science, sociology, psychology or even medicine; and it is from all these groups that the Association draws its membership.

J. DOUGLAS BROWN

CLARK KERR

EDWIN E. WITTE

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Part I

**THE NEW AGE DISTRIBUTION
IN THE NEW SOCIETY**

THE CHANGING AGE PROFILE OF THE POPULATION

HENRY S. SHRYOCK, JR.
U. S. Bureau of the Census

THE POPULATION of the United States has been aging for at least a century and a half. The general trend has been similar to that in most of the rest of the western cultural sphere, namely in Europe and among those people of European descent in the British Dominions. Furthermore, there are no signs that this process will cease in any of these countries in the foreseeable future.

TRENDS IN AGE COMPOSITION

Median Age

The extent of this demographic aging process may be measured in several ways. Let us start with one of the simplest by examining the trend of the median age. Figure 1 presents this trend from 1820 to date. One hundred and thirty years ago, half of our people were under 17 years old. Since that time the median age has increased by about three-quarters, and it stood in 1950 at 29.8 years.¹ During this period, there was an increase in every intercensal decade.

A slackening of the increase is observable in the last decade. These ten years of comparatively slow aging and rapid population growth followed ten years of rapid aging and slow population growth in the 'thirties so that the median age in 1950 was still fairly well in line with the previous trend. The median age reached an estimated peak of 29.9 years in 1946 but has remained at 29.8 years since 1948, the long-time upward trend having been halted because of the sensational rise in births since the end of the war.

Is this halt in the rise of the age of the average American temporary or permanent? For an answer now, we need accurate projections of population by age. Unfortunately, at the present time there is considerable difference of opinion among demographers as to probable future population growth. Recently published projections² by the Bureau of the Census reflect this uncertainty by having

¹ This figure is an estimate since at the time of this writing the age statistics from the 1950 Census were not yet available.

² U. S. Bureau of the Census, *Current Population Reports, Population Estimates*, Series P-25, No. 43, "Illustrative Projections of the Population of the United States: 1950 to 1960," August 10, 1950.

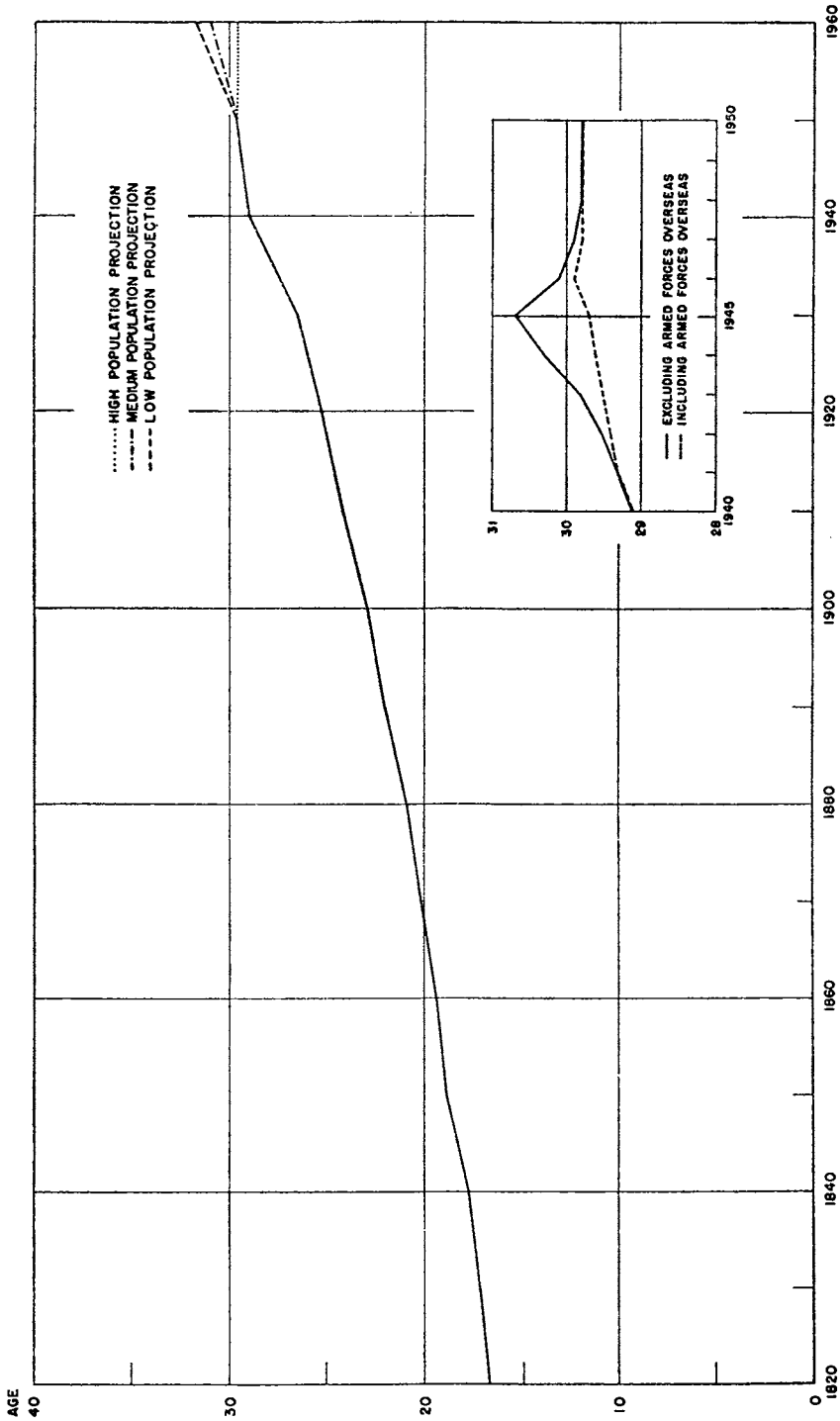


FIGURE 1.—MEDIAN AGE FOR THE UNITED STATES:
1820 TO 1960

a very wide range between the high and low population series. The three series, high, medium, and low, represent the resultants of varying assumptions concerning the trends of fertility, mortality, and immigration from abroad. Mortality rates are assumed to decline in all three series. The differences among the fertility assumptions contribute the greatest part of the differences among the population projections.

In the medium series, age-specific fertility rates are assumed to decline at a rate depending upon the age of the woman. These population projections have a rise of one or two tenths of a year in the median age every year, the median reaching 30.3 in 1955 and 31.0 in 1960. In the low population series, fertility declines more sharply than in the medium series. The rise of the median age in this projected population is even sharper, with medians of 30.6 and 31.8 years in 1955 and 1960, respectively. Only in the high population series does the median age decline, and then only slightly. It stays at about the 1950 level through 1959 and drops to 29.6 years in 1960. This series requires that fertility should remain at the very high level of 1949 throughout the next decade. In the opinion of the writer, it is likely that the median age of the population will continue to rise in the course of the next ten years.

Number and Proportion in Broad Age Groups

The median, like any other measure of central tendency, cannot give us a complete picture of the changing age composition of a people, however. There may be opposing changes taking place simultaneously among the various age groups; for instance, both a very young group and a very old group may be increasing more rapidly than the total population. Furthermore, we are particularly concerned here with the importance of the oldest age groups. The various age groups may be examined in terms of both their absolute and relative numbers, each method of analysis being significant from various standpoints.

To avoid overwhelming the reader with too much detail, a few broad age groups will first be considered. These also have a functional significance. At the present time, under 5 years old roughly constitutes the preschool ages, 5 to 19 the school ages, 20 to 44 the earlier years of working life (and, for women, the chief years of childbearing), 45 to 64 the later years of working life, and 65 and over the period of retirement from the labor force and often of widowhood.

Statistics for the above class-intervals were first published in 1870. (Prior to that time, the population of all age groups had been increasing, according to the available data.) Until 1920 to 1930, each of the five broad age ranges had increased in numbers in every decade. The long-established decline in the birthrate finally was reflected in a decline in the number of children under five years old from 1920 to 1930; this decline was accelerated over the depression decade of the 'thirties. In that decade the number of children of school age also dropped. Meanwhile, marked rises continued in the older age groups. Persons 65 years old and over increased from a little over one million in 1870, to about nine million in 1940, growing by well over two million in the 'thirties alone. Over the 70-year period, their rate of increase was almost 700 per cent and far exceeded that for any of the younger groups. Middle-aged persons, those 45 to 64, ranked second in rate of increase, and the rate was progressively less for the younger age groups.³

As a result of these trends, the relative share of the preschool and school age groups had persistently declined through 1940. Children under 5 years old constituted 14.3 per cent of the total in 1870 and 8.0 per cent in 1940; for those 5 through 19 years old, the corresponding percentages were 35.4 and 26.4. Meanwhile, the 20-to-44 group had increased its share only slightly. Thus, the large gain in proportionate share occurred among the two older groups. The share of the aged more than doubled, having risen from 3.0 to 6.8 per cent.

Let us look now at estimates of the present and projections into the future. The 1950 figures of the population excluding troops abroad are as of July 1 and are not based on the April census. The total population estimated, however, is quite closely in line with the total of the preliminary field counts.

During the 'forties, it is almost certain that all of the functional age groups increased in size, although the 5-to-19 year olds increased only slightly. Because of the "baby boom" after the end of the war, by far the largest rate of increase occurred among the preschool children. The aged group ranked next, however, and numbered about 11,600,000 in 1950.

In this decade, the proportion of the total population in the preschool ages reversed its trend sharply, whereas that for the school

³ For a much more detailed description of trends in age composition up to 1930, see: Warren S. Thompson and P. K. Whelpton, *Population Trends in the United States* (New York, McGraw-Hill Book Co., 1933). Chapter IV, "The age composition of the population," pp. 106-171.

ages continued to decline. The proportion of those 20 to 44 also continued to decline somewhat, being 37.1 per cent in 1950, as compared with 38.9 in 1940. The rising proportions aged 45 to 64 and 65 and over reached 20.6 and 7.7 per cent, respectively.

Only the youngest age group in 1955 is affected very much by future births and only the two youngest in 1960. At most a few hundred thousand net immigrants per year are assumed in any of the projections. Very few immigrants are customarily over 44 years old. Thus, practically all of the variations in the three older age groups represent variations in the assumptions with respect to declining mortality.

After 1950, the trend for the preschool ages is the most speculative but fortunately is of least interest here. This group will probably decrease fairly sharply in numbers from 1950 to 1960. It will be the turn of the school-age population to have a rapid growth. The slim cohorts born during the depression will be in their early working life in 1960. Accordingly, during the 'fifties, the 20-to-44 year olds will remain fairly constant in numbers. Meanwhile, the two oldest groups, and particularly persons 65 years old and over, will continue to grow appreciably. Barring some catastrophic event, our oldsters will number between 15 and 16 million in 1960. For the first time, they will probably outnumber the preschool children.

By any of the three projections the proportion of the youngest children will resume its decline over the 'fifties. The proportionate share of the 5-to-19 year olds should be successively larger in 1955 and 1960. The age group containing the most active workers, however, will have a progressively smaller proportion over the next decade. All the depression-born cohorts will be in this age group by 1960. The share of the older persons of working age should change but little, probably showing a slight rise. Those 65 and over, however, will continue to have a rapidly increasing relative number, reaching at least 9 per cent by 1960.

No projections consistent with those to 1960 have been made beyond that date. However, some reliance may be placed on the projections published in 1947.⁴ The series with low mortality and net immigration of 1,000,000 every five years results in 39,427,000 persons 50 years old and over in 1960. This is the cohort that will

⁴ P. K. Whelpton, *Forecasts of the Population of the United States, 1945-1975*, U. S. Bureau of the Census (Washington, Government Printing Office, 1947).

be 65 years and over in 1975. The low series of the new projections results in 39,744,000 persons 50 years old and over in 1960. Since the old projections lead to 19,935,000 aged in 1975, it is obvious that any of the new projections, if carried forward, would result in at least 20,000,000 persons 65 and over only 25 years from now. Compare this with 11,600,000 today.

The ratio of the number of persons 65 years old and over to the number aged 20 to 64 is often used as a crude measure of the load of the dependent aged upon the more economically active sector of the population. By this measure, a steadily rising burden is shown. For every 1,000 persons 20 to 64 years old, there were 63 persons 65 years old and over in 1870, 79 in 1900, and 117 in 1940. There are an estimated 133 in 1950, and there will be between 165 and 169 by 1960.

In the past the rising dependency load of the aged had been more than offset numerically by the declining relative number of youngsters (persons under 20 years old).⁵ The ratio of both young and old "dependents" per 1,000 "producers" was 1,113 in 1870, reached the even mark between 1880 and 1890, and was down to 702 in 1940. During the 'forties, this important ratio began to rise, however, and stood at about 733 in 1950. Looking ahead, we may expect a further rise in the next five years, the three projections giving a range from 772 to 813. The range is even wider by 1960. The low population series indicates a slight drop, but the high and the medium would entail further substantial rises. Although such factors as the school-leaving age and the employment of old workers and of women can affect the real ratio of dependents to producers, the changing age profile imposes limits beyond which it is very difficult for institutional forces to reverse the trend of this ratio.⁶

⁵ As Kiser has pointed out, however, "problems of old-age dependency are vastly different from those of child dependency. For despite the increasing tendency of the community to take over functions connected with the education, health, and recreation of children, the family still continues its cardinal role of furnishing food, clothing, and shelter to the children. But, whereas parents can be depended upon to give a home to their children, experience shows that adult children cannot always be depended upon to give a home to their aged parents, who are thus more apt to become a charge upon public funds." See Clyde V. Kiser, "Significance of Our Aging Population" in: New York State Joint Legislative Committee on Problems of the Aging, *Birthdays Don't Count*, 1948, pp. 74-75.

⁶ A more refined measure would restrict the aged to those not in the labor force and the 20 to 64 year olds to those in the labor force (including armed forces). Comparable statistics are available for only a few years. Comparing 1950 with 1940, we find 153 per 1,000 and 141 per 1,000, a moderate rise in this measure of the dependency load.

Another index of economic significance is the ratio of the number of persons 45 to 64 years old to the number 20 to 44. The middle-aged group has always been outnumbered by the younger adult group, but the ratio has been increasing. From 337 per 1,000 in 1870, it had risen at an accelerating pace to 509 in 1940, probably stands at 554 today, and may be between 627 and 629 in 1960. Thus, the middle-aged are becoming an increasingly large part of the population of working age and also of the labor force.

Detailed Age Groups

Thus far we have looked at broad age groups only. The changing age profile is measured more closely, of course, by the use of narrower class intervals; and several additional phenomena are thereby made apparent. For this purpose, "age pyramids" for 1900, 1950, and 1960 have been chosen. As shown in Figure 2, these consist of the number in each 5-year age group of each sex up to age 85. For 1960, the high series is shown superimposed on the low series.

As compared with that of the present time, the age profile of the small 1900 population seems relatively simple and regular. The gradually sloping sides and fairly equal steps of the pyramid reflect a population that had been growing at a rapid and even rate. Each cohort is progressively smaller as we review the cohorts from youngest to oldest. At the present time, the age profile of the population is much more irregular. The wide fluctuations in the number of births since 1930 are reflected in the irregular steps below age 25. Beyond this age, each age group is successively smaller, however.

Even the low series for 1960 contains more persons of each sex than in 1950 at every age group beginning with 35 to 39. The percentage increases at the older ages are particularly marked. At 55 to 59 the increase should be between 11 and 17 per cent, at 60 to 64 between 13 and 19, at 65 to 69 between 27 and 33, at 70 to 74 between 32 and 39, and at 75 years old and over between 32 and 46 per cent.

Effects of Biases in Data

The data that have been discussed are those compiled from censuses or projected from censuses. We do not yet know the total amount of underenumeration or how underenumeration varies with age. In addition to errors due to persons being missed, age data are affected by the misreporting of age for those enumerated. Considerably more

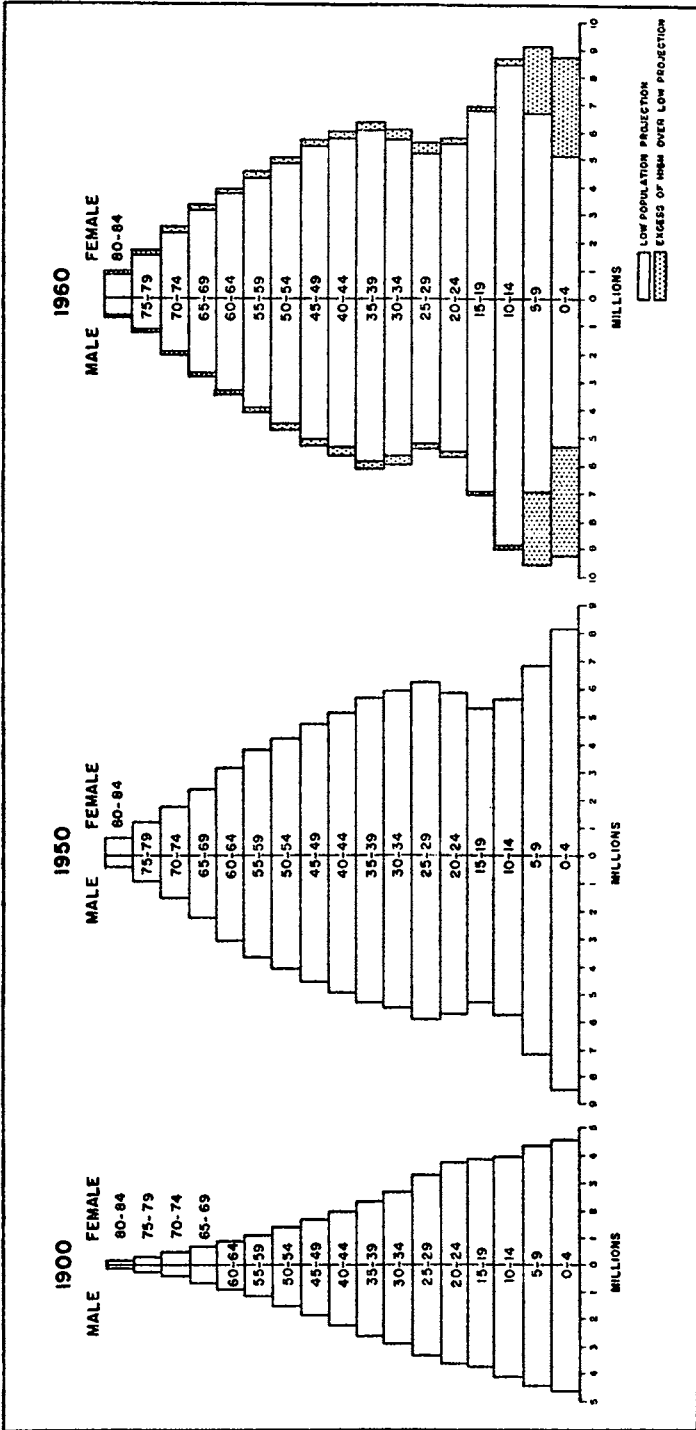


FIGURE 2- POPULATION OF THE UNITED STATES, BY AGE AND SEX: 1900, 1950, AND 1960

should be known after the sample postenumerative check of the 1950 census is analyzed. It seems to the writer, however, that the various biases just mentioned are not large enough to have very much effect upon the very radical changes in the age profile of the population that have been sketched.

CAUSES OF CHANGES IN AGE COMPOSITION

The four components of change in total population, namely, births, deaths, immigration, and emigration, also affect its age composition. Let us consider how each one, in order, has been operating.

Births

The secular decline in the annual crude birth rate (births per 1,000 of the total population) contributed to the increase in the average age of the population and the proportion in the older ages. The birth rate⁷ dropped from 29.5 in 1915 to 18.4 in 1933. The ratio of the number of children under 5 to the total population indicates that the birth rate had been decreasing steadily during the nineteenth century. The slight recovery of the birth rate from 1934 through 1939 was probably merely a cyclical change by which part of the deficit of the depression period was made up. The writer inclines toward the view that the birth rate will soon resume its historic decline.

Under present practices, the age of retirement from the labor force is 65 years for many persons. Survivors of the small cohort of births of 1933, 2,278,000, will attain that age in 1998; and those of the record-breaking cohort of 1947, 3,876,000, will not be 65 years old until 2012. Meanwhile, those currently reaching the age of retirement are the cohorts born in the 1880's. Although the birth rate was declining at that time, the absolute number of births was increasing; and, furthermore, increasingly large proportions of successive cohorts were surviving the hazards of childhood and early adult life.

Deaths

In the United States, a declining mortality has accompanied a declining fertility. The trend in the former, unlike that in the latter, has experienced no recent reversal. The savings in lives have not

⁷ P. K. Whelpton, "Births and Birth Rates in the Entire United States, 1909 to 1948," in National Office of Vital Statistics, *Vital Statistics-Special Reports, Selected Studies*, Vol. 33, No. 8, September 29, 1950. Rates are adjusted for underregistration.

been confined to childhood and adolescence and accordingly the decline in mortality has also contributed to the rise in the proportion of older persons.

The crude death rate (the number of deaths per 1,000 of the total population) has been estimated at 15.5 in 1910.⁸ By 1949, it had dropped to 9.7. This comparison fails to tell the full story, however. Age-specific death rates increase progressively and sharply through middle age and old age; and, as has been shown, the proportion of the population in these older age groups has been mounting. Thus the changing age composition has masked a great deal of the improvement in the mortality conditions that underlie the crude rate.

A much more revealing measure is the expectation of life, or average future lifetime, at a given age. For the ten states and the District of Columbia that were in the Original Death Registration Area, the expectation of life at birth was 49.2 years for the period 1900-02. (The expectation for all persons in the United States at this time was undoubtedly even lower.) By 1948, this average had risen to 67.2 years for the entire country. According to each of the mortality assumptions underlying the recent three series of projections of population from the Census Bureau, the expectation of life at birth will continue to rise. For instance, under the high mortality assumption, it is expected to reach 68.7 years in the period 1955 to 1960, and under the medium and low mortality assumptions, 70.3 and 72.8 years, respectively.

The reduction of the death rate at any age increases the proportion of babies who survive to old age. Reduction in infant and child mortality without reduced mortality in later life or a declining birth rate would not necessarily lead to an increase in the median age of the population, however.

Historically, the most spectacular reductions in mortality have occurred in early life. The infant mortality rate (number of deaths under 1 year of age per 1,000 live births) has declined from 99.9 in 1915 in the Original Birth Registration States (it was undoubtedly higher at that time for the whole of the United States) to 31.0 in 1949 for all states. The high toll once taken by diarrhea and enteritis and by such contagious diseases of childhood as diphtheria, meningitis, and whooping cough has been reduced progressively to an almost negligible level. Death rates in adolescence and early adult life have

⁸ Based on estimated deaths in: Warren S. Thompson and P. K. Whelpton, *op. cit.* p. 234.

decreased less sharply but still quite appreciably. The most important advances at these ages have been made in the control of tuberculosis and other contagious diseases.

Many people think that practically no progress has been made in extending the expectation of life beyond age 45 and especially beyond age 65. It is true that at these ages a relatively high proportion of deaths are caused by the degenerative diseases, such as heart disease, cerebral hemorrhage, cancer, and nephritis, against which but little medical progress has been made. Of course, some of the deaths prevented from contagious diseases have been those of the middle-aged and aged, and furthermore the virtual extinction of many of these diseases has had an indirect effect upon the later death rates from degenerative diseases. As Louis I. Dublin points out: "When you eliminate typhoid fever from a community, for example, you cut down the number of persons with impaired hearts and other vital organs, and the same is true of rheumatic fever, of scarlet fever, and of other infections which, when they do not kill, often leave in their train serious impairments that accelerate the aging process and break down the physical resistance of the individual."⁹

Let us look then at the trend in the expectation of life at the older ages to see the total effect of these factors. For 1900-02 the expectation of life in the Death Registration States was 24.8 years at age 45 and 11.9 years at age 65. By 1948 in the United States as a whole, it stood at 28.0 and 13.4, respectively. For the period 1955 to 1960, the mortality assumptions in the Census Bureau's population projections imply the following average future lifetime:

Age	Mortality Assumption		
	High	Medium	Low
45.....	28.6	29.2	30.4
65.....	13.8	14.1	14.8

All of these represent improvements over the 1948 level.

In the study of death control at advanced ages, it is of interest to see whether age-specific deaths are declining for the degenerative diseases. For the Death Registration States (equivalent to the United States after 1932), the rates per 1,000 of the population in the age groups 65 to 74 and 75 and over are given in Table 1 for selected

⁹ Louis I. Dublin, "Significant Trends in the Health of Our Aging" in: New York State Joint Legislative Committee on Problems of the Aging, *Birthdays Don't Count*, 1948, p. 190.

dates. We observe that although mortality from all causes has declined, that from the main degenerative causes has increased.

TABLE 1
 Death Rates from the Main Degenerative Causes and from Other Causes at
 Ages 65 to 74 and 75 and over: 1947, 1930, and 1900.

	1947	1930	1900
65 to 74, all causes.....	44.6	51.4	56.4
Degenerative causes ¹	35.1	36.3	27.5
Other causes.....	9.5	15.1	28.9
75 and over, all causes.....	117.1	129.1	142.0
Degenerative causes ¹	87.9	86.0	52.9
Other causes.....	29.3	43.1	89.1

¹ Cancer, diabetes, intracranial lesions, disease of the heart, and nephritis.

Migration

The last factors affecting age composition are immigration and emigration. These factors have had much more influence in the past than in recent years. The number of immigrant aliens admitted reached a peak of 1,285,000 in 1907, declined sharply during World War I, and was prevented from recovering its former level by the quota legislation of 1921 to 1924. Immigration ebbed further during the depression and during World War II. The Displaced Persons Act of 1948 and its amendment in 1950 have represented only a slight fillip. Immigrant aliens during the past decade totaled only 908,521. Except for a few depression years of the 'thirties, immigrant aliens have usually exceeded emigrant aliens several fold. The movement of nonimmigrant aliens and that of nonemigrant aliens (tourists, students, persons in transit, etc.) tend to cancel over a period of years as do the movements of citizens arriving and departing. In summary, the net movement from all these sources has almost always been inward but has been declining in size.

Immigration and emigration alter the nation's age composition in a given year to the extent that the age composition of immigrants and emigrants differs from that of the base population. Historically, the migrants have had a relatively large proportion of young adults.

Since there has been such a sharp reduction in the volume of immigration in recent decades, our foreign-born population is relatively very old. In 1945, the median age of the foreign-born white population was 54.1 years and over one-fifth were 65 years old and over. We cannot say, however, that our population would be younger today were it not for these immigrants because they have had rela-

tively high fertility rates in the past. The important consideration is that net immigration nowadays has but little effect on population growth and on the age profile.

DIFFERENTIALS IN AGE COMPOSITION

Areal Differentials

There are differences in age composition among the various geographic subdivisions of the United States and among the various type-of-residence areas. These differences arise from variations in birth and death rates and from the selectivity of in-migration and out-migration. Particularly in the last three decades, internal migration within this country has had more effect upon the age profile of a particular area than has immigration from abroad.

Areal differences are illustrated by the four regions of Table 2. Perhaps the most striking feature is the relatively young population of the South. The proportion of the population that is 65 years old and over increased between 1940 and 1948 in each of the regions. Among the states in 1940, the aged were relatively most numerous in northern New England where they constituted 9.5 per cent or more of the population of all ages. The next highest proportions were found in Massachusetts, the Corn Belt States of Iowa, Kansas, Missouri, and Indiana, and in the Pacific Northwest, where the percentage ranged from 8.3 to 9.0. At the other extreme were the

TABLE 2
Median Age, 1940, Per Cent Who Were 65 Years Old and Over,
1948 and 1940, for the United States, by Regions.

Area	Median Age, 1940	Per cent 65 and over	
		1948 (est.)	1940
United States.....	29.0	7.5	6.8
North East.....	31.1	7.9	7.2
North Central.....	30.4	8.4	7.7
South.....	25.5	6.1	5.5
West.....	31.0	7.9	7.5

Source: See footnote ¹⁰

Southern States of South Carolina, North Carolina, and Alabama and the Southwestern States of New Mexico and Arizona where only between 4 and 5 per cent of the total population was 65 years old and over. On the whole, the first group were low birth rate

states and the second group high birth rate states. By 1948 it is estimated that the number and the proportion of the aged had risen in practically every state.¹⁰

*Residence Differentials*¹¹

The age pyramids presented in Figure 3 for 1940 show age profiles that are strikingly different for the urban, rural-nonfarm, and rural-farm populations. For example, the young adults and the middle-aged tend to be concentrated in cities. There is, however, considerable geographic variation in the relationship between urban-rural residence and the proportion of the aged. In 1940, only two of the nine geographic divisions conformed to the United States pattern—relatively most persons 65 years old and over in the rural-nonfarm population and least in the rural-farm. The racial composition of the population affects this pattern, as will be described below.

Although the rural-nonfarm population is intermediate in many characteristics, it represented, until the definition was revised in 1950, a hodgepodge of people living in several very different kinds of areas. Its definition in terms of persons living outside of incorporated places of 2,500 or more but not on farms covered such disparate groups as those in unincorporated suburbs, unincorporated villages, and non farm residences in the open country. The available evidence indicates that the suburban part contains a high concentration of young married couples and their children, whereas the villages contain a high concentration of elderly persons, such as retired farmers and widows of farmers. More meaningful statistics will be available from the 1950 census when, for the first time, both the suburban fringes around cities of 50,000 or more and the unincorporated places of 2,500 or more will be classified as urban.

Within the urban population, the median age varies directly with the size of the place. In fact, there is an orderly progression through the five urban and rural categories of Table 3, which represent decreasing density of settlement. The variation of the proportion 65 years old and over is not quite so regular, however.

¹⁰ U. S. Bureau of the Census, *Current Population Reports, Population Estimates*, Series P-25, No. 37, "Estimates of the Population 65 years old and over, for Continental United States, July 1, 1940 to 1949, and for States, July 1, 1948," March 20, 1950.

¹¹ The aged in rural and in industrial societies are discussed separately in the next two chapters. The following section consists mainly of a comparison of the age profiles of such societies.

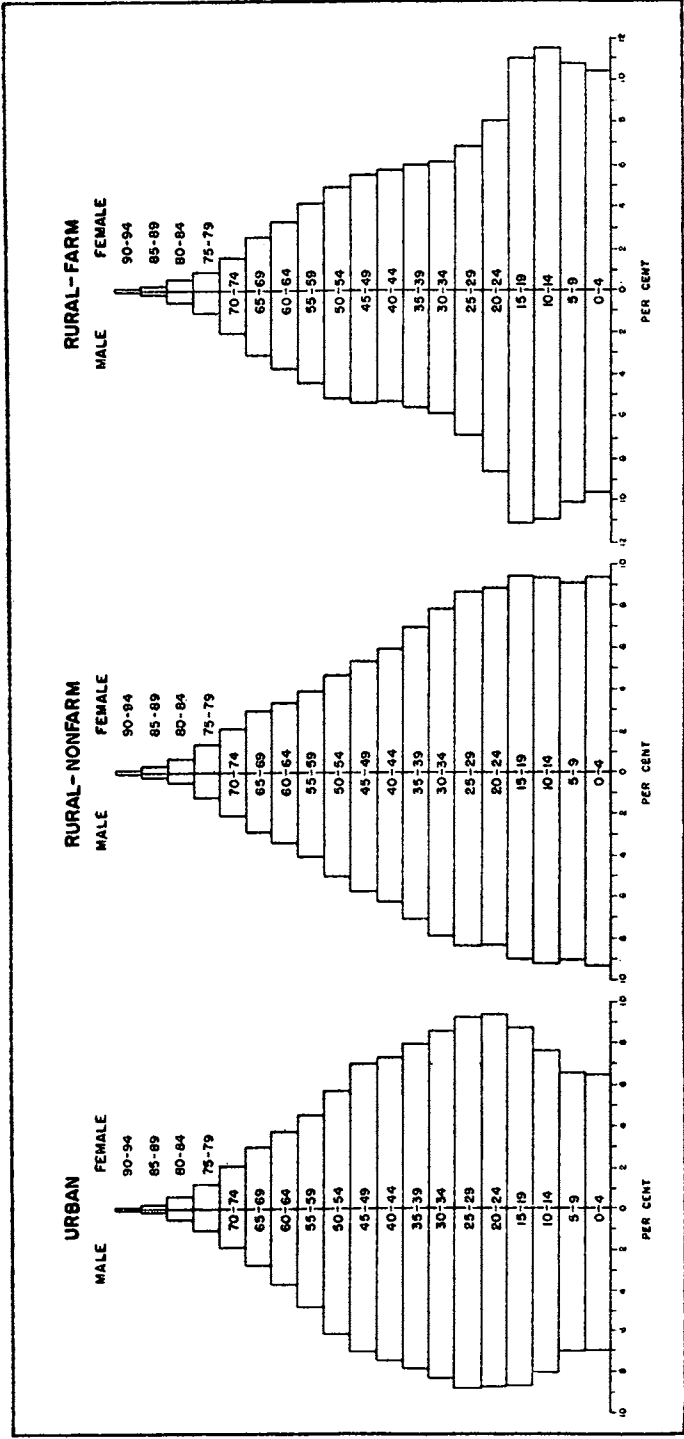


FIGURE 3 — URBAN, RURAL-NONFARM, AND RURAL-FARM POPULATION OF THE UNITED STATES, BY AGE AND SEX: 1940

TABLE 3
Median Age and Percentage Aged 65 Years and Over by Class of Place,
for the United States: 1940.

Class of Place	Median Age	Per Cent of All Ages 65 and over
Cities of 100,000 or more.....	31.8	6.5
Urban places of 10,000 to 100,000.....	30.5	7.0
Urban places of 2,500 to 10,000.....	29.5	7.6
Rural nonfarm	27.7	7.3
Rural farm	24.4	6.6

Source: U. S. Bureau of the Census, *Population*, Series P-10, No. 21, "Age, Color, and Sex Composition of the Population in Urban Places Classified by Size and in Rural Areas, for the United States by Regions: 1940," March 5, 1943.

PERSONAL CHARACTERISTICS AND AGE

Sex Differences

A rather constant ratio of about 106 male births per 100 female births gives the males an initial numerical advantage. However, there is a lower mortality rate at every age for females than for males. According to the 1940 Census, females first outnumbered males in the age group 20 to 24, but males again were more numerous from 40 to 64. The excess of males among past immigrants now operates to increase the sex ratio among the aged above what it would otherwise have been.

It is quite probable that the apparent excess of females in early adulthood represents a more complete enumeration of young women than of young men in the census. Eldridge and Siegel estimate that with complete enumeration and without immigration, white females would not outnumber white males until at about age 40.¹²

The age pyramids of Figure 2 for July, 1950, may be used to illustrate the different age profiles of males and females. They show a very heavy excess of women among the aged. The actual estimates are (in thousands) :

Age	Men	Women	Sex Ratio
65 years and over.....	5,484	6,125	89.5
65 to 69.....	2,252	2,359	95.5
70 to 74.....	1,554	1,729	89.9
75 and over.....	1,678	2,038	82.3

The comparative median ages are 29.3 years for males and 30.3 for females.

¹² Hope Tisdale Eldridge and Jacob S. Siegel, "The Changing Sex Ratio in the United States," *The American Journal of Sociology*, Vol. 52, p. 229, November, 1946.

By 1960 the Census projections result in a range from 6,816,000 to 7,152,000 for men 65 years old and over and from 8,252,000 to 8,976,000 for women. These projections represent 83 and 80 men per 100 women, respectively. The proportionate excess of elderly women has been increasing and will probably continue to increase.

The increasing proportion of women among the aged reflects, in large part, greater improvement in expectation of life than among men. Even in the period 1900-02, females had a decidedly higher expectation of life at birth than males; and the gap has been widening, as the following table shows. The data are for whites, but there are similar differences between nonwhite males and females. At age 65, women still have two or three more years of life remaining, on the average, than do males.

TABLE 4
Expectation of Life at Birth and at Age 65 for the White Population, by Sex,
for the Death Registration States at Selected Dates.

	At Birth		At Age 65	
	Male	Female	Male	Female
1955-60				
Low mortality.....	69.6	77.0	13.1	16.3
High mortality.....	66.6	72.6	12.6	14.8
1948.....	65.5	71.0	12.4	14.4
1939-41.....	62.8	67.3	12.1	13.6
1929-31.....	59.1	62.7	11.8	12.8
1900-02.....	48.2	51.1	11.5	12.2

Racial Differences

Most of the comparisons here will be made between the white population and the total nonwhite population, of which Negroes comprise 96 per cent. The latest published current estimates by color and age are for 1949.¹³ Nonwhites have a higher proportion of their population in each age group below 30 than do whites, but from that age on the proportion for whites is the higher. In 1949, nonwhites comprised only 6.8 per cent of all persons 65 years old and over even though they made up 10.6 per cent of the population of all ages. The nonwhite population has been a younger population than the white population since 1830, as is shown by the trend of the respective median ages. Changes in the age profile of the nonwhites

¹³ U. S. Bureau of the Census, *Current Population Reports, Population Estimates*. Series P-25, No. 39, "Estimates of the Population of Continental United States, by Age, Color, and Sex: July 1, 1947 to 1949," May 5, 1950.

have followed those of whites with a lag so that the nonwhite age profile of today is roughly similar to the white age profile of a generation ago. Negroes are much more concentrated in the South and on farms than are whites, and part of the regional and residential differences in age composition is due to these differences in racial composition.

Marital Status and Relationship of the Aged

Estimates derived from a national sample survey in 1949 showed the distribution by age and sex from age 45 given in Table 5. The higher survival rates among women than among men are reflected in the higher proportion widowed and the lower proportion still married. Because of the general reduction in mortality rates, the proportion of both widowed men and widowed women has dropped at the older ages. In 1900, 26.4 per cent of men 65 years old and over were widowers, and 59.3 per cent of elderly women were widows.

TABLE 5
Per Cent Distribution by Marital Status of Selected Age Groups,
by Sex, for the United States: 1949.

Age	Total	Single	Males		
			Married	Divorced	Widowed
45 to 54 years.....	100.0	7.9	86.9	2.2	3.0
55 to 64 years.....	100.0	8.8	81.4	2.0	7.8
65 years and over.....	100.0	8.3	66.3	1.7	23.8
			Females		
Age	Total	Single	Married	Divorced	Widowed
45 to 54 years.....	100.0	7.7	77.7	2.8	11.8
55 to 64 years.....	100.0	7.7	64.3	1.8	26.1
65 years and over.....	100.0	8.1	36.6	1.0	54.4

Source: U. S. Bureau of the Census, *Current Population Reports, Population Characteristics*, Series P-20, No. 26, "Marital Status and Household Characteristics; April, 1949," January 27, 1950.

As compared with younger adults, persons 65 years old and over were less likely to be living in a family in 1949 (78.4 per cent versus 89.3 and 94.3 per cent for persons 45 to 64 years old and 18 to 44 years old, respectively). Still, 72.8 per cent of these elderly men were heads of families (as compared with 82.0 per cent of men 45 to 64 years old). Considerably more aged women than aged men lived with a daughter or son. There remain about 2,400,000 old folks who lived outside of a family group. Of these, 1,600,000 lived alone or with unrelated persons in a private household. About 400,000 were lone

lodgers or servants. Almost 500,000 lived in quasi households such as hotels or institutions. Statistics for 1940 showed 221,965 aged persons in institutions; 125,630 in homes for the aged, infirm, or needy; 87,974 in mental hospitals; and less than 10,000 in other types. The proportion living in institutions was more than twice as great for the aged as for the general population.

Labor Force Status

A considerable body of census data is available on various social and economic characteristics by age. The aged differ markedly from other groups in education, unemployment, occupation, and income. For examination here, however, labor-force status is probably of the most importance.

In Table 6, labor-force participation rates are presented by age and sex, based on data from the April 1950 Current Population Survey.¹⁴ Among males, labor-force participation rises sharply with

TABLE 6
Per Cent of Population in the Labor Force by Age for the United States
Population Including Armed Forces Abroad, by Sex: April, 1950.

Age	Male	Female
14 years and over.....	82.4	31.9
14 to 17 years.....	33.9	16.6
18 and 19 years.....	73.8	45.3
20 to 24 years.....	86.9	44.4
25 to 34 years.....	94.4	33.5
35 to 44 years.....	96.5	38.0
45 to 54 years.....	94.6	36.9
55 to 64 years.....	85.1	27.3
65 years and over.....	45.0	9.5

Source: Unpublished estimates from the U. S. Bureau of the Census.

age reaching a peak in the age-group 35 to 44 years old. The rate declines fairly gradually; and even among men 65 years old and over, 45 per cent are still in the labor force. Among females, the pattern of labor-force participation by age is somewhat different. The rate rises to 45.3 per cent at ages 18 and 19; but then, because of the heavy demands of keeping house and rearing a family, it drops

¹⁴ The rates represent the total labor force in an age-sex group divided by the total population of that group including armed forces abroad. They therefore differ from the published figures in Series P-57, *Monthly Report on the Labor Force*, which represent the civilian labor force divided by the civilian noninstitutional population.

off to 33.5 per cent at ages 25 to 34. There is then a partial recovery to 38.0 per cent at 35 to 44 years when some mothers find their family responsibilities considerably lighter. Finally, labor-force participation declines again to a rate of only 9.5 per cent among the elderly women.

Census statistics on the labor force were not published before 1940, but the figures on gainful workers from earlier censuses are roughly comparable in level to the current series. In 1890, over half of the boys 14 to 19 years old were gainful workers; but because of the extension of schooling and of child labor laws, only about 38 per cent were in the labor force in 1940. Because of the manpower shortage during the war, however, the labor-force participation rate for these youths shot up to 71 per cent in April, 1944. Now it is down again to an intermediate position between the 1890 and 1940 rates. Changes in labor-force participation rates for men in the age groups from 20 through 64 have been relatively slight. Among the aged, however, there have been marked changes. In 1890, 74 per cent were gainful workers. The percentage in the labor force was 43 in 1940, 50 in April, 1944, and 45 in 1950.

The gainful activity of females has always been much less, of course; and the pattern of changes has also differed somewhat from that for males. Even in 1940 the age-specific proportions of women from 20 to 64 years old in the labor force were considerably higher than the corresponding proportion of gainful workers in 1890. These proportions reached peaks in 1945 and for age groups from 35 to 64 are still above the 1940 proportions. High birth rates are the main factor in the post-war decline in the gainful activity of younger women. The gainful activity of women 65 years old and over has always been low.

Now that we have examined both the changing age profile of the population and the trends in labor-force participation by age, we may view their combined influence on the age profile of the labor force. As may be seen from Table 7, persons 45 to 64 years old make up 29.9 per cent and persons 65 years old and over, 4.8 per cent of the 1950 labor force. Although the share of the middle-aged has increased markedly since 1890, the share of the aged has been almost constant. The proportion of young people (the age group under 20) is only about half of what it was in 1890, and there has been a smaller decline in the share of those 20 to 24 years old. The 1944 figures are interesting as an illustration of the impact of war upon the age composition of the labor force.

TABLE 7
Per Cent Distribution of the Labor Force by Age for the
United States: 1890, 1940, 1944, and 1950.

Age	1950	1944	1940	1890
14 years and over.....	100.0	100.0	100.0	100.0 ¹
14 to 19 years.....	7.5	11.8	7.8	15.1 ²
20 to 24 years.....	12.2	14.2	14.4	16.8
24 to 44 years.....	45.6	43.2	46.6	43.6
45 to 64 years.....	29.9	26.6	27.1	20.1
65 years and over.....	4.8	4.2	4.1	4.5

¹ 10 years and over.

² 10 to 19 years.

Unfortunately, there are no up-to-date projections of the labor force by age. We must fall back on Durand's 1948 monograph for projections to 1960.¹⁵ These were based on population projections made in 1947, and concepts of "normal" labor-force participation rates were used that were based on prewar experience at levels lower than those of full employment. The gainful activity of women and of the aged seems likely to continue at higher rates than anticipated. The 1960 proportion of those in the labor force who are 65 years old and over is probably too low at 3.7 per cent and should be much closer to the 1950 proportion. The absolute number of persons 45 to 64 years old in the labor force should rise from 19,000,000 in 1950 to at least 20,650,000 in 1960, but it is difficult now to make a similar forecast for the aged. In summary, however, it seems that the labor force is not aging so fast as the general population.

Wolfbein and his associates at the Bureau of Labor Statistics have computed the analogues of life tables for labor-force participation.¹⁶ The 1940 pattern of mortality and labor-force participation implies for males the following selected values:

Age	Average Number of Remaining Years of:	
	Life	Labor-force Participation
14.....	52.2	46.6
45.....	25.5	19.7
65.....	12.2	6.8

Under 1940 conditions, of a cohort of 100,000 male babies starting life together, 54,080 would be alive at age 65 and 36,426 would still be in the labor force.

¹⁵ Durand, John D. *The Labor Force in the United States: 1890-1960* (New York, Social Science Research Council, 1948).

¹⁶ Seymour L. Wolfbein, "The Length of Working Life," *Population Studies*, Vol. 3, pp. 286-294, December, 1949.

CONCLUSION

In conclusion, the American population has been growing older for generations. The high birth rates of World War II and its aftermath represented a "braking" influence, which should be temporary, however. At the present time, there are about 11,600,000 persons 65 years old and over. By 1960 these elderly persons should number between 15 and 16 million, and by 1975 at least 20 million. In the writer's opinion, it is highly probable that the proportionate share of the aged in the total population will also continue to rise. There have been fairly persistent differences in the age composition of certain areas of the United States and of the sexes, the races, and certain social and economic classes.

Projections of the aged population into the future are relatively reliable as compared with those of other ages. A catastrophe or a radical change in the rate of medical progress would be needed to upset the general trend that the writer has forecast. The future looked unusually problematical, however, when this chapter was written in the summer of 1950, with a third World War a real possibility. World War II fortunately had only a moderate effect on mortality, even of men of military age, and practically none on that of America's old folks. The evolution of weapons represents an increasing danger to civilians, of course. However, in those countries where civilians were most subjected to aerial bombings, mass murder, famine, and disease in the last war, the *proportion* of the aged rose at an accelerated rate because of the far heavier losses among men in the prime of life.

THE AGED IN INDUSTRIAL SOCIETIES

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THE CONCERN of one generation or major age-group over the problems presented by another is no new thing. The young in all societies constitute a problem for adults, for they must be supported and socialized until they are ready to take an active part in the life of the community. And in rapidly changing societies adults have long bewailed the deteriorating manners and morals of their own or their neighbors' children. In such societies it is also quite likely that children approaching maturity will know more than their parents about many things, with consequent damage to time-honored principles of age-respect and consequent material for uncomfortable humor.

Over the last few decades in modern industrial societies an interesting and significant change has occurred in the pattern of expressed concern over particular age-groups. Adults have not ceased to worry about their troublesome offspring, but they have begun to worry also about their own and others' aged parents.

What gives rise to this recent concern for the aged in industrial societies? Three intricately interrelated explanations may be offered: (1) Old people form a larger proportion of the total population in "advanced" than in "undeveloped" areas, and the secular trend in this proportion is steadily upward; (2) In both obvious and subtle ways, the industrial economy places a peculiar emphasis on youth while the aged are subject to special hazards of obsolescence of skills; (3) The patterns of organization and social norms of modern industrial societies present peculiar problems with regard to the opportunities for security and satisfactory activities for the aged.

These points will be discussed in unequal detail, owing to the coverage of other chapters. Together they permit a preliminary understanding of the connections between the social position of the aged on the one hand and the industrial mode of production and organization of society on the other.

Relation between Industrialism and Aging Populations

The aged are of special significance in industrial societies in part simply because they are numerous. In primitive and peasant so-

cieties life may not be nasty, brutish, and dull, but is very likely to be short. An important correlate of the increased levels of material production made possible by the industrial system is the increasing proportion of the aged in the population.

Table 1 shows the marked disparity in the proportion of old people in "advanced" and "undeveloped" societies. The "advanced" so-

TABLE 1
Proportion of Population Aged 65 and Over and Ratio of Those
Aged 15-64 to Young and Old Dependents in Certain
"Advanced" and "Undeveloped" Countries ¹

Country and Year	Population Aged 65 and Over as Per Cent of Total Population	Ratios of Population Aged 15-64	
		To Those Under 15 Years of Age	To Those 65 Years of Age and Over
CERTAIN "UNDEVELOPED" COUNTRIES			
India and Burma, 1931.....	2.2	1.4	26.3
Mozambique, 1940.....	2.2	1.2	24.3
Brazil, 1940.....	2.4	1.3	23.0
Colombia, 1938.....	2.9	1.3	19.2
Mexico, 1940.....	3.0	1.4	18.7
Chile, 1940.....	3.5	1.6	17.0
Philippines, 1939.....	3.5	1.2	15.5
Egypt, 1937.....	3.6	1.5	15.6
Turkey, 1935.....	3.9	1.3	14.0
Peru, 1940.....	4.3	1.3	12.5
Roumania, 1930.....	4.3	1.8	14.3
Palestine, 1931.....	4.4	1.4	12.7
Japan, 1930.....	4.8	1.6	12.3
CERTAIN "ADVANCED" COUNTRIES			
Netherlands, 1930.....	6.2	2.1	10.2
Canada, 1941.....	6.7	2.4	9.8
United States, 1940.....	6.8	2.7	9.9
England and Wales, 1931.....	7.4	2.9	9.3
Belgium, 1930.....	7.6	3.0	9.2
Germany, 1939 ²	7.9	3.3	8.9
Australia, 1947.....	8.0	2.6	8.3
Norway, 1930.....	8.3	2.2	7.6
Denmark, 1945.....	8.4	2.7	8.0
Switzerland, 1941.....	8.6	3.1	8.1
New Zealand, 1945.....	9.0	2.5	7.2
Sweden, 1940.....	9.4	3.4	7.5
France, 1936.....	9.8	2.6	6.6

¹ Based on official national statistical sources.

² Territory of 1939, including the Saar, Austria, and Sudetenland.

cities include the major industrial countries except the Soviet Union, where available statistics would seem to indicate a position about midway between the types indicated in the table. The "undeveloped" societies were selected in part for their direct or representative importance, in part in terms of availability of data. Column 1 of the table expresses the population aged 65 and over as a percentage of the total population for the country and year indicated. In this and the other columns of the table undue significance should not be attached to the exact rank order of countries, since the data derive from different census years and the age distribution in any population reflects vagaries in its own demographic history, including migrations and changes in birth rates as well as death rates. Considered as types, the two groups of countries exhibit sharp differences in the proportions of the aged. The variations internal to the groups appear to be roughly related to the time "modernization" has been going on and to the degree of its success.

Table 1 also indicates, in columns 2 and 3, the consequences of changing age distributions for the ratios of potential workers to probable dependents. In the "undeveloped" countries there are likely to be about one and one-half persons in the assumed working ages (15-64) to each person under 15,¹ whereas this ratio varies from two to three and one-half working-age adults to each person under 15 in economically advanced countries. In contrast, the aged constitute a much smaller burden of dependency in areas where industrialization is slight and recent.

The historical connection between industrial development and the increasing proportion of the aged is suggested by the comparisons given in Table 2, where the proportions of those over 65 around the end of the last century and at the most recent census are shown for a limited group of economically developed countries. With the exception of France, which has the longest record of low fertility and its consequences for age distributions, there has been a pronounced increase in the proportion of old people over the periods represented.²

¹ The arbitrariness of the limits of working ages is indicated by the likelihood that in "undeveloped" countries many persons under 15 years of age will be at productive work, partly because production is labor-intensive and partly because of the extremely limited opportunities and demand for formal training in productive skills.

² In terms of the types of data presented in Table 1, the United States in 1890 would appear on that table in the approximate position of contemporary Egypt or Turkey, with 3.9 per cent of the population aged 65 and over, 1.7 persons 15-64 to each person under 15, and 15.6 persons of potential working ages to each person 65 or older.

TABLE 2

Proportion of Population Aged 65 and Over in Certain Countries at Various Census Dates 1880-1901 and 1930-1947 ¹

Country	Population Aged 65 and Over as Per Cent of Total Population			
	Date	Per Cent	Date	Per Cent
Australia.....	1901	4.0	1947	8.0
Austria.....	1880	4.4	1934	7.9
Belgium.....	1900	6.1	1930	7.6
France.....	1891	8.3	1936	9.8
Switzerland.....	1900	5.8	1941	8.6
United States.....	1890	3.9	1940	6.8

¹ Based on official national statistical sources.

The demographic explanation of this changing age structure, although complex in ways of small importance here, is simple in its broad outlines. It may be stated briefly in terms of absolute and relative numbers of the aged.

With given fertility and barring the effects of migration, declining mortality will have the general effect of increasing the number of people living to an advanced age, the precise effect obviously depending on the differential impact of reduced mortality at various ages. Put simply, reduced mortality allows more people to die of "old age." ³

An increase in the *relative* proportion of the aged will occur if, subsequent to a decline in death rates, birth rates also decline, with a consequently reduced proportion of young people in the population. The amount of the relative increase of the aged will obviously depend not only on the magnitude of the changes in deaths and births but also on the length of time elapsed since the changes occurred. For example, suppose a population has had stable birth and death rates for a considerable time. Should birth rates suddenly be cut in half and remain at the new level while death rates remain constant, the highest proportion of old people (65 and over) would occur just short of 65 years later.

Both the absolute and relative increase of the aged have accompanied the process of industrialization. Every industrial society still

³ By the latest available life tables, a male child born in one of the "advanced" countries listed in Table 1 has an average expectation of life of 56 to 66, depending on the country he chooses as birthplace. A male child born in one of those "undeveloped" countries for which mortality data are available has an average expectation of life of some 30 to 47 years, again depending on the area. (Females have a uniformly higher average expectation of life at birth.)

exhibits in some degree the effects of the relative increase of the aged. Persons are now reaching retirement age who would not have survived infancy had they been born a decade earlier, or might not have been born at all had their parents married a decade or so later.

This relative increase arising from the time gap between declining mortality and declining fertility may be regarded as "transitional," although not thereby unimportant. There remains the fundamental relationship between economic development and improved chances for living out something like a full "span" of life.

What accounts for this relationship between declining mortality and industrialization? One is tempted to jump immediately to an explanation in terms of individualistic values associated historically with capitalism but somewhat inherent in any industrial system through the requirement of competitive occupational distribution. This explanation has merit, but only when set in a somewhat less idealistic perspective.

The decline in mortality in the Western World, which started before the conventionally ascribed beginning of the Industrial Revolution, has been in large measure a by-product of political order, improved transportation from surplus to deficiency areas, control of epidemic diseases, and improved sanitation and nutrition. In later stages of industrial development the tremendous increases in production, of agricultural as well as manufactured products, have often resulted in greater disparities in income, but also in rising minimum levels of consumption.

All of these changes can be explained without *direct* recourse to the "value of human life" as a variable. The conditions necessary for an industrial mode of production with an urban population are conditions conducive to reduced mortality.

Industrial societies then provide and depend upon the conditions for making mortality reduction appropriate and feasible, and the means for improving material welfare and medical services. The canons of rational efficiency of production, when added to the universal valuation of preservation of life, might then be thought to constitute adequate bases for linking the available means to the ends of health and longevity. Although difficult to prove, it does additionally appear that the individualization of motives and rewards in industrial societies is related to an especially strong emphasis on health and preservation of life. No society encourages early death as a positive value in the ordinary course of affairs. But in industrial

societies the greater means for preserving life are combined with the notion that life and health are fundamental values available to all within the limits of available services and technical knowledge.

Suppose that the rationale for mortality reduction were based solely on productive efficiency. The question would then immediately arise, Why not kill the aged on grounds that they are a drain on the social product? In view of the universal valuation of life-saving unless the community is obviously endangered by scarcity⁴—a condition difficult to imagine in peacetime in industrial societies—and in view of the values necessary to the system of individual motivation appropriate to industrial systems, such a policy if explicit would be impossible. The circumstances cannot be imagined which would make possible maximum devotion to productive efficiency during working life, followed by the certainty of death when no longer productive.

In sum, the relation between industrialism and increased longevity cannot be accounted for solely on the basis of increased supplies and improved medical techniques plus consideration of technical efficiency. It is necessary to add to the explanation the values attached to health and longevity for their own sake. Since these values are in some form universal, present knowledge lends only tentative support to the hypothesis that the motivational pattern typical of industrial societies places special emphasis on universal sharing of the benefits of vigor and long life. However, the nuances of the explanatory principles do not alter the basic association between industrialism and a high proportion of the aged in the population.

The Aged and the Industrial Order

Industrialization leads not only to an increased proportion of non-productive old people but also to an increased proportion of productive workers in the later years of life. Like the number of people beyond the ordinary retirement age, the proportion of older workers can be traced not only to declining death rates but also to later reductions in birth rates. The decline of birth rates leads to an increased relative number of persons who represent larger "baby crops" in

⁴ In many primitive societies the aged who require a great deal of care and those who would seriously impede or prevent movement of the group may be abandoned or even killed. It seems safe to say that life-preservation is a universal value, but that, like other social values, it is not maintained "at all costs" to the individual or the group. See Leo W. Simmons, *The Role of the Aged in Primitive Society* (New Haven: Yale University Press, 1945), especially Chap. VIII, "Reactions to Death."

earlier years.⁵ The "bulge" in the age structure, representing the gap between declining birth rates and reduced death rates, must either move to steadily higher ages or else "move out" through increased mortality at the working ages. The latter is a highly improbable alternative in peacetime. Every industrial country provides evidence of this "bulge," although its dimensions vary with the demographic history of each area.

Several implications of this generalized phenomenon of an aging labor force are important for their bearing on productive organization in industrial societies. These implications may be appraised in terms of three ratios: workers and dependents, older and younger workers, and labor force entrances and retirements.

Although age is by no means the sole criterion of inclusion in the labor force, it is obviously an important one. For some purposes of examining the relation between age structure and a productive system, it is convenient to make the arbitrary assumption that persons aged 15-64 represent the potential labor force and that those under 15 and over 64 represent "dependents." This assumption was made in the discussion of Table 1, above, with regard to the increasing proportion of aged dependents in industrial societies. If now these two groups of "dependents" are treated as one, a significant feature of industrial societies emerges. Despite the number of old people in these societies, they enjoy a distinctly favorable ratio of potential workers to probable dependents. In the "undeveloped" countries listed in Table 1, there are only about 1.3 persons 15-64 to each person older or younger. In the "advanced" countries the ratio is about 2 to 1. This difference comes about because in industrial societies there is a smaller mortality during working life (so that a person who reaches adulthood is more likely to be active 40 or 50 years later),⁶ and more importantly because efficient human reproduction reduces the burden of supporting the young. The dependency of the young is a very serious drain on the productive arrangements in "undeveloped" countries. Were this simply a question of high birth rates, it might be argued that large accretions to the potential labor force are thereby assured. Actually, however, high birth rates

⁵ For an exposition of this process and its projection into the future, see Frank W. Notestein and others, *The Future Population of Europe and the Soviet Union* (Geneva: League of Nations, 1944), Chap. IV, "Changing Age Structures, 1940-1970," and Chap. V, "Manpower."

⁶ Seymour L. Wolfbein, "The Length of Working Life," *Population Studies*, Vol. 3, pp. 286-294, December, 1949.

are partially offset by high mortality in infancy and childhood. This means that many children are supported and educated formally or informally at very considerable social cost without living to contribute to their own and others' support. The waste involved in such circumstances is obvious and significant. Viewed solely in these terms, the industrial societies have clear advantages in age distribution, always assuming that economic arrangements permit effective utilization of potential manpower.⁷

The potential advantages to industrial societies in the ratio of workers to dependents may be offset by other characteristics of age distributions in industrial societies. One very important consideration is the ratio of older to younger workers. Durand shows that in the United States male workers 45 and over comprised only 26.0 per cent of the male labor force in 1890, 34.2 per cent in 1940, and systematic projection leads to an estimate of 36.9 per cent in 1960. Those under 25 comprised 27.7 per cent in 1890, only 19.0 per cent in 1940, and may fall to 15.3 per cent in 1960.⁸ Thus the oldest workers were slightly outnumbered by the youngest in 1890, but by 1940 had become twice as numerous as the youthful members of the labor force. Although increased educational exposure during this period had some effect on delaying entrance into the labor force, this change is due mainly to the factor of the changing age of the population.

It is not possible here to explore the full implications of this change in labor force composition. It may be appropriate, however, to mention some of the more obvious problems. One of these is the geographical and occupational *mobility* of workers. Family responsibilities, property ownership, community ties, and probable attitudinal changes combine to make the older worker less sensitive to geographical and occupational income differentials than is his younger and less encumbered colleague. In a very real sense, the longer a worker's experience in one place and occupation, the greater his "trained

⁷ Part of this advantage is a "transitional" phenomenon, since no industrial society has yet absorbed the full impact of the "bulge" in the age structure as it affects the number of persons over 65. The ratio of persons in the working ages to those over 65 is likely to be even lower therefore in the immediate future. Meanwhile, the upward swing in birth rates following World War II, even if temporary, will affect the ratios here discussed. It is virtually certain that the 1950 census will show that the United States now has a lower ratio of working ages to old and young dependents than in 1940.

⁸ John D. Durand, *The Labor Force in the United States, 1890-1960* (New York: Social Science Research Council, 1948), p. 40.

incapacity" for taking other jobs. A related problem deriving from the greater proportion of older workers is that of *efficiency* on the job. Here one must balance decreased physical stamina and mental ingenuity against accumulated knowledge and experience. Whether the net effect is positive or negative will depend in large measure upon the organization of productive work and upon the degree to which employers and labor unions are sensitive to the problem.

A further problem may be regarded as another dimension to the problems of mobility and efficiency: it is the *flexibility* of an aging industrial labor force with regard to the changing demand for skills. The industrial system of production depends upon and fosters rapid technical change. Now technology is often discussed as if it were a factor external to and impinging on labor, but it may also be viewed as the useful knowledge and skills represented in the productive sector of the population (including inventors and engineers as well as production workers). Technical innovation, fostered by one sector of the labor force, has two significant effects upon the demand for skills as related to age.

1. Any technical change, whether an alteration of process alone or of both product and process, is likely to cause some degree of obsolescence of skills. This obsolescence may come about either through the demand for different skills of something like the same relative order or through the dilution of skills through further mechanization and specialization. Specialization decreases the monopoly by the old and experienced of fairly complex but relatively static knowledge of social importance. This does not mean that all workers become unskilled, as is sometimes foolishly asserted, but only that any given command of skills is subject to fragmentation and obsolescence through technical changes.

2. In any case, however, continued technical change requires a continued supply of new and high-order skills, whether as "operators" of the process or as designers, technical planners, and coordinators. A new occupation added to the repertoire of the labor force is likely to be filled by a new or recent entrant to the labor force. Conversely, the older an occupation, the greater the probable average age of its practitioners. This principle is commonly known and its implications commonly missed. The formal training programs for the young, whether at intermediate or advanced levels and whether public or private, have been relied on to provide the ever-changing vocational skills. With a reduced proportion of younger workers, there is reduced adaptability to technical demands.

If the industrial system is to maintain anything like its historic dynamism, it would appear that adult retraining programs, designed to help supply the changing demand for skills, must be a definite part of social policy in the older industrial societies. This is a case where a change in social organization may serve both the interests of the individual worker whose skill has become obsolete and the interests of the economy as a whole.

This leads to a consideration of the third ratio mentioned above, that between labor force retirements and entrances. For the present and near future, severances may nearly equal additions, unlike the usual situation in populations recruited by high fertility and eroded by high mortality even in the middle years of life. The principal implication of the decreasing proportion of young workers has already been indicated. One or two other comments are in order. An increased number of retirements for "superannuation," whether voluntary or not, clearly poses problems of pensions or other support. Whether a large annual cohort of new workers is advantageous or not very much depends upon the state of the labor (including military) market. During the depression of the early 1930's the ranks of the unemployed were steadily swollen by new job aspirants without a correlative withdrawal of older workers by death or retirement. Aside from the problem of labor force flexibility discussed above no clear conclusion can be drawn from the probable decrease in the proportion of young labor force entrants in the near future.

It is possible, however, to conclude that the increasing age of the productive sector of the population in industrial societies presents clear challenges to public policy. It has been suggested that attention needs to be given to the organization of production for maximum adaptability to the characteristics of older workers, at the same time that the flexibility of the labor supply itself is fostered by adult retraining facilities. Changes in retirement age and employment policies will also affect the quantity and quality of labor. But even so the problem of the aged in industrial societies will not have been solved.

The Aged and the Institutions of Industrial Societies

Perhaps the fundamental problem of the aged in industrial societies is that they have no definite place in the social structure. That is, there are no regular, institutionally sanctioned responsibilities for their care and social participation which square with both traditional values and the requirements of an industrial system. To test these

assertions, rather careful attention must be given to the place of the family in industrial societies.⁹

The family system of the modern Western World approaches one extreme along a range that extends from complete emphasis on extended biological kinship (the consanguine family) at one pole to complete emphasis on the marital relationship and its immature progeny (the conjugal family) at the other. Along this range the family in industrial societies is clearly nearer the conjugal type, and the degree of its approximation to the pure type stands in some proximate relation to the degree to which the various societies approach the pure type of urban industrialism as a mode of social organization. The most frequent appearance of the pure conjugal family appears to be in the United States.

The significance of this family type for the role of the aged may best be seen through comparison and contrast with other kinship systems. It is the universal function of the family to provide sanctioned sexual relations and legitimate reproduction, to educate the child in attitudes and at least partly in facts, and to establish the child as a member of society as a whole. A child is a member of society only by membership in an effective kinship unit, or in some substitute unit recognized as such.

In most societies, however, the immediate family of reproduction is part of an extended kinship system, so that the child is *structurally* related to siblings and parents but also to grandparents and collateral relatives descended from common ancestors (uncles and aunts, cousins of various degrees). *Structurally* related is emphasized because that form of kinship system sets definite patterns of social rights and responsibilities among kinsmen, varying with their relationship as defined in the structure. A most important attribute of the consanguine system in the present context is that it retains its forms of social relationships throughout the life of any member, shifting only by change of status from child to parent or grandparent (and their collateral equivalents) as a normal part of growing older. The important point is that the child remains a member of the same extended kinship group, with definite and continuing rights and responsibilities, even through marriage, parenthood, and old age.

⁹ Although the exposition here differs sharply in emphasis, it follows the general theoretical position developed by Talcott Parsons in *Essays in Sociological Theory, Pure and Applied* (Glencoe, Ill.: The Free Press, 1949), Chap. X, "Age and Sex in the Social Structure of the United States," and Chap. XI, "The Kinship System of the Contemporary United States."

Neither adulthood nor marriage severs ties with the parental family and its broader kinship liaisons. The aged in such a system tend to acquire increasing power and responsibility, with correlative security, at least as long as they retain their normal faculties.

The extreme conjugal family stands in marked contrast to such a system. As in any system, the conjugal family is the nexus between the child and society. But the family into which a child is born and the family into which his children are born are two quite different units, only tenuously related through the single individual. In the conjugal system when an adult married person refers to "his" family he must perforce mean his wife and immature children and not his parents or brothers and sisters. In short, the conjugal family in the type case involves a radical separation of the generations, and of adult brothers and sisters. They are all members of different families. Each married adult male has a wife who also no longer belongs to the kinship unit into which she was born.

The implications of this system for the role of the aged are clear and far-reaching. Old people have *no* definite claim upon an extended kinship group for support and social participation. The primary obligation of each brother and sister is to his or her *own* family, *and the same is true for married children.*

The increasing incidence of the conjugal family type in industrial societies is often interpreted in terms of "loss of functions" to more specialized agencies (government, factory, church, school, organized recreation). With this interpretation there are commonly explicit or implicit overtones of moral condemnation for those who have allowed timeless principles of kinship obligations and solidarity to fall into neglect. These interpretations usually rest upon a fundamental misapprehension of the structural requirements of modern industrial societies.

The conjugal family makes possible and indeed fosters the determination of adult status upon the basis of qualities and achievements of the individual as they are developed through childhood and maturity. This system of filling adult occupational and other positions is quite different from the determination of adult status at birth on the basis of criteria such as kinship group and birth order, over which the individual has no control. The efficiency of the industrial system rests upon the recruitment of individuals as individuals, for their technical competence and not for their membership in a kinship system. An adult can be assigned a status appropriate to the system and

various rewards for his own performance in the occupational sphere only if he is not directly and completely dependent upon the success of his parents and siblings. This mode of occupational placement and reward requires also a substantial amount of movement from place to place and between occupations, and the necessary motivation to seek enhanced opportunities. Changes of this sort are most easily accomplished if the family is sufficiently small and free from entangling alliances with kinsmen.

The family universally prepares the child for adulthood, with or without the help of other agencies. It follows from the thesis presented here that the conjugal family supports the industrial system by preparing the child for adult independence of his parents and siblings.

Once this relationship between family and society becomes clear, considerable light is thrown on many contemporary problems associated with the aged. For example, the care of the aged is often discussed in terms of urbanization and urban housing. But urbanization simply gives a geographical dimension to the basic phenomenon of occupational change. And housing is merely a symptom and not a very reliable one at that. Comparisons of the ease of housing the aged in rural communities as contrasted with the cramped space in urban apartments are likely to involve unrecognized comparisons through time and across social strata. Not all rural families live in large, rambling dwellings where aged parents may be given a room and a corner in a spacious living room. The spacious dwelling unit is a rarity in rural as in urban communities; crowding is common in both.

The hidden comparison through time is that between the standards and expectations typical of the semi-isolated rural community at the turn of the century and those of urban dwellers (but also of many of their rural contemporaries) at the present time. Crowding is resented only when it is recognized as such, and it is increasingly alleged precisely because the basic structure of the modern family encourages spatial as well as social separation of the generations. Married children have both the right and the duty to "lead their own lives."

The hidden comparison across social strata is that between low-income farm families, where more traditional types of kinship relations are likely to prevail, and white-collar and professional groups in the cities, which are precisely the most mobile as compared with parental occupations and status and as compared with the aspirations

and expectations of other occupational strata. It is for the competitor in the urban occupational sphere that the separation of generations is most effective.

The unwillingness of the young married adult to make serious sacrifices for the benefit of his parents is then something different from a general attrition of morals. If he makes such sacrifices he not only prejudices his own legitimate aspirations but also jeopardizes his responsibilities to his own children.

The foregoing structural analysis is, however, a little too neat. The conjugal family is *not* universally adhered to in industrial societies. In major sectors of the social systems of Western Europe, where change has been somewhat more gradual, and in older rural communities and among the very poor and families representing several generations of wealth in the United States, the generations and collateral kinsmen retain a variable but important range of social ties. These areas and sectors of the social order are precisely the least mobile in terms of generational change and of movement within a single career. It is therefore not accurate to refer to the pure conjugal family as *the* kinship system of industrial societies, but only as the kinship system best integrated with urban industrialism.

This lack of uniformity in practice is also reflected in the normative system. The conjugal family is *not* completely institutionalized, even in the United States. An adult married person may be criticized both for continuing to consider himself a member of his parental family and for failing to provide for his aged parents. Age-respect, honor to one's father and mother, and indeed intimate affectional bonds between generations are traditional values that do not mesh neatly with inter-generational mobility and achievement of social status. Parents are expected to provide maximum opportunities for their children, but without commensurate assurances for themselves.

Persons now in or approaching inactive old age were reared before the end of the last century, quite probably in a rural environment and certainly when urban industrialism was less firmly entrenched. They are likely to be kinship-oriented to a degree that disturbs their children and bewilders their grandchildren. Here the lack of clarity and uniformity as to the nature of the American family system may have acute consequences: the total incompatibility between the expectations of aged parents and their children as to their mutual obligations. Of the two, the children are the more likely to be ambivalent because of the inconsistency between the older expectations and the newer ones.

It is important to emphasize that this ambivalence is not one between moral obligation and crude self-interest. It is a moral obligation to the middle-class breadwinner to respect his primary responsibility to his own immediate family.

Only on the most superficial view can the sloppy sentimentality surrounding Mother's Day be attributed to clever commercialism. Its emotionalism is also cultivated and sanctified in urban churches. But the basic factor is surely the widespread prevalence of uneasy consciences about aged parents cut off from their adult offspring.

At the same time there are manifold signs of a sense of frustration among the aged. As Parsons suggests,¹⁰ it is highly probable that the demand for pensions, especially as represented in pension clubs, is only partly a search for financial security. Emotional security is perhaps the acute need of the aged, and this can be assured only by stable and fairly intimate relationships that are regarded by participants as good in themselves and not as inferior substitutes.

There is a kind of deep tragedy in the vagaries of the normative patterns as they now stand. Parenthood, far from being "old age insurance," is a type of sacrificial duty. In the urban environment large families generally hamper both generations in competition for status. But even the small family does not assure the position of the parents after their children reach adulthood. The parents' freedom from responsibilities is likely to be too late for effective utilization for enhancement of the parents' social status of the money, time, and effort formerly spent on the young. Even more important is the lack of satisfying social participation, as the available activities substituted for those centering around the family are likely not to provide the emotional sense of belonging and being needed. The aged are in effect members of no family except their own truncated one. If that is further severed by death of one member, the awkward question of living arrangements arises. And there are few definite and approved patterns for filling the gap.

The tragedy, however, does not consist primarily of the separation of the generations. Rather it arises from the differing expectations of the aged and their children as to rights and responsibilities. This in turn derives from the incomplete institutionalization of the conjugal family. Failure to recognize this situation accounts in large measure both for the lack of attention to the social participation of the aged

¹⁰ *Op. cit.*, pp. 231, 247.

and for the apparent feeling of the aged that available activities are inferior substitutes for kinship bonds.

The same complex process loosely called "urbanization" and "industrialization" has made it possible for more people to reach old age and has made it difficult or impossible for the aged to be used and supported in conformity with older patterns and values. It has been argued here that continued efficiency and technical innovation in the industrial system will require modifications in the organization of productive assignments and definite provisions for dealing with the obsolescence of skills of the older worker, probably through adult retraining. It has also been argued that the type of family system best fitted to the industrial order is incompletely supported by social norms. This fact has further implications not only for the expectations of the aged but also for the scant attention society has given to the emotional as well as financial security of old people and to the types of social participation which will be within the capacities and expectations of the aged.

The problems of the aged will be alleviated but not solved by pensions or other forms of financial security. The reintegration of the aged into an extended kinship system would entail tremendous sacrifices in the organization of industrial societies with their attendant norms—sacrifices of such degree and complexity as to result in a quite different form of productive organization. A solution consistent with the industrial order would require new activities and organizations *appropriate* for the aged, appropriate being defined not only in terms of their capacities and interests, but also in terms of ethical principles commonly held in the society at large.

THE AGED IN RURAL SOCIETY

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THIS EXPOSITION must be considered as exploratory and tentative. Most of the research on which a satisfactory treatment of this topic might be based is still to be initiated; and the scope and intricacy of the subject make it unlikely that results in significant amounts and adequate quality will be forthcoming in the near future. In this chapter we merely touch upon three aspects of the general problem: (1) the relative importance of the aged in rural populations; (2) the status of aged persons in rural society; and (3) the variations from time to time and place to place in the position of the aged in country districts. For purposes of this discussion rural society has been conceived of as embracing the great civilizations in which agricultural and pastoral activities have been the occupations of the lion's share of the population as well as the rural portions of such highly urbanized and industrialized countries as those of Western Europe and the United States.

The Relative Importance of the Aged

The relative importance of the aged in any society depends upon three factors, namely, the birth rate, the death rate, and migration. Except in local situations, where migration from an area may leave excessive proportions of the old people and those who are incapacitated, the first two of these are the major determinants of the proportions of the aged in the population. The following generalization is fairly simple and can be verified: Where a high birth rate is accompanied by a high death rate the proportion of persons in the advanced ages is very small; and, on the other hand, where a low birth rate is accompanied by a low death rate, or a long expectation of life, the percentages of persons in the ages above 65 are comparatively great.

The great rural civilizations of historic times, and most of the contemporary ones as well, have been characterized by high birth rates. Those of the past have also been subject to very high death rates, a condition that still prevails in many of the more important of the world's great rural regions such as those of China, India, Brazil, Mexico, and much of Russia. As a result, on a relative basis, in such societies aged persons are of relative unimportance numeri-

cally in comparison with those in industrialized societies such as the United Kingdom, the United States, France, or Germany; and this is true in spite of the fact, elaborated upon below, that in an industrial society, the rural segment of the population contains far more than its proportionate share of persons who have reached the twilight of life. Thus from the standpoint of numbers alone, great rural societies are characterized by relatively few elderly folk, and an abundance of children and persons in the early stages of the productive span. Consider a few of the most recent data as taken from the 1948 *Demographic Yearbook of the United Nations*.¹ As given by this authoritative source, the percentage of the population aged 65 years and over was only 2.2 in India, 2.9 in Mexico, 2.5 in Brazil, 2.9 in Colombia, 4.4 in Romania, 4.9 in Poland and (probably) about 4.5 in the Soviet Union, to mention only enough countries to give a fair indication of the situation in the most rural portions of the earth's surface. China is omitted because the comprehensive data are lacking, but in all probability the percentage in that vast country would not exceed 3.0. In sharp contrast with these low proportions of old people, is the situation in the countries in which a rapid industrialization and urbanization have been accompanied by a precipitous decline in the birth rate, on the one hand, and the enjoyment of the fruits of modern civilization, through a reduction in the death rate, on the other. As given by the same reliable source indicated above, at the latest census the percentage of the population aged 65 and over was 7.5 in England and Wales, 9.8 in Sweden, 7.6 in Italy, about 10 in pre-war Germany, 9.8 in France, and 6.9 in the United States. This figure for the United States is for the year 1940. But only fifty years previously, when the birth rate was still comparatively high and before the life expectation was greatly increased through the saving of infant and youthful lives, the corresponding percentage was only 3.7.

As rural-urban differentiation within a society proceeds, so that the urban population comes to rival or exceed in number the rural portion, the relative importance of old persons in the two segments becomes vastly different. Under such circumstances, excellently illustrated by what has taken place in the United States and in most of the Western European countries during the 20th century, the rural districts contain far more than their proportionate share of the elderly folk (as they also do of the children) while the cities are

¹Lake Success, New York, 1949.

characterized by excessively high percentages of persons in the productive ages of life. Elsewhere I have sought to describe the nature of these differences in the following words:

Much sociological interest is attached to the fact that the age constitution is one of the most obvious, uniform, and persistent ways in which the make-up of the rural population differs from that of the urban. The principal differences may be summarized as follows: (1) the country population includes large proportions of children; (2) the rural population has low percentages of its population in the ages 15-45, i.e., the "productive" years of life; (3) the country contains a disproportionately large share of aged persons. The city, on the other hand, has a great scarcity of children, high proportions in the productive ages, and relatively few aged persons. If the rural population is divided into rural farm and rural non-farm segments, the differences between the age structures of the various residential groups stand out even more clearly. Then it becomes obvious that the nation's children are concentrated on the farms, its persons of productive ages in the cities, and its elderly folk in the villages, small towns, and suburban areas.²

On another occasion, so great was the observed tendency of elderly people to concentrate in the small centers dispersed throughout the United States, that the rural village was characterized as "America's 'Old Folks' Home." Working with 1930 data, when in all probability the differentiation was much less pronounced than that prevailing in 1950, it was found that:

. . . 3,087 incorporated villages with between 1,000 and 2,500 inhabitants (the only ones for which data are available) contained only 3.9 per cent of the national population. But in these same villages resided 5.6 per cent of all persons aged 65 and over in the United States. On a relative basis, this means that the aged population was 40 per cent more important in the villages than it was in the national population. Furthermore, in almost every state in the union, the village population contained a disproportionately large share of the aged. . . . Throughout much of the nation and particularly in the northern and midwestern states, the villages contained old persons in proportions that were half again as high as the percentages in the respective states.³

Attention also has been directed to an analysis of the factors which are influential in bringing about this differentiation in the distribution of the aged, of their concentration in the nation's rural sections, and especially its villages, and their relative scarcity in the towns and cities. These have been summarized as follows:

² T. Lynn Smith, *The Sociology of Rural Life*, Revised Edition (New York: Harper & Brothers, 1947), pp. 73-75.

³ T. Lynn Smith, "The Role of the Village in American Rural Society," *Rural Sociology*, Vol. 7 (March, 1942), pp. 18-19. Cf. T. Lynn Smith, "Some Aspects of Village Demography," *Social Forces*, Vol. 20 (October, 1941) pp. 16-21.

The differences in the age composition of rural and urban populations seem to be the result of several factors. In the first place, the differential birth rate of country and city gives the rural districts excessive proportions of children. In the second place, there is always a strong movement of young able-bodied persons from the farms to the city. Part of this arises out of the specialization and division of labor in the cities which creates varied economic activities and opportunities that attract young and vigorous persons from the country. . . . In the third place, if the rural person is to migrate to the city it must be while he is young, energetic, capable of making adjustments, and before residence in the country has developed ties such as family obligations, sentimental attachments, community responsibilities, deep-rooted habits, and property ownership. After the age of 25 or 30, few persons leave the country for the city. In the fourth place, after farm people attain the age of 45 or 50, a great many of them take up residence in the nearby village or small town. This is especially true of the widows of farmers. Finally, many a person in the older age groups who has spent the productive years of his life in the cities moves to the country or to a small town to spend the twilight of his life. For some such a transfer represents the attainment of a lifelong objective, the goal of long-continued work and struggle; for others this landward migration represents an attempt to make slender resources go as far as possible in a place where living costs are low, after their earning power has been seriously curtailed or shut off entirely. But in either case this backwash of elderly people toward the land helps swell the numbers of the aged in the villages and the open country. Combined with the greater expectancy of life in the country, it accounts for the high proportion of oldsters in the rural population.⁴

Finally, a development now taking place in the United States may point to radical changes in the relative importance of the aged in the urban-influenced rural societies of the future. This is the already strong tendency for elderly farm folk to take up residence in the towns and cities along the Pacific and Gulf coasts, particularly California and Florida. The migration of old people, large numbers of whom have spent their lives on farms, to these sections of the country already is running into the hundreds of thousands each year; and the likelihood is that the movement will increase. Are we to have a specialization by areas in which the bulk of those in the declining years of life will be concentrated together in selected portions of the country? If so it will materially alter the proportions of the aged in the farming districts of the nation.

The Social Status of the Aged

That there have been many horrible examples of callous neglect, cruel abuse, and heart-rending ingratitude to the aged in rural societies

⁴ Smith, *The Sociology of Rural Life*, pp. 76-77.

goes without saying. Unfortunately such occurrences seem to be inevitable concomitants of social life, urban as well as rural. Since by far the greatest part of man's existence has been passed amid rural surroundings, and the overwhelming share of all the earth's inhabitants has been rural people, it is true that many of the most pitiful cases would be found in the rural districts. In spite of all these exceptions, notwithstanding the horrible examples that may be pointed out, on the whole the status or position of the aged in the typical rural society must be regarded as highly satisfactory in terms of our culture's standards.

This is not to say that the rural districts contain any "fountain of youth" in which all the ills of old age may be washed away. Nor is it merely a nostalgic idealization of a golden arcadian age that existed somewhere in a remote period of the past. Even in a society such as the United States at mid-century, one in which social differentiation and the division of labor have proceeded to great lengths, a society in which the urban-industrial way of life has emerged supreme in comparison with the rural-agricultural pattern of existence, the position of the elderly persons of the rural population probably is generally somewhat superior to that of the urban old folk.

Probably in more typically rural societies the advantage enjoyed by the aged in the rural districts, in comparison with their urban fellows, is even greater. As a matter of fact one could probably demonstrate beyond all possibility of reasonable doubt that the relative position of the aged reaches its maximum in the most highly developed rural civilizations. This is to say that when the rural mode of existence rules supreme, the lot of the aged is probably far superior to what it is in pre-rural (primitive) groups, on the one hand, or in the more highly industrialized civilizations, on the other. If, in the latter, those in the twilight of life are not relegated to a position far less desirable than that once enjoyed by their ancestors who followed the agricultural and pastoral modes of life, it is probable that an exceptional case is under observation. Such cases whenever found should be studied carefully in the hope that they may point the way to a more satisfactory solution of this aspect of modern social pathology.

The limitations of space do not permit an elaborate historical verification of the proposition stated above. Nor is it possible at this time to present a thorough examination of the roles of the aged in the great rural societies of India, China, the Near East, or Latin

America. But a few basic observations concerning the nature of rural society may be given; and these may help set forth the major reasons why the situation of the aged in rural societies, or in the rural part of a rural-urban civilization, seems to be relatively favorable.

The first factor which helps account for the high position occupied by old folks in rural society is associated with the nature of the domestic institutions and family life. In the rural world family undertakings, in contrast to individualistic activities, form the warp and woof of the daily pattern of living. In a civilization that is essentially rural the production of raw materials, the processing of food products, the manufacturing of clothing, the provision of shelter, and almost all the other essential economic activities are carried on by the members of the family on a household basis. Specialization by tasks has not yet graded the population by age and sex and differentiated a nation or a region into a series of interdependent areas, each producing only a small part of the essentials of life. The activities of all the persons in the household, including those of the aged persons, are integrated into the production of the basic necessities. Consumption tends to be on the basis of need and not closely related to the individual's contributions to the gross product. Before the division of labor has been carried to extreme degrees, before the specialization by areas and by tasks is highly developed, the young, vigorous, and able-bodied have little or no alternative except that of participating wholeheartedly in the communal activities of one of the basic social cells—one of the families or households. To these activities the aged contribute, and in good measure, for they are the possessors of much of the technical skill and managerial experience or "know-how" enjoyed by the society; and from the common pool, they, along with the others, enjoy a substantial part of the goods and services that are available for consumption. As the rural mode of life gives way to the urban, these features become less pronounced, but even in a highly urban and urban-influenced society such as the United States, they have not entirely disappeared.

But it is not merely the collectivistic nature of rural economic activities that give the aged a fairly satisfactory relative position in a highly rural society. In a predominantly rural civilization the overwhelming influence of the family permeates all social relationships. Under such circumstances the domestic unit is usually the larger kinship which is known as the great family, and not merely the married pair and their own children; and the society in which the

influence of this extended kinship group is paramount is correctly called familistic. All rural societies are not as familistic as the Chinese, to mention the classic example, or the Brazilian, the Louisiana French Acadian, or the Sicilian, to indicate a few others chosen more or less at random. But familism, the state in which influences emanating from the domestic units dominate all social forms and relationships, is intimately associated with the rural pattern of living. With a few notable exceptions, it is practically absent from the urban scene. This, in turn, means that in a highly rural society all the individuals in a family unit—the young, the middle-aged, and the old people—are almost completely submerged in the intimate kinship group. The needs, wishes, desires, welfare, and activities of the group are of paramount importance, and those of the individual definitely secondary. Persons of both sexes and all ages function only to a slight extent as individual personalities and largely as parts of one of the basic kinship units. In this connection much has been made of the fact that marriage is more of a group than an individual matter. Under such circumstances the personal desires of the persons being mated count for little, the wishes of the family group for much. This is useful for showing the extreme degree to which the individuals are submerged in the group, but analysis of almost any other aspect of the social relationships would also serve the same purpose. The important fact in connection with the present discussion is that elderly persons are integral parts of this family group, and furthermore that they are the moving, directing, and controlling agents in this old rural type of collective entity. Because of this their status in such a society is greatly enhanced over that they are privileged to enjoy in societies where familism does not persist. It would be absurd to expect the aged to occupy a comparable position in a society in which children upon reaching maturity leave the parental roof to establish small, independent family units of their own.

The numbers involved in the household unit is another factor closely related to the status of elderly people in rural society, or even in the rural part of a highly urbanized society. The basic facts in this case are so well known as to need no elaborate substantiation—as compared with the urban household or family, the rural one is large and composed to a much greater extent of persons other than parents and their own offspring. And this is highly significant in the present connection. When a household is large and the quarters it occupies adjusted to accommodate a dozen or more people, the

presence under one roof of an additional person or so is a matter of no critical proportions. When food, fuel, and light are provided at little or no out-of-pocket money cost, and a few simple garments suffice for all occasions, the financial aspects of the prolonged stay of a father, or mother, or other relative in the household have only a slight resemblance to the crisis it might represent for the dweller in an apartment, a flat, or even a duplex in the densely populated districts of one of the larger urban centers. And when the household may include representatives of three, four, or even five generations, with a few collateral relatives thrown in for good measure, the presence of a few aged persons in the group may be a definite asset, rather than the terrific problem it usually represents under typical urban modes of life. To a far greater extent than is possible under city conditions, the larger and more diverse rural household offers opportunity for interesting, continuous, productive, and uninhibited activities on the part of elderly folk. Lest the economics of the matter be given too much stress it is well to consider briefly one of the other aspects of the subject.

In the familistic society typical of most great rural civilizations, with advancing age the person is not shorn of his essential functions to the extent that seems to be the case in many more urbanized and industrialized systems of social organization. To begin with the function of dealing with the supernatural tends to be lodged in the head of the household. In fact in not a few of the greatest rural civilizations the cult of ancestor worship gives to the oldest members of the family group a status approaching that of the deities, and in many others the priestly or sacerdotal functions are mostly vested in the heads of the households. Even where social differentiation has proceeded to the point where much of formalized religion has been transferred to an extra-familial institution called a church, and the functions of the priest have become distinguished from those of the head of the family and the household, the aged continue to be occupied to a large extent in the myriad duties connected with man's relationship to the supernatural world, and particularly in seeing to it that the young are properly indoctrinated and disciplined in religious and theological ideologies and activities. This responsibility alone is sufficient to keep time from hanging heavily on the heads of the old people in many rural societies, while the generally accepted importance of the function effectively prevents the emergence of any feeling that what they are doing lacks genuine social significance. Under such

circumstances it is unlikely that the elderly person's opinions and ideas will be dismissed with scornful disdain. Much of this is lost when the rural population in a given society fades into a position of minor importance in comparison with the urban, such as presently is the case in the United States; but even then the role of the aged in religious matters is one of first rate importance. In the case of at least one large religious group, the "Mormons" or Latter-Day Saints (whose theology and religious forms were *set* in strictly rural environment), "Temple Work" supplies a powerful *raison d'être* and a thoroughly busy life for thousands of the aged faithful.

But the greater extent to which the aged in rural societies actually maintain control of the property and a dominant role in directing economic affairs is probably the major reason why their relative position is best in those societies. The following quotation from a recent analysis of the situation in Brazil's great rural, patriarchal system is highly informing, and it differs merely in degree and not in kind from that typical of rural societies in general:

Paternal authority was practically unlimited, since the sons remained subject to the father as long as he lived, dwelling frequently in his house or one that he gave them. Economic and political initiative was his by right, and the proof of his omnipotence is found in some of the extreme cases in which he passed judgment upon rebellious offspring just as he judged his retainers and adversaries—without resort to royal justice. . . .

The monolithic cohesion of the family, with the rigorous subordination of the younger to the older, was required and guaranteed by their respective roles in the process of production. In an economic panorama limited to the perspectives of the activity, the son and the grandson performed the same tasks as the father and grandfather, success in this case depending upon the experience acquired in the course of time.⁵

Even in the United States, in which urban stimuli of every variety, from the radio and television to the periodic visits to great urban centers, daily impinge upon rural dwellers, the extent to which farm properties are controlled and operated by those above 65 years of age is in a class of its own. Thus in 1940, of a total of 3,699,177 owner-operators of farms reported in the Census of Agriculture, one-fifth (693,066 or 19.5 per cent) had passed the age of 65 years. And this figure does not take into account the very substantial number, the exact total of which it is impossible to determine, of aged farm owners who make use of various kinds of rental agreements to retain

⁵ Antonio Candido, "The Brazilian Family," in T. Lynn Smith and Alexander Marchant, *Brazil: Portrait of Half a Continent* (New York: The Dryden Press, Inc., 1950).

considerable control over farms which are nominally operated by others, many of them by their sons, grandsons, or nephews. It would be difficult to find a close parallel in any other important line of production.

Variations within Rural Societies

Although as a general rule the status of aged persons in rural society probably has been somewhat higher than that of their fellows in the urban districts of the corresponding countries and epochs, this should not be allowed to obscure the fact of the tremendous variations in this respect within the rural sections themselves. From time to time, country to country, and place to place the situation of aged persons in rural societies has differed so much that we may be sure practically all the possibilities have been exhausted. Because life in rural communities embraces such an overwhelming proportion of the sum total of human experience, it would not be easy to over-emphasize the variations that might be noted. It is probably possible to encounter in some rural district, at some time and place, practically every sort of experience or vagary that has been the lot of mankind. This being the case one should hardly expect the status or position of elderly folk in rural society to be constant from one period to another or from country to country.

Preliminary study and reflection suggest a few of the factors that may be closely related to the nature and magnitude of the variations. Of these the nature of the agricultural holdings thrusts itself to the fore as probably being among the most important. As a matter of fact, of all the social determinants in a rural society, the extent to which the ownership and control of the land is concentrated in the hands of a few, in the first place, or widely distributed among the rural masses, in the second, seems to be the most important. Where a system of large estates is in vogue, which is to say where the ownership and control of the land are highly concentrated, the lot of most of the old people in the society is an unenviable one. It is hardly counterbalanced by the fact that the select few belonging to the elite classes may spend their declining years amid extremely favorable circumstances. Nor is it offset by the consideration afforded the favored few who are employed as servants, after they have passed the more productive years of their lives. Any system of large estates (latifundia, plantations, haciendas, fundos, fazendas, to mention only a few of the names by which they are known through-

out the world) deprives the bulk of the rural people from performing any essential economic function other than that of the laborer. The capacities of the people to exercise the managerial functions are never developed; and, of course, the exercise of the capitalistic and entrepreneurial functions belong to a different world—a world from which they are separated by a tremendous and almost impassable chasm of class differences. When field is laid to field and acre to acre, the bulk of the rural people are never privileged to develop those capacities and abilities which bring out their peculiarly human qualities. As a matter of fact, throughout the span of history the bulk of the persons associated with large agricultural estates have been held in some kind of servile or semi-servile status. This has been unfortunate enough while such workers were in the prime of life, able to perform from sun to sun the severe manual tasks imposed upon them. But with the passage of the years and the onslaught of the degenerative ailments characteristic of old age, their lot has been deplorable to the extreme. Only the kindness of an exceptional overseer, or the *noblesse oblige* of a rare landlord who actually was in intimate contact with the people on his lands, assured that the creature wants of the aged workers would be adequately satisfied. The bulk of them, probably the majority of the human race, have been the victims of the most pitiless driving, exploitation, and neglect. The world has been kind only in that their expectation of life was not great! Even the few servants who waited at the beck and call of the members of the master class, were hardly to be envied after the infirmities of age began to creep over them.

Quite different has been the lot of the aged peasants and farmers in those communities in which the ownership and control of landed property has been widely distributed. Under such circumstances the passage of years merely means that the operator of the small or family-sized farm reduces to some extent his labor function, but continues to own and manage the rural property. But until a ripe old age, or until a debilitating sickness lays him low, he continues to perform some manual tasks and to be thoroughly preoccupied with the managerial and financial aspects of the farm. This in turn insures that his role in family, neighborhood, and community affairs is not an insignificant one. In brief the middle-class type of rural society generated and perpetuated by a widespread distribution of land ownership probably is associated with the most satisfactory status of elderly people, while the concentration of land ownership and control

probably is largely responsible for the most unsatisfactory conditions that have ever plagued the rural districts.

The manner in which the population is arranged on the land is another factor closely related to the variations among rural districts in the status accorded elderly people in society. Such settlement patterns are of three principal types; namely, the village, scattered farmsteads, and the line village.⁶ The majority of the world's inhabitants have lived in the village; scattered farmsteads are characteristic of such societies as that of the United States, Canada and Brazil; and the line village, an intermediate type, although not widely diffused, offers much to commend it to the serious student of rural social planning. The settlement pattern in vogue, in turn, is closely related to the adequacy of community organization and life, the agricultural village being associated with the development of a rich, intimate, continuous set of social activities and strong community social institutions, while the scattered farmsteads seem to result in a weak, inadequate, unsatisfactory system of community and social organization.

Other things being equal where the farm homes are widespread over the landscape, at considerable distances from one another and widely separated from schools, churches, and other social institutions, the situation of elderly persons is likely to be far less favorable than that of their fellows in village communities. In much of the United States aged rural persons come to the time when they must make a serious decision. They must choose either to remain on the farm, with the certainty that their reduced ability to participate actively in farm activities will be accompanied with increased social isolation, declining participation in church, recreational, and other community activities; or to cut their intimate ties with the land and move into some town or village where they may more easily participate in social activities. In most cases this choice is not an easy one, and in not all is it satisfactorily resolved. Many are the cases in which the elderly woman has moved into town, giving her aged mate the privilege of remaining on the farm or of staying with her in the center, just as he wishes; and not rare is the situation in which the elderly male shuttles back and forth between the two residences, staying on the farm as long as he can bear the loneliness, then spending a few days or weeks with his wife in town, until the lure of the old attach-

⁶ For discussion of these and an analysis of their social advantages and disadvantages, see Smith, *The Sociology of Rural Life*, Chapter X.

ments in the country lead him to initiate another of the cycles. Any of the alternatives are not too desirable, and it may be stated categorically that the scattered farmsteads type of settlement, and the greatly weakened rural community life to which it gives rise, results in a status for the aged that leaves much to be desired.

In contrast to this is the situation in a rural society based on village settlements. This pattern is characteristic of Asia, most of Europe, considerable parts of Spanish America, and is to be found in the United States among the Mormons in the Great Basin and some of the Spanish Americans in the Southwest. As indicated above, this type of settlement is associated with the strong, intimate, closely knit social life popularly supposed to be characteristic of peasant societies. As with the family, such a community organization means that the person, young and old alike, is deeply submerged in the group.

In an agricultural village community advancing age may reduce to some extent the frequency with which the farmer or peasant commutes to his fields, but even then it need bring about no sudden change in the attention he gives to the care of his livestock or the amount of time and effort he puts forth in the performance of farm chores. With greater time in the village he may, if he chooses, spend more time visiting with his cronies, help to a greater extent in carrying on the work of the various community institutions, or cultivate more chummy relationships with his grandchildren and their village playmates. A whole host of activities associated with the fuller life need not be hampered at all. For his wife there need be no sharp break, and for both the wide range of community activities (of which gossip is not the least) is the best assurance that loneliness and solitude will not take complete control. The opposing attractions of the society and the land, which present such a problem for the farmers on scattered farmsteads, offer no threat to the marriage bond. On the whole the full community life facilitated by the village type of settlement is highly conducive to the most satisfactory status of the aged in rural society. In fact it is difficult to understand how so many millions of humble rural folk could have borne the existence to which they were doomed by the large estate had it not been for the compensations offered by a village community and the possibility of sharing troubles and easing burdens that it offered.

We shall have to content ourselves merely with listing some of the other factors which probably help explain the variations in time and place of the status of aged persons in rural society. Items to be

included in such a list, even the partial one attempted here, are: (1) the heterogeneity or homogeneity of the rural population and culture, the more satisfactory situation of the aged probably being associated with homogeneity in rural society; (2) the degree to which rural society is stabilized, on the one hand, or flaming with agrarian revolt, on the other, for the gains achieved by revolutionary measures probably are won partially at the cost of extraordinary hardships to the aged; (3) the degree of social stratification present within the society, and especially the extent to which class differences are reinforced by caste barriers; and (4) the type of agriculture carried on and especially the extent to which the operations are dependent upon large inputs of heavy manual labor. But an adequate analysis of these and the other relevant factors would involve a complete study of rural life, ancient, medieval and modern, and must await a great deal of patient investigation and research that is still to be done.

Part II

**OLDER WORKERS AND
SOCIAL PATTERNS**

THE OLDER WORKER IN THE LABOR MARKET

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IN OUR SOCIETY making a living is often more important than just having one. It should be noted that although famines or death by starvation are practically unknown in this country and that therefore lack of work does not represent a threat to continued existence, unemployment is considered as one of the greatest misfortunes which can befall a person. Of course it readily can be said that loss of work usually means a decline of income and thereby a reduction in the standard of living of the individual and his dependents. There is certainly much reality to this explanation of our preoccupation with the threat of unemployment. Some phenomena, however, cannot be fully explained by this type of reasoning. It is well known that business executives who experience no financial hardships after retirement frequently find it extremely difficult to enjoy their leisure and sometimes a surprisingly short span of time elapses between retirement and the death of such a person. Many husbands whose wives are working and are able to carry the financial burden of the household find little comfort in the financial security of their situation when they lose their jobs. Such a loss invariably implies a decline of status within the family group which seriously affects the social and mental well-being of the unemployed.

To work is for people who have assumed the role of earners in our society apparently more than a utilitarian device for gaining the means of livelihood for themselves and their dependents. It seems to be the basis for their social standing in their families and their communities, for their feeling of worth and sometimes even a condition for their unimpaired physiological functioning. This seems particularly so for people past the middle of life because making a living in our society is a time-absorbing function in the pursuit of which the individual becomes accustomed to spending the best part of his day. To block behavior patterns which are the result of such long time conditioning must create serious psychological discomforts in many instances. Also purely biological considerations suggest the adverse effects of inactivity in later years. It is a common physiological phenomenon that atrophy, i.e., a wasting of tissue due to want of the necessary cell nourishment, accompanies the aging of the organism. It is further commonly observed that parts of the human

organism which are not used show a tendency to atrophy regardless of age. To reduce drastically the activities of a person who is threatened by atrophy because of age cannot but accelerate this process. Consequently, to lose the opportunity of making a living means more than loss of income. To study the position of older people in the labor force is more than the investigation of an economic problem. It is actually an inquiry into the capacities and opportunities of these people to maintain a worthwhile existence socially, psychologically, and physiologically.

It is therefore of great importance to make such a study particularly at a period of time in which people seem to concentrate their efforts at solving the problems of advancing years in terms of financial security only. This is not to say that financial security is not a necessary condition for giving our population a chance to look forward to old age with a minimum of apprehension. It means to say, however, that for social, psychological and physiological reasons useful occupation is a human need which cannot be satisfied by the assurance of an income alone.

Discussion and understanding of analyses of the opportunities for work which older people can find in the labor market, however, are frequently hampered by the fact that many readers of such studies consider it as a problem concerning others and therefore not personally pressing. They overlook thereby that getting older is something which one can escape only by premature death. In view of the actual mortality trends in this country, however, there is a great likelihood that such readers will experience the need for gainful work in advancing years as very much their own and as a frequently unsatisfiable one unless existing personnel practices should undergo a change in the not too distant future.

Before beginning a study of older persons in the labor force one point should be clarified. Who is an older person? Is it a person whose capacities have declined because of his advancing years, or is it a person who has reached a certain chronological age regardless of what his capabilities still may be. One often hears such remarks as, "He is old at 40," "He is in his sixties but he is still young." It is also common knowledge that in the same individual some functional capacities may decline relatively early and others may be retained into a rather advanced chronological age. A man may have to give up strenuous physical activity at the age of 45 and yet he may work hard at his business until he is 70. Finally, one must keep in mind

that some occupations have a different age evaluation than others and that the same occupation may have different age requirements for retaining and hiring workers. In the depression a waitress was old when she was past 25 and today a worker in his middle forties may be too old to be hired but not yet old enough to be retired.

Obviously a general study of labor force data cannot work with a definition which takes account of individual differences among workers of the same age, desirable as such a definition may be in actual personnel practice. It must of necessity work with the chronological age groupings in the framework of which the data are collected. On the other hand, such a study must be careful to set the lower chronological age limit early enough so as to operate within the reality of hiring and firing considerations for the vast majority of occupations. For this reason in this study individuals who have reached the chronological age of 45 years will be considered as older workers.

Having thus decided to present a picture of the position of persons over 45 in the labor force, it appears indicated to answer first of all the question, to what degree such persons participate in it. Since making a living is a function which in our society is still predominantly assigned to men it may be interesting to show primarily what percentages of men 45 years and over are actually working or looking for work. A picture of this situation can be gained from the following table:

Participation of the Male Population 45 Years and Over in the Labor Force, April 1940¹

Age in Years	Per Cent in Labor Force	Per Cent Not in Labor Force	
		Unable to Work	Other
45-54.....	92.8	5.4	1.9
55-59.....	88.5	8.2	3.3
60-64.....	79.6	14.2	6.2
65-74.....	51.6	34.7	13.8
75 and over.....	18.3	65.6	16.1

¹ Based on John D. Durand, *The Labor Force in the United States, 1890-1960* (New York: Social Science Research Council, 1948), p. 33.

The salient fact shown in this table is of course that in the whole age span between 45 and 64, between 90 and 80 per cent of the male population in the United States are either working or looking for work. This figure may well be understated because there may be among those not in the labor force many who would be desirous and capable of working who, however, have withdrawn from the labor force because of discouragement over their chances of finding a job.

Furthermore, there may have been listed among those not in the labor force persons who have been so reported by the respondents to the census enumerators while they actually were still looking for work. Even without taking this situation into consideration, the number of men between 45 and 64 who are still working or looking for work is so great as to suggest that employment or self-employment is still the basic form of living which these men can visualize.

These figures, however, are nationwide and comprise the whole range of economic opportunities. They represent therefore a statistical abstraction which requires a breakdown according to at least industrial and occupational groups. In the following pages an attempt will be made to show what lines of work and what occupational groups within these lines of work appear to be relatively open to older workers and which ones appear to be relatively closed to them.

With regard to the differences in economic opportunities for various age groups according to major industrial classifications, attention should be paid to the work done by William M. Gafafer who studied the situation as it existed in the United States in 1920 and 1930.¹ Using the data on age, sex and industrial classification contained in the census material for these years, Gafafer tried to answer the question how the different industrial classifications ranked with respect to the proportion of their workers in various age groups. Taking the percentages of all gainful workers distributed among the various age groups for the total of all types of work as his yardstick for the identification of significant deviations, either in favor or against certain age groups, he arrived at the following findings regarding older workers. He found the male group 45 to 64 years of age to show a dearth of workers principally in the clerical occupations. The group 65 years and over he found to be under-represented in the industrial classifications of: extraction of minerals, manufacturing, mechanical industries, transportation, communication, trade and clerical occupations. On the other hand, he found the group 65 years and over to have a notable excess of their expected participation in agriculture, forestry and animal husbandry, and public service.

Persons in the age group 45 to 64 seemed also to hold their own on a better than average level in trade and professional services besides being over-represented in the same classifications which favored the 65-plus group.

¹ William M. Gafafer, "Studies of the Age of Gainful Workers," U. S. Public Health Service, *Public Health Reports*, Vol. LII, Part I, pp. 269-81, 437-53, 730-48, 999-1011 (1937), Vol. LIII, Part I, pp. 4-16 (1938).

Female workers showed similar but not identical variations in these industrial classifications as did workers in the four geographic regions of the United States and in both the white and Negro populations.

Data from the 1940 census² showed the same major general and industrial classes to have an over-representation of older workers as Gafafer found in 1920 and 1930. They indicated further, however, that not all industries within these major groups followed the pattern of a particular group as a whole. Among the manufacturing industries in which the older workers were generally under-represented, some had more than the expected percentage of older workers. These were, for instance, the tobacco industry, woolen and worsted manufactures, miscellaneous wooden goods, and leather and leather products other than shoes. On the other hand, the rayon industry had an unusually small percentage in the higher age brackets. Similarly older workers were over-represented in certain channels of trade but under-represented in others.

These data suggest two important indications of possible factors which seem to be giving older people a chance for continued work in certain lines of industry.

First of all, it seems to be the growth curve of many occupations and professions and the length of time they have been in existence which determine the age distribution of their workers or members. For example, the relatively small number of psychologists in the higher age groups seems merely to reflect the fact that psychology is a new and rapidly expanding field. In industries which have been established recently such as electronics and aircraft, many considerations may influence adversely the participation of older workers in the work force. At first, such industries may not seem attractive to men with apparently more certain jobs. In many occupations initially low-paid and inexperienced labor may appear sufficient and this may militate in favor of the younger age groups. Managers, foreman, and other supervisory employees are drawn largely from among rather young men who may hesitate to face the problem of supervising men much older than themselves.³

² U. S. Bureau of the Census, "The Labor Force," *Population*, Vol. III, *Sixteenth Census of the United States, 1940* (Washington: U. S. Government Printing Office, 1942-43).

³ Part of this discussion has been published by the author in *Social Adjustment in Old Age* (New York: Social Science Research Council, 1948). Bulletin No. 59, and appreciation is expressed to the Social Science Research Council for permission to use this material also in this paper.

Another point to be considered are the chances of self-employment which these various lines of work offer. Material prepared for the New York State Joint Legislative Committee on Problems of the Aging by Charles A. Pearce reveals interesting information on this question.⁴ Grouping occupations into classes he found the following participation rates of workers over 45 years of age who are working or seeking employment, with 100 equaling the rate of participation in the labor force of all experienced males in the same age group. Farmers and farm managers rated 151; proprietors, managers and officials, 143; professional and semi-professional workers, 96. The latter group, however, contained a wide range of older worker participation rates, so that the measure of central tendency is actually misleading. Topping the list were veterinarians, clergymen, physicians and surgeons. Falling well below the standard of 100 were teachers, designers, draftsmen, authors and reporters, chemists, metallurgists, artists, musicians, dancers, and athletes. In other words, professionals which exercise their profession largely in employment relationships do not do as well as those who are largely self-employed. Purely physiological job demands of course also play a role.

On the other hand, lines of work which do not permit self-employment, ranked significantly lower when this standard was applied. Laborers ranked 88; clerical, sales and kindred workers, 81; operatives and kindred workers, 73; and finally farm laborers, 54.

The importance of self-employment for continued work in advancing years is indicated by the 1940 census data also in another way. In the age group 65 to 74, for instance, almost 50 per cent of all men in the labor force were employers or self-employed. In the age group 75 years and over the proportion of such workers was nearly two-thirds.⁵ This suggests that it is not so much decline of capacity as opportunity to use one's capacities which determines whether a person can participate in the labor force after he has passed the middle of life.

Further analysis shows still another factor at work which seems to indicate where older persons find a chance at employment and this is the type of work within an industrial classification. A questionnaire study undertaken by the New York State Joint Legislative

⁴ Charles A. Pearce, "Employment Status of Older Workers," *Industrial Bulletin* (Monthly News Magazine of the New York State Department of Labor), January, 1949, pp. 34-40.

⁵ Durand, *op. cit.*, p. 110.

Committee on Problems of the Aging revealed that in New York State employers mention three categories of jobs as being most suitable for the elderly worker. Without studying the question of whether such opinions are sound or not they seem to offer a clue as to the actual opportunities presently available to older persons in industry. The jobs mentioned were (1) dead end jobs (watchmen, receptionists, guards, elevator operators, janitors, sweepers, mail sorters, etc.), (2) monotonous, repetitive jobs such as light assembly work and routine machine operatives, and, on the other hand, (3) highly skilled or responsible jobs such as inspectors, instructors, and tool and die makers, etc.⁶

How much reality there is in the determination of job opportunities following from these beliefs can again be gathered from the participation rates by occupation calculated by Charles A. Pearce. Referring to the study mentioned above, it might be noted here that Pearce found craftsmen, foremen, and kindred workers of over 45 years of age to rate 120 against the yardstick of 100 equaling the rate of participation in the labor force of all experienced males 45 and over. These apparently are the highly skilled and responsible jobs for which industry prefers older workers. For protective service workers, Pearce gives an index of 113. In this group belong guards, watchmen, police and firemen—in other words, a considerable number of dead end jobs. Also in this category seem to belong domestic service workers for which Pearce computed an index of 103.⁷

However, there is little evidence in the Pearce material that monotonous and repetitive jobs as such really furnish many employment opportunities for older workers. All census classes which could fit this type of job description; namely laborers (except farm and mine), clerical, sales and kindred workers, and operatives and kindred workers, had participation indices for older workers of well below 100, according to the Pearce calculation.

Participation in the labor force, however, does not by itself tell the full story of employment opportunities for older workers. Labor force data comprise two classes of people; those at work and those looking for work. It is perfectly possible that older people may be counted heavily among the participants in the labor force of any one industry, but that they participate there more strongly as people

⁶ Albert J. Abrams, "Industry Views Its Elderly Workers," in *Birthdays Don't Count*, Albany Legislative Document No. 61, 1948, New York State Joint Legislative Committee on Problems of the Aging, p. 147.

⁷ Pearce, *op. cit.*, p. 35.

looking for work than as people working. It is important, therefore, to check the index value of participation in the labor force against the reality of employment and unemployment in the various industrial classifications. Of course, such a problem does not arise in an economy which has employment for everybody able and willing to work. The war years of the last decade would, therefore, furnish no significant data in this respect because it is well known that during the manpower shortage of the war period large numbers of older persons were drawn back into or kept in employment from which formerly they would have voluntarily or involuntarily retired.⁸

Since the 1950 census data are not yet available, an analysis of this question must therefore be drawn from the data for 1940, in which year there was still substantial unemployment so as to permit investigation which would show whether this situation was affecting workers of all age groups proportionately or not. In that year, 19.2 per cent of the males in the labor force 45 years and over were unemployed. Men 25 to 44, however, were unemployed to the degree of 14.6 per cent. In the 65-plus group, 18.4 per cent of the male workers were unemployed. In other words, there seems to have been a higher degree of unemployment among older workers than among those in the younger age groups. Protection by seniority rules, however, may change in future periods of unemployment the impact of advancing years upon the employment situation. In this respect it is interesting to remember that railroad employees had low older worker unemployment rates in 1940. Of course, it is well known that this type of transportation is a line of industry in which seniority rules have been operating for a long time and therefore have had a chance to show their effectiveness as a protective device. In the large majority of occupations, however, which did not have high proportions of self-employed people and no strong seniority protection, the unemployment rates of older men exceeded those of younger men. This was true for the skilled crafts in spite of the stated opinion of industry that this was an area for the employment of older workers and it showed itself particularly in those occupations which as such do not seem to offer older persons good opportunities for employment. Here belong most occupations in the laborer's group and all occupations in the operative group.⁹

⁸ Leonard Eskin, "Sources of Wartime Labor Supply in the United States," *Monthly Labor Review*, Vol. LIX, No. 2 (August 1944), p. 278.

⁹ Pearce, *op. cit.*, p. 36.

In summary, the opportunities for making a living vary considerably among the various industrial classifications. Within any one of the major classifications they vary according to the question whether this is a long established line of work, whether it gives a fair chance for self-employment, and whether it offers opportunities for jobs requiring high skill or for dead end jobs in considerable numbers. Unemployment, unless counteracted by long established seniority rules or chances for self-employment, seems to affect older persons to a greater extent than persons in the age brackets below 45.

THE ROLE OF INDUSTRY IN RELATION TO THE OLDER WORKER

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TO BE REALISTIC, any analysis of the role of industry in relation to the older worker must be based upon the premise that private industry, in America at least, is in business for profit, and that workers are employed and compensated as a means of enhancing that profit. Many generous policies have been developed by progressive firms in the pursuance of enlightened self-interest. Among these, not a few have involved the favorable treatment of older and long-service employees. But to thrust upon private industry the obligation to employ or compensate older workers under conditions which lead to loss or even bankruptcy, is to impair the functions of the private corporation as a highly important institution in our national economy.

Since private industry should not be compelled to assume the problem of the older worker and yet that problem is increasing in severity with each passing decade, it is useful to examine what private industry has done and will probably continue to do *voluntarily* in its attack upon the problem. Progressive managements have had strong motivation to study superannuation and retirement during the last half century. Until the government entered the field in the mid-thirties with the passage of the Social Security Act, by far the largest body of material and experience in respect to the problem of superannuation was related to company programs.

Superannuation became a serious problem for industrial managements only after the individual firm became a stabilized entity in terms of corporate existence, financial responsibility, and a continuing group of employees. Only as the employing unit began to have a span of life longer than the working life of its employees was there a continuing entity to be seriously concerned with the superannuation of an individual worker. Businesses of short life closed out employment relationships with their own decease. No worker had time to accumulate considerable service with a single firm. If they became old on the job, it was usually because they were already in middle age at the time of employment. But as the life of the employing corporation became extended, sufficient time elapsed to carry young workers through to superannuation so that the individual's prob-

lem of superannuation became shared with a specific employing corporation.

In the United States, it was the railroad industry which first developed corporations of sufficient life-span to face a serious problem of superannuation. As time has passed, the leadership in other industries such as steel, oil, electrical machinery, and chemicals was assumed by corporations of large size and established corporate stability. Meanwhile a group of closely held, family corporations survived past the period when workers employed in the years of early expansion could continue in productive employment. In all of these cases, whether managements were tough and aloof or sympathetic and generous, they discovered that displacement of older workers of long service could not be effected without either some form of compensation or a serious impact upon the morale of their continuing personnel.

The problem of these firms, and of thousands since, was that of indemnifying expectancies. A study of economic and social history indicates that, time out of mind, a continuing economic relationship, and especially that of master and servant or employer and employee, possesses a moral force within itself similar to the force of momentum in the physical world. The longer an employment relationship exists, the stronger the expectancy of continued employment, not only in the mind of the individual employee, but in the assumptions of his fellow employees, his immediate superiors, and the community in which he lives. In ancient Rome, the good slave was manumitted on the death of his master and was provided a fund to establish himself as a self-employed worker. So strong was the social momentum of mutual responsibility, however, that the family of the deceased slaveowner continued in the role of patron to the former slave and his descendants, who in turn became clients of the patron family. While such continuing relationships appear throughout ancient and medieval times, it might be supposed that the development of the wage system eliminated them root and branch. But neither men nor societies change so radically in a few brief centuries. The force of expectancies in the employment relationship exists today. With the modern development of a stable, continuing entity as an employer—the private corporation—there has been recreated the conditions in which expectancies grow strong and compensable.

A manifestation of the strength of expectancies is the firm hold which the principle of seniority has on the thinking of both organized

and unorganized groups of wage earners. Despite the steady improvement in selection and evaluation methods in personnel administration, the individual worker and his fellows continue to place great emphasis upon accumulated service with a particular employer as concrete evidence of the right to continued employment or to other preferment. The application of the seniority principle, in turn, adds to the problem of the employer by concentrating and intensifying expectancies in a definite group, rather than diluting them over the whole labor force. This is not, however, a conspiracy against the freedom of management but rather a positive expression of an age-old force in the employment relationship.

But the growth of expectancies in American corporations has not arisen out of the worker's mind alone. Improved selection, training, and placement, developed to reduce the costs of turnover, have assured that more employees survive the early years of employment when expectancies are weak. Service and benefit plans have encouraged a sense of "belonging" to the corporate organization. Specialization in function has made change in job more difficult. Managements have striven to overcome the impersonality of the employment relationship in large corporations and, through a wide variety of channels and programs, such as publications, clubs, conferences, and athletics, have sought to enhance the very psychological forces from which expectancies of continued relationship develop. The integrity of the corporation as a social institution has been emphasized. Meanwhile the rate of growth of many corporations has declined so that a larger and larger proportion of the labor force has had sufficient service to make voluntary change of job unlikely.

In sharp conflict with this growing mass and momentum of expectancies in the older corporation is the vital necessity for the corporation as a perpetual institution to remain vigorous, adaptable, self-critical, and imaginative. It must avoid hardening of the arteries, the creeping disease of tired bureaucracies. Youthful enthusiasm, restlessness, and energy are needed at executive and technical levels; adaptability is needed in supervision and the rank and file. Industrial corporations, unlike churches, courts, and even governments, live by creating change. Few firms can grow or even stay alive by producing and selling the same product year after year. This demand for vigor and adaptability in the corporation is most acute in time of depression when unfortunately employee expectancies are most evident and demanding. The corporation for its survival as a dynamic factor in

society must as time passes relieve itself of some of this accumulating weight.

The solution of the corporation's problem in the face of these forces has been to buy off the expectancies of superannuated workers with dollars. In normal times, the corporation could await a predetermined age to buy off expectancies by retirement annuity payments. In depression, the retirement age has sometimes been lowered or dismissal compensation paid. The primary purpose of the corporation has been to secure the *displacement* of the older worker in order to assure its own efficiency and survival. Quite naturally, the atmosphere of reward and veneration has surrounded the act of displacement, but the act is primarily one of enlightened self interest and not of social obligation.

The price paid by an employing corporation in the buying off of employee expectancies offers interesting evidence that a socio-economic transaction is involved and not a gesture of freely determined generosity. After an early period of arbitrary grants under informal pension plans, almost without exception, retirement annuities in American firms have been related to years of service and average annual wages rather than need. In this way they have directly reflected the growth of expectancies with years of service rather than the precise loss in current income to be met on retirement. It has been the *past* that most often determines the rate of a retirement annuity, not the present or future. Past service, whether under the existing pension plan or not, is the substance of the socio-economic "right" which is indemnified.

This emphasis on past service in the compensation of expectancies in the retirement of the older worker helps to explain the difficulty of readjusting the retirement age in private corporations to meet individual or social requirements. The retirement annuity is determined by past earnings and years of employment, not by the current physical or mental condition of the employee at a set date. Two employees of identical service and past earnings are strongly assumed to have identical rights, not by the individuals alone but by the whole employee group. Since the precise balance of advantage of continued employment compared to retirement on annuity is subjective and fraught with a host of variables, the employer discriminates between workers at his peril. The delay of a generous displacement compensation may be considered by some an injustice, whereas the enforcement of retirement on a less adequate annuity may likewise become a

grievance. The employer is not giving or withholding an *ex parte* grant, he is seeking to alter, as between individuals, the compensation of a long-standing expectancy. The trade union representing the worker is entering a complex field if it seeks to resolve this problem. Rather than establishing rights held in common among its members, it is attempting to arbitrate individual rights as between members.

Discrimination in retirement based on the individual's physical or mental condition faces another obstacle. Whereas the determination of individual competency is often subjective and uncertain, the determination of age and the computation of retirement compensation are objective and definite procedures. In the former, the management must rely on judgments of supervisors or executives close to the individual, who tend to resist change in friendly and customary relationships. The greatest gain in displacement of the individual is often not the elimination of the particular older worker but rather the possibilities of upgrading and intake which the elimination permits. The supervisor of the person to be displaced can hardly see clearly all these future effects, nor do they have full weight as opposed to immediate inconvenience. It is understandable that managements have sought to avoid discretionary departures from the fixed retirement age, once a pension plan is established.

It is true that many retirement plans permit the displacement of workers at earlier than normal ages when physical disability prevents continuance. Experience indicates, however, that such early retirements are usually determined upon medical evidence of a concrete nature which is more likely to be acceptable to all concerned. It is easier to demonstrate physical defects which call for pre-retirement than physical vigor which might justify postponement. Possible injury to the individual, his fellow workers, or the public is a powerful argument in many situations for early retirement of individuals who develop serious organic defects. A much more difficult justification for pre-retirement is deterioration in the mental or personality attributes of an employee. In this area, management has the support of medical certification only after the deterioration has become clearly defined. Experience in pre-retirement cases does not warrant optimism for the use of medical certification in selecting those employees whose mental adjustment, in addition to physical condition, warrants a postponement of retirement until after the normal age.

Another illustration of downward adjustment in retirement ages is the arbitrary lowering of such ages by a few companies in the

midst of the depression of the 1930's. This was most certainly an example of elasticity in the displacement of older workers. Could not similar elasticity be shown in raising the retirement age in times of good business? The special conditions surrounding the instances where retirement ages were reduced do not, however, encourage generalization of the principle. First, in the leading examples, the lowering of the retirement age was "across-the-board" and not discriminatory as to physical condition or personal contribution to the company. Second, the companies concerned had not only unusually generous pension plans, but supplementary thrift and stock-ownership plans as well. Third, the step was taken at a time of such adverse business conditions that many younger workers had been laid off and strong social pressure supported a non-discriminatory displacement of older workers whose pension rights were favorable.

From this it may be argued that an "across-the-board" increase in the retirement age within a company might take place in times of good business and high labor demand. If all older employees were treated alike, this would avoid the difficulties of discriminatory displacement already discussed. But most certainly any considerable increase in retirement age would uncover additional cases where physical or mental impairment caused inefficiency or danger. Unless the normal retirement age of 65 has become too low in terms of most American workers because of some general change in physiological or mental make-up, it does not seem that "across-the-board" increases in the retirement age, even in times of high labor demand, is the best approach. Added years of service would increase the expectancies to be compensated, both for the efficient and the inefficient.

No matter what the problem of the employing corporation, aging is an individual condition. Any plan for increasing the employment opportunities of the older worker who remains efficient must of necessity involve discrimination. The need is for some solution which recognizes the general conditions which surround superannuation and displacement of long-service employees by the corporation and the individual characteristics of each older worker.

A necessary step in the solution of the problem of industry's role in respect to the older worker is the firm acceptance of the need for a fixed age at which the worker's expectancy of continued employment ends. Attainment of this age should terminate all seniority rights and all further accumulation of pension credits, whatever

future employment relations may develop. The contract of employment, assumed or actual over the years, should cease. Both the employer and the employee should become free agents so far as any obligations apart from pensions are concerned. The termination of the employment relationship should be similar in all cases and attended by an actual termination of status, responsibilities, and compensation. Even though recall is contemplated, retirement should involve a real break, perhaps best symbolized by the passage of time before recall is made.

It is important that the management, the worker, the trade union, and the community recognize clearly the full meaning of the termination of the employment contract at time of retirement for age. If the price paid for the buying-out of expectancies is not sufficient, this may become a question for negotiation. The continuance of the contract in individual cases or the carry-over of seniority rights to re-employment should, in the interest of both the employer and the union, be kept out of negotiation or agreements. Since any recall must involve individual discrimination in respect to physical and mental competency, it should be left entirely to management initiative, subject to grievance procedures if selection is claimed to be arbitrary.

To maintain the clear position that employment after retirement is *re-employment* and not an extension of a previous employment relationship, the decision to recall a retired worker should involve more than usual consideration by the appropriate officers of a company. The probable term of employment should be definitely limited and should not extend for more than a year at a time. The assignment of temporary status is important to avoid the accumulation of new seniority rights. The older worker becomes, in fact, a probationary worker who faces the likelihood of early layoff as business declines. In addition, relatively short spans of work permit the more frequent physical examinations needed to check the condition of older persons.

In this way, selected individuals can be recalled for specific needs on the basis of the changing demand for personnel and the physical, mental, and personality adjustment of the particular worker to advancing age. Both the need for orderly displacement to avoid an aging labor force and the need for careful discrimination in the use of over-age individuals is recognized. The retired worker becomes a special, stand-by reserve of experienced personnel, to be used subject to special, established procedures. The presence of such a reserve is an added factor of flexibility in meeting such conditions as

arise in time of war when men are withdrawn for war service at a time of peak production.

The sticky question remains, what should happen to an individual's retirement annuity when he is recalled to temporary employment? Should it continue unchanged, be suspended, or reduced by some amount? It may be argued that the annuity as a compensation for an expectancy of continued employment should be suspended during a period when employment is resumed. But such an interpretation muddies the important distinction between the life period of employment before retirement and the temporary and probationary period of recall. Further, it is essentially incorrect. The fact is obvious that the basic employment relationship was terminated, seniority rights and status were eliminated, and the assurance of further employment was removed. Since the annuity is based on expectancies built up over many past years, it should not be lightly altered by a temporary change in current conditions.

But is it reasonable to ask an employer to pay both the former rate of wages to a recalled employee and a full annuity as well? Will this not prove so burdensome that few retired workers will be recalled? Is it equitable for the retired employee to receive a supplementary income above that of other employees on the same job? The answer to the former question again turns on the fact that the pension is related to past service and past production which the employee has already rendered the employer. In a fully financed pension plan with full reserves and full vesting, this fact is reflected in the earmarked funds from which retirement annuities are paid. On the other hand, the retired employee, on recall, does earn his current wages by current services and production. To the company in the enviable position of a fully financed pension plan, the savings from suspended annuities is an opportunity to reduce pension costs already met, not a necessary step to avoid increased charges against current income.

But few companies have fully financed pension programs or are uninterested in reducing annual appropriations to meet accrued liability for past service under partially financed plans. To these companies the suspension of retirement annuities to retired workers, when recalled, appears both equitable and advantageous. The payment of full wages and full pensions might well discourage recalls regardless of the philosophical justification of both forms of compensation.

A way out of this dichotomy of philosophy and apparent equity arises from the proposition reiterated above. On recall to employ-

ment, the retired worker enters upon a new contractual relationship with his employer. It is by no means necessary that he should be assigned his former position or his former rate of pay. At the least, no additional pension rights accrue, and benefits and premiums related to service, as such, need not be provided. The worker is assumed to be temporary, and not a continuing, growing asset in the labor force. Employment is at mutual convenience and subject to limitation by the less certain capacity of the worker to sustain fully and without interruption the physical demands and responsibilities of the job. These conditions would argue for a lower rate of compensation for recalled workers receiving retirement annuities, at least lower than that previously earned, and probably lower than regular workers on similar assignment. In jobs for which standard rates are paid, a starting or probationary rate might be justified. In salaried positions, the salary on recall might be subject to individual determination.

It seems better economics and better personnel administration to adjust the compensation of the recalled worker to his true worth than to suspend the payment of the annuity. This places all retired workers on an even basis in securing post-retirement employment. It relates recall to the physical and mental capacity of the worker to serve in times of high demand. It does not encourage the employer to favor workers according to amount of the annuity received, whether high or low. Probably as a working rule, the compensation on recall should never be lower than previous average earnings *less* one-half the continuing annuity received. But the retirement annuity should be the constant in the equation, and the current compensation the element adjusted to the conditions of current employment. It cannot be emphasized too much that the retired worker on re-employment is a new and probationary employee. Unless he is willing to assume this status, and his fellow workers accept this fact, the recall of retired workers will meet with understandable resistance on the part of farsighted managements.

Will the trade union, when affected, accept the fact that a retired worker, recalled to employment, should start as a new and temporary employee without such advantages in compensation or employment rights as the earlier period of service would justify? The other facet of the proposition should make the advantage of this logic clear. It is better to encourage and support the premise that pensions, once established, are related to past service and are not to be changed, than to demand that recalled workers reassume past status. It is important

to the union that pensions be considered fixed and assured by long established agreement. It is also important that recalled workers be considered temporary, so that they are the first to be laid off as demand declines. There is little likelihood that a company will hire many older workers not previously with the company. The return of those retired by the company would constitute a relatively small addition in most situations, and have negligible effect upon wage levels in a period of peak production.

A great deal has been said or written concerning the role which American industry should play in extending the working span of life for individuals able to continue. Quite naturally, larger and more stable corporations with well developed retirement annuity programs and fixed retirement ages have been a focus of attention. With the large number of workers such corporations employ, and the positions of leadership they hold, this concentration of attention is understandable. But if such corporations are to assist in meeting the social and economic problem of the older worker, the corporation's problem of being both perpetual and unaging must be recognized. Without vigorous employing corporations, workers both old and young will suffer.

It is for this reason that the above analysis has been centered upon the philosophy and mechanics of expectancies, displacement, and retirement compensation in the established corporation, and upon the conditions under which recall is likely to prove possible. With the clarification and widening appreciation of these basic elements of the problem, ways may well be found to adjust selection procedures, re-employment examinations, job assignments, and working conditions so that thousands of retired workers can be drawn upon as a reserve labor force in time of high production, whether in war or peace.

UNION POLICIES AND THE OLDER WORKER

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OVER THE YEARS no group has been as continuously concerned with the problems of the older worker as the trade-unions. They have been vocal in protesting the fate of the qualified worker whose age has been a handicap in getting employment; pioneers in the development of clauses in collective bargaining agreements protecting the worker's rights to his job; and leaders in the battle for adequate financial provisions for the aged, both by private industry and the government. Currently trade-unions are in the vanguard of the movement to liberalize the benefits, extend the coverage and lower the qualifications for federal old-age pensions and supplementary private pensions. They have also sounded the call for vigorous public action to guarantee employment to older persons.

Such deep concern is to be expected of trade-unions. They have been fashioned by workers to provide an agency through which they could compel management to operate the enterprise in such a way as to reduce the human costs of the economic process and promote the advancement of the workers. The very purpose of the collective bargaining process is to secure specific implementation of these goals. No employer action more completely affronts a union's sensibilities than that which sacrifices the individual workers for the financial success of the business enterprise. Much of a union's activity is dedicated to preventing such "businesslike" operation of the enterprise. The union's purpose is to prevent discrimination against employees, particularly those with established service. Unions have a direct responsibility in protecting the rights of the older worker in an establishment or in an organized labor market where it has a closed shop.

The trade-union's defense of the older worker until World War I had been associated largely with the protection of established labor groups against newer population groups which were underbidding them for jobs. Entrenched labor groups fought displacement by children, women, immigrants, rural youth, and negroes. The newer groups represented young populations which could be employed at lower wage rates. Restrictions were demanded to reduce their

¹ The author expresses his appreciation for the aid of the United States Bureau of Labor Statistics.

inflow. Unions supported child labor legislation to remove the competition of cheap child-work. Regulation of the hours and conditions of employment of women was considered a way of reducing the displacement of male adults by women. Restrictive legislation on immigration would diminish the pressure on overcrowded labor markets and thereby moderate the displacement of older workers.

During this period, trade-unions also underscored the wasteful exploitation of human life and the deleterious effects of employment. They charged current conditions of employment with bringing about disastrous physical exhaustion, premature debility and dependency in old age. They were fighting for a shorter work day, accident prevention and better working conditions. They resisted "scientific management" because it would "stimulate and drive the workers up to the limit of nervous and physical exhaustion and overstrain." They saw a partial answer in improvements in the work place. They perceived that discrimination was being fostered by formal hiring age limits and protested them. But the older worker problem was subordinate to the general drive for protection against displacement and improvements in working conditions and terms of employment.

While the protective emphasis has continued strong in the daily operations of the organization, trade-unions within the general community have taken a broader approach. The newer worker groups receded in importance as easy scapegoats for the complaints by established labor groups. Higher minimum work age levels were set; the high tide of immigration stopped; legislation limiting women's work was passed. However, the sources of the older workers' troubles persisted. Moreover, the improvements in working conditions, living standards, and the establishment of shorter daily and weekly hours helped to remove the basis for charges of oppressive working conditions.

In face of these trends, trade-union thinking has had to broaden out. The older worker problem began to take on new significance. Most important in the development of new views was the experience during World War I when the older worker found it easy to get jobs. In fact, his services were sought for. His experience and values were extolled. In an era of full employment, the difficulties of the older worker were found to diminish. The hiring process became a procedure for sound placement of workers according to their abilities rather than an occasion for discriminating tests designed to sort out the marginal workers who gathered increasingly into a human scrap-heap.

To the labor movement the plight of the older worker became a symbol of the inadequacies of our economy. It forecast the broader problems with which we were to be confronted. Mechanization was proceeding at a pace which outdistanced the growth of buying power. The threat of mechanization and the "scrap-heap at forty" joined into one challenge to the community. The trade-union literature and discussions of the late twenties, of the late thirties, and currently, speak of these problems in one breath.

In an era of contracting employment, or inadequate job opportunities, discrimination becomes widely practiced. New hiring age-limits are set. Unjust allegations are sounded concerning the older workers' abilities. Spurious justifications are invented to support discriminatory age policies. Attention to these claims prove helpful in battering down improper discrimination. The basic fact remains that management continues to favor "businesslike" attitudes in their employment policies. These favor discrimination.

During the thirties, the prevalence of general unemployment channelled organized labor's attention to over-all techniques. The recent war experience contributed significantly to reassuring the trade-unions that their age-old demand for "a job for all" could become a positive public goal and a definite public policy. They learned that the older worker problem assumes special significance only in an era of contracting employment. In an era of full employment, management itself becomes resourceful in fitting the job to the worker and the worker to the job. The main emphasis therefore has become that of pressing for private and public responsibility for full employment. The threshold of tolerance of unemployment has been greatly reduced. The demand for action to restimulate the depressed areas has become continuous and active. Even at low levels of over-all national unemployment, organized labor is pin-pointing problem areas. The more nearly full employment is reached, the more certain it is that industry will retain and be more amenable to the reemployment of older persons.

Seniority

No union activity has greater primacy than that of protecting the worker's right to his job. The union formalizes the protective groups which tend to be formed on the job. It reflects the worker's demand for protection against the employer's "businesslike" attitudes toward his employees. The union therefore is designed to enforce limitations upon the employers' discretionary powers in employment and thereby

to prevent them from continuing the discrimination, favoritism, and job selling from which workers had suffered. The union has been formed to provide workers with a vehicle through which they could effectively protect themselves against these practices. In collective bargaining, unions have sought the development of rules which would spell out controls over layoffs, work-sharing and rehiring as well as discharges in order to protect workers against arbitrary employer practices. The results have varied in effectiveness according to the bargaining powers in various situations, but the basic drive for the protective clauses has been the same in all places.

The most important single practice which unions have supported to secure the worker's right to his job is the rule of seniority. It establishes the principle that length of service with a company or in a specific occupational group establishes the individual worker's relative claim to a job. The long-service employee is the last to be released in a layoff and the first to be rehired in a recall of laid-off employees. This practice has also been followed by some employers prior to their contractual agreements with unions, but collective bargaining contracts have formalized the rules and made them binding.

Unions have fought strongly for the strictest application of the rule of seniority. Its members have known the handicaps of the older-service employee. They have insisted continuously, on the one hand, that the company has an increasing responsibility for an employee with long service and, on the other hand, that the long service has necessarily increased the employee's usefulness to the company.

But management has not yielded willingly to the union demands. While some industries, in which collective bargaining has been more securely established, have acceded to an unqualified seniority rule, many recently unionized industries have insisted on qualifications or have sought to substitute other rules. Many contracts now qualify an employee's seniority rights with considerations of knowledge, training, ability, skill, efficiency, physical fitness, family status and residence, and other factors. Often these factors actually negate the seniority rule. Where management has enforced these qualifications the unions have sought to moderate their influence.

Other managements have sought to formalize their opposition to the strict seniority rule by insisting upon the use of merit rating systems which appraise the employee in terms of his value to the concern. Frequently personal characteristics having a questionable

relationship to the employee's economic worth are introduced. These are presented to allow management to balance service with judgment factors. Unions have fought these rating systems both by refusing to concede the value of factors other than service, and by arguing that merit rating plans are merely systematic procedures for recording the personal judgments and prejudices of the rater. To the extent that these qualifications and merit rating systems limit the use of the service factor, they tend to diminish the security of the older workers' position. But the unions' constant pressure is in the direction of a stricter seniority rule.

The principle was securely administered in the earlier unionized industries in which individual crafts constituted the major or sole group of employees. With the extension of the seniority principle to the mass production industries, numerous difficulties developed. The fullest value of the principle could be obtained through plant-wide seniority, but managements have tried to restrict it to occupations, or at best to homogeneous departments. Numerous combinations have been worked out in answer to the unions' drive for insuring the greatest benefit to the long-service employee. In some plants employees are granted occupational, departmental, and plant seniority which are exercised under different conditions in order to assure the older employee the greatest possible protection. Employer resistance to such extensive application of seniority rights is commonly encountered so that the final arrangement is a compromise of interests.

The seniority principle has been applied in layoffs, promotions, transfers, and rehiring. In layoffs, the older-service employees have greater opportunities to survive than shorter-service employees, but the chronologically older employee with short service will not be any more secure than any other shorter-service employee.

The seniority right to promotion has given the older employee the opportunity to advance, gain greater skills, and accumulate greater value to the firm and thereby enhance his position. However, the seniority principle in promotion has been vigorously contested by many employers who have preferred to pretest employee qualifications and choose the person whom they consider most likely to succeed rather than offer a vacancy to the senior employee and afford him the opportunity to master the job. To the degree that the seniority principle prevails in promotions, the position of the older worker is reinforced.

Similar gains are secured through the application of the seniority rules in transfers to more desirable jobs or to expanding departments. In such transfers unions seek to develop rules which safeguard the employee's security rights on his former job for a period of time.

The final use of the seniority rule is in rehiring. It insures that a longer-service employee will be given prior rehiring rights. Unless there is a permanent contraction which allows for no rehiring, the rule tends to improve the survivor rate for the longer-service employee. Further to reinforce the older employees' opportunities for rehiring, unions have challenged and resisted the use of occupational and physical tests as determinants of an employee's rehiring rights. This position has been a hotly contested one but unions have made substantial progress in doing away with these practices.

While the above policies are usually applied on a plant-wide basis, unions have pressed for their wider use on a company-wide basis. In some contracts unions have negotiated for the extension of seniority rights from a single plant to an entire company. This arrangement has been particularly valuable where new openings have appeared in an expanding or a new plant of the company. It has been applied even where the new plant has been located in another area, in which case the contracts may require the company to shoulder some of the costs of the moving.

These rules have tended to enhance the value of seniority rights and therefore improve the older worker's chances of keeping his job. But the final value of the seniority right is determined by the size of the layoffs and the rate of rehiring. The more moderate the layoff the greater the utility of the seniority right. In the mass-production industries, with their highly compartmentalized seniority rosters, specific technological, style, and economic changes frequently destroy the value of this hard-won right. Finally the high turnover of plants also eliminates the rights of long-service workers. Despite these weaknesses, the seniority systems are the basic protection for the older worker's job rights.

Work Sharing

The practice of work sharing during slack periods has also contributed to the older worker's security. This practice has been employed almost exclusively in unionized industries such as the needle trades, boot and shoe, and textile industries, where considerable seasonality exists. The procedure has helped to maintain the work force and has allowed the workers to share equally in the available

employment. In some instances, it is provided that temporary or provisional employees are to be laid off before the sharing is begun in order to insure more adequate employment to the permanent staff. In recently organized industries, the sharing of work is allowed to continue until a minimum stipulated number of hours are attained, such as 32 hours per week, and thereafter layoffs are invoked according to seniority rules in order to maintain the minimum hours for the remaining work force. These practices contribute to increasing the older worker's security.

Discharge and Compulsory Retirement

Arbitrary discharges have also been a constant source of workers' complaint. Frequently the target has been the older worker since employers have sought through one pretext or another to rid themselves of these employees. Unions have sought to restrict the employer's rights in this respect. They have sought to limit discharges to specific grounds and have tried to rule out as a "just cause" declining productivity in the case of the older service employees. To insure adequate control over discharges and to prevent arbitrary action, union negotiators have usually sought to provide for advance notice and explanations of discharges. Investigations have thus been provided to enable a search for a solution before the action is finally taken. A line of appeal and, if necessary, arbitration are also provided to insure a court of last resort if the union still believes that the employer's action was unjust. The great preponderance of contracts provide for reinstatement and back pay for unjustly discharged workers to discourage improperly considered action by employers.

Numerous cases of appeals from discharges of older workers have been carried to arbitration by unions. The advantage that the worker usually possesses in such arbitration is that the burden of proof tends to rest with the employer. He must convince the arbitrator of the propriety of his action. Moreover, arbitrators are disposed to recognize that workers with long service have a stake in their jobs and should not be discharged for light cause. The mere chronological age of a person, independent of evidence of competence, is not likely to be persuasive in determining the arbitrator's opinion in a case. But the severity of the test applied to the concept of just cause tends to rise with the employee's length of service and therefore acts to increase the older worker's security without necessarily guaranteeing the same. Long service is not an absolute reliance in arbitration where charges of serious declines in production are proved against an

aged worker. The business test of efficiency is likely to be convincing to most arbitrators.

Unions have resisted the compulsory retirement of workers when they have passed a particular age even where there is a pension program. Several strikes have centered about this issue. The unions have contended that the worker has a right to his job at least as long as he is qualified. Where there is a pension program, the worker should be able to retain his job at his own discretion and carry the normal rights to the job. Pension programs are designed to provide an adequate alternative to aged workers who no longer desire to continue their employment.

Unions have had uneven success in trying to void compulsory retirement practices in industry. In one instance a court has held that such a policy violated the contract. One judge has declared that "retirement implies that at least part of the motive power must originate in the person whose status is to be changed. Retirement includes some consent by the employee; it may be by participating in a pension plan or it could be by specific agreement. Here we do not have a case of retirement but instead we have a discharge because of age."² Other courts and arbitrators have refused to conceive of compulsory retirement as a discharge and have held that unless the contract specifically subjects an existing compulsory retirement policy to the seniority provisions, the company is at liberty to retire workers at the specific age.³ But the general trend in arbitration decisions appears definitely to be that no changes in policy may be made unilaterally. Nor can the compulsory retirement policy be capriciously or discriminatorily applied.⁴

Unions have been cognizant of these developments and have sought specific protection against compulsory retirement. In plants without

² International Association of Machinists et al. vs. Electric Vacuum Cleaner Division, General Electric Company (Ct. of Common Pleas, Cuyahoga County, Ohio) September, 1949. *Labor Relations Reference Manual*, Vol. 24, p. 2527.

³ McKesson and Robbins, Inc. vs. International Longshoremen's and Warehousemen's Union, Local 26 (CIO), 6 *Labor Arbitration Reports* 590 (hereinafter cited as LA); American Salt Corporation and International Chemical Workers Union, Local 278 (AFL), 9 LA 124; Barrett-Cravens Company and United Automobile, Aircraft and Agricultural Implement Workers of America, Local 453 (CIO), 12 LA 522; Metals Disintegrating Company and United Mine Workers of America, District 50, Locals 12243 and 12744 (AFL), 4 LA 601; Swift and Company and United Packerhouse Workers of America, Local 88 (CIO), 9 LA 560.

⁴ Bloomfield Tool Corporation and Kidde Manufacturing Company and United Electrical, Radio and Machine Workers of America, Local 421 (CIO), 9 LA 921; General Transportation Corporation and United Steelworkers of America, Local 1976 (CIO), 7 LA 773.

pension programs, they have pressed to make retirement subject to the discharge provisions. In connection with pension plans, they have proposed "flexible retirement age provisions" which provide a minimum age such as 65 years for voluntary retirement and a higher maximum age for compulsory retirement. In addition, provision is usually made for exceptions from the compulsory retirement provisions. Unions have recognized that there may be a need for some compulsory retirement age provisions particularly in plants or industries where far-reaching technological changes are narrowing employment opportunities or restricting the advancement of younger persons. In some such cases, unions have proposed lower ages for voluntary retirement than 65 years.

Job Adjustments, Transfers, and Rate Downgrading

The success which unions have had in increasing the probability of older persons maintaining their employment until their efficiency has declined noticeably has necessitated the development of special policies which will allow such workers to transfer to less active jobs and reduce the cost of their employment to the employer through various rate adjustments. These practices have been long observed by the older unions. They have had to face up to the problem and have evolved definitive policies in their industries. The more recently organized unions are generally to be found in the newer industries where the age population is relatively low and they have therefore not developed such systematic policies. Moreover, the reduction of the amount of exhausting, physical work on thousands of jobs in modern industry has no doubt minimized the entire problem.

It has been common for many unions to arrange for job adjustments for the aged worker through agreements to relieve them of some of the more strenuous phases of the job or to reduce the production standards. Piece workers are often placed on time work as well as the reverse, time workers are placed on piece work. Longer rest periods and transfer to easier shifts have been most helpful. Other adjustments have also been made to adapt the job to the worker. The more commonly used approach to helping the aged worker has been to transfer him to lighter jobs better adapted to his lower capabilities. Agreements frequently provide for the predetermination of such jobs or establish a list of them. Other agreements vaguely refer to this problem, relying upon later study to meet the needs which may arise. Experience has shown that careful study made beforehand will reveal more jobs proper for aged persons.

In the case of skilled jobs, demotion through the steps followed in reaching the top job in the craft is a useful course. Aged persons have been transferred to light work entailing less speed, little hazard, moderate temperatures, and little strenuous motion. The understandings concerning the transfer may be quite detailed, specifying such matters as super-seniority for the aged person for all jobs which he can perform; the proportion of such aged workers in a department; the minimum age and service with the company necessary to enjoy the privilege of the transfer; and the rate and production standards for such workers. However, the work done in developing these jobs has been local in character and not uniform. The experience of progressive employers who have applied themselves to the development of such jobs for aged persons has not been systematically incorporated into the current patterns of collective bargaining.

One common problem to all of these efforts at arranging jobs for the aged worker has been determining the rate of pay for such workers. The practices vary considerably, with representation of both extremes of policy being evident in current union contracts. One contract specifies that "an employee with 25 or more years of service with the (company), who cannot thereafter perform his regular duties due to some physical condition or other impairment and is assigned to a work function which he is capable of performing, shall, for the duration of his employment by the (company), retain the same job title and continue to receive the same rate of compensation as heretofore regardless of the range of pay attaching to the job classification for such work function, but shall not be eligible for wage increases beyond the maximum rate for that work function which he is performing."⁵ From this level the terms descend to arrangements or complete exemptions from all job rate minima for the aged worker. But the common provision in newly organized industries is for the new rate to be determined jointly. In industries such as construction and printing, the rate is frequently set by the union after consultation with the employer. In some instances aged workers who are employed on jobs normally compensated on a time-work basis are placed on a piece-rate. Other devices for equalizing the labor cost and worker earnings of the aged workers and other workers have also been used to induce employers to retain aged workers. There is a definite conviction that full equalization is not necessary

⁵ Consolidated Edison Company, New York, and Utility Workers Union (CIO), 1950-52.

for it is a legitimate demand to make on employers that they carry the additional cost of retaining such workers in order to discharge their responsibility to long-service employees.

Pensions

Many aged persons, as well as those who are disabled, are unable to continue in employment, and others are desirous of retiring. Moreover, the contracting volume of employment in specific occupations, industries, and localities, make it desirable for the aged to retire to ease the job pressure on younger persons in these situations. The trades unions have become sensitive to the need for adequate old-age pensions, particularly as the pressures of technological displacement and total unemployment have grown.

Unions have been among the earliest organizations to develop some form of old-age pensions, but these systems are now limited to a handful of the older craft-unions. Even in these, the beneficiaries are few and the benefits are inadequate. The plans were set up without careful determination of obligations and cannot be counted on to provide adequate benefits. The newer unions have not conceived of themselves as means of administering formal systems of benefits. At least seven of the craft-unions have old-age homes. These include the International Pressmen and Assistants' Union, International Typographical Union, United Brotherhood of Carpenters and Joiners of America, and three railroad brotherhoods. But the pressure for such homes for the aged is practically non-existent and highly impractical for the large unions in the mass-production industries.

In considering the present need for pensions, trade-unions characterize the existing federal old-age pension system as obsolete and the benefits as inadequate. They moved ahead on their own to develop appropriate insurance and pension programs. Spearheaded by such unions as the Amalgamated Clothing Workers Union, International Ladies Garment Workers Union, United Mine Workers of America, Textile Workers Union of America, United Automobile Workers and the United Steelworkers of America, the movement has pressed both for the liberalization of the federal system and the development, through contractual agreements, of supplementary pensions which would make the total pension attractive enough for a worker to consider voluntary retirement.

Both of these drives have met with considerable success. The federal pension program has been revised to provide more adequate benefits and coverage has been broadened considerably.

The private industrial pension programs negotiated in collective bargaining have gained sufficient momentum to cover well over four million union workers. While a number of the unions had secured pension programs immediately after the war, the most strategic gains were made by the United Mine Workers of America and then by the United Steelworkers of America. Workers have had to take to the picketline to establish these rights. The United Steelworkers' patterns provided the precedent for progress in the automobile, rubber and associated industries. They were built around the observation of the 1949 Steel Fact-Finding Board that "no thoughtful citizen, interested in the human resources of our nation, can expect labor to wait patiently by until Government makes up its mind. Workers are entitled to security in the meantime—with the thought that, if Government should finally decide to provide adequate security through a nationwide pension plan, changes in private plans could be made." The Board further observed that "we think that all industries, in the absence of adequate government programs, owe an obligation to workers to provide for maintenance of the human body in the form of medical and similar benefits and full depreciation in the form of old-age retirement—in the same way as it does now for plant and machinery."

Organized labor moved to transform these conclusions into reality. As a result, millions of workers have been added to the list of those covered by agreements providing pensions to aged workers. These plans generally are non-contributory and provide a minimum pension of \$100 per month after 25 years of service with the company, including such benefits as are received under the federal pension program. The plans are funded and administered with respect to the determination of eligibility of pensioners by a joint body. They usually avoid compulsory retirement but where it is provided, flexibility is prescribed rather than a fixed retirement age of 65.

A number of previously existing contributory plans have been liberalized to assure more adequate benefits, particularly by vesting part of the employee's claims to pensions after a stipulated period of service with the company, such as 10 or 15 years.

The trade-union movement has been conscious of the outstanding responsibility it has to assure adequate pensions. Many of its leaders are aware of the limitations of the private pension programs, which are designed primarily as superannuation programs for the existing older population. Many shortcomings have been acknowledged but in face of Congress' slowness to improve the federal system and the

modest improvements which were finally effected, the negotiated pension programs must be considered as substantial contributions to the advancement of the well-being of the aged, particularly those who are presently in the older age groups. As the above program is extended and experience is gained, additional thought will be directed to overcoming the deficiencies.

A supplementary technique is now being considered which will allow for annuity credits represented by governmental annuity bonds for all workers on the basis of annual earnings. A special bond would have to be developed by the federal government for the purpose. Such a program will eliminate the fears that a private pension program would reduce job or plant mobility, or that the funds might be endangered by business failures; or that newly hired older persons would be creating a special financial liability and it will avoid the cumbersomeness and costliness of the present individual plans.

The present pension programs have just been launched but the trade-unions have already recognized that further thought must be given to the problem to evolve more satisfactory programs.

Hiring Handicapped Older Workers

All efforts directed to increase the security of the older worker on the job will prove insufficient in a dynamic industrial society such as we live in. In periods of declining activity, individual businesses are wiped out or they contract so sharply that seniority claims prove unavailing. Even during periods of high employment, there are individual industries, plants, and occupations which are shrinking while others are expanding. As we survey our economy at the present writing, when we boast of very high employment, we find several depressed areas and industries. Railroad roundhouses are being consolidated as the diesel engine replaces the steam locomotive. Ghost towns are appearing. The New England and Middle Atlantic traditional woolen and worsted plants are being steadily supplanted by new cotton system plants processing worsted fibres in southern locations. The result is sharp displacement in the northern communities of older workers with skills which are not easily transferable. Current technological changes are destroying older jobs and skills. The newer jobs are very likely to appear in other communities and regions. These sweeping changes disgorge hundreds of thousands of older workers onto the market.

The great challenge is to increase the opportunities for older workers to secure new employment in expanding and new establish-

ments. The formal and informal discriminatory age hiring policies which pervade American industry are formidable barriers which cannot be easily overcome. These have been erected by prejudice, fears, past experience with individuals, and an outright desire to secure the best available workers on the market, which usually excludes the older worker. The most obvious of these barriers is the formal maximum age hiring rules which originated in the railroad industries. These have been widely extended to other industries. Where such formal policies do not exist, there are informal policies which are equally effective in barring older workers from jobs. In some plants there are specific age bars for selected jobs. Other companies which do not reject outright chronologically older persons, actually subject them to such rigorous interviews that they must be especially qualified to gain acceptance. Other companies substitute physical examinations as a means of sifting out applicants. It is probable that the greater proportion of American industrial establishments maintain discriminatory age hiring policies and make no effort to hire older persons for the jobs for which they are suited.

It may, however, be noted that during periods of full employment and labor scarcity these policies actually are less restrictive. Studies indicate that during periods of an expanding volume of new hiring, the proportion of older persons among the newly hired progressively increases. The reverse is equally true. The lower the number of hirings, the smaller the proportion of older persons among the newly hired.

The trade-unions have been particularly outspoken against the discrimination displayed against the older worker. They have protested that it is unjust and inhuman as well as disastrous to the economy and the nation. They have sought to overcome it within the confines of their own sphere of influence and they have also urged movements directed to dissuade employers from following discriminatory practices. In several states, unions have urged mandatory percentages of older persons in all establishments.

Union Policies Designed to Increase Hiring of Older Persons

Trade-unions have evolved various procedures to increase the probability of older persons being hired, but these have had limited application because of the high degree of bargaining strength required of the union. The first is the direction of older workers to specific employers with job vacancies. In industries where unions have closed shops, many contracts provide that all vacancies shall in

the first place be filled through the union. In such instances the union is likely to maintain a roster of available persons. All individuals would be listed, usually according to the date of application. This systematic and formalized seniority procedure has enabled the older worker to claim his share in industries where hiring halls have been maintained and work is shared equally among members. However, in some instances, employers retain the right to establish qualifications and make investigations. They have at times set age hiring rules which negate the union's attempts to get work for all members equally.

In areas where the unions have had full control of the recruitment of new workers, some have moderated the inflow of new workers to correspond with the available opportunities for jobs. In a contracting market, they have limited the new recruits, thereby preventing further increases in an overabundant labor market and the possibility for increasing discriminatory hiring by employers. The closed shop and the controlled labor market have contributed to raising the security and the share of the employment enjoyed by older persons.

The building trades unions are among the leaders in the movement to secure contractual provisions setting out the requirement that specific proportions of older workers be hired. Available information indicates that the electrical workers, bricklayers, plasterers, plumbers, granite cutters and carpenters in different localities have succeeded in getting such provisions. A bricklayers' contract prescribes that "the employer, when engaging bricklayers for work, shall employ one man of 55 years or over out of every five bricklayers hired." In the electrical workers' contracts the ratio may be as high as one to three journeymen and as low as one to eight journeymen. The age level for which the required ratio was to be maintained varied from 40 to 50 years of age up to 55 and sometimes 60 years of age. These are older and not aged workers who are being protected. These clauses were becoming quite common before the war and, should the demand for building trades workers decline, the movement for such compulsory employment of older workers is likely to be revived.

Trade-unions in scattered instances have agreed to waive certain contractual provisions which may have stood in the way of the employment of older workers. This tendency is typified by a clause which declared that while older workers would be hired, "no person over 50 years of age will be added to the seniority list. However, such employees shall become members of the union after being employed over 60 days, and shall be paid union wages, otherwise

seniority rights of all union members shall prevail throughout the plant.”⁶

The fourth type of approach which unions have followed is to secure the inclusion within the contract of a declaration against discrimination of older persons in the hiring of new employees. A few contracts now provide that “in hiring there shall be no age limits except as provided by law.” The latter two types of provisions reflect the inability of trade-unions in the great mass of industries where they have no control of the local labor market or the hiring procedure, effectively to promote the employment of older persons. The increasing importance of the problem and the pressure from the older persons may, if we have an era of contracting employment, prompt the unions to demand more precise controls over the hiring process so as to insure the employment of capable older persons who are now discriminated against solely by reason of their chronological age.

Labor Leadership and Support for Public Movement to Improve Employment Opportunities for Older Workers

Trade-unions have originated and participated in other movements designed to educate employers to the need of employing older persons and the lack of support for their prejudices, as well as resisting efforts to enforce compulsory employment of older workers.

On all occasions when the issue of the older worker has been to the fore, trade-unionists have been among the most articulate in pointing out his plight. They have appeared before agencies in New York, California, Pennsylvania, and Massachusetts when special commissions or legislative agencies have considered this problem. They were among the supporters of the move for a second-injury fund under Workmen's Compensation Insurance in order to minimize the liability of employers in hiring workers who have already been injured. Trade-unions have also supported moves which would reduce the possible impact of insurance costs on employer hiring policies. They have supported the movements organized in Pennsylvania and California at the end of the twenties for enlisting employers in declaring themselves against discrimination and pledging themselves not to erect age bars in hiring.

During the thirties and currently, trade-unions are forcibly behind a demand both to penalize employers who are discriminating

⁶ Standard Brands, Inc., Terre Haute, Ind., and the AFL Meat Cutters, 1948.

against older workers and another which would require stated percentages of older persons to be employed in each establishment. A significant result of this agitation was the passage of a law in 1937 in the state of Massachusetts which added to the Labor Relations Act of the state, the pronouncement that it is against public policy "to dismiss from employment any person between the ages of 45 and 65 or to refuse to employ him, because of his age." Employers found guilty under the act were to have their names published in the newspapers. This publicity device has not been employed. The State Federation of Labor has been advocating further changes in the 1937 law which would provide criminal penalties for persons found guilty of discriminating in employment because of age. Another proposal would amend the state Fair Employment Practices Act of 1946 to include employment discrimination because of age. It would entitle the commission to order reinstatement with back pay and upgrading. The commission, it is hoped, would be able by conferences to discourage such discrimination. The International Association of Machinists in 1949 expressed the need for legislation "to make it unlawful for any business firm to refuse employment, to dismiss, to demote, or to otherwise discriminate against any employee because of his or her age." In New York state, labor organizations have similarly expressed their concern about discrimination and have proposed similar legislation. Interest has been evoked in legislation which would specify a minimum proportion of older workers in each establishment. Such legislation has been in effect in other countries for handicapped workers; the thought is to apply similar regulations for older workers in this country.

Conclusion

The trade-union movement approaches the problem of the older worker in terms of its basic demand that the industrial mechanism must serve the people who have created it. Industry has no more fundamental responsibility than to make a job available for each qualified person who is desirous of working. In an era of full employment the task of solving the problems of special groups is reduced considerably. The need for special drives for compulsory employment of these groups is minimized. The pressure for discrimination in hiring is diminished. These great gains are sufficient in themselves to counterbalance some of the economic criticisms levied against a condition of full employment. Moreover, the adjustment

of workers released by contracting occupations and industries is greatly facilitated during such periods. The opportunities for the continued survival of the older person in an establishment are heightened.

The continued availability of jobs does not necessarily eliminate the problems of the individual worker. He may have reached the age and physical condition when retirement is desirable. For these, the unions have advocated satisfactory pensions. Those who are not disposed to retire are often in need of counseling and advice as how to adapt themselves to their declining productivity and physical capacity. Management also needs counsel on fitting the jobs to the men. There are areas of joint cooperation in the constructive adaptation of jobs and older workers. In an era of full employment, employers must be educated in the lack of support by evidence for many of their prejudices and the capabilities of the older worker so that they may be less inhibited in the placement of such workers.

It is in an era of less than full employment that the problem of finding employment for the older worker becomes particularly serious. Unions have done much to insure him continued employment in a continuing enterprise. The older worker who loses his job is at a great disadvantage. The efforts to educate employers to the advantages of older persons is not likely to be too effective while younger persons are available. Moreover, many older persons need not only maintenance but also specific aid in maintaining their morale and in adapting their experience and skills. The employment services must be particularly prepared for long and personal attention to these persons. In fact, it may be necessary in depressed areas and declining industries where a considerable proportion of older persons are displaced, to provide specific types of public employment to utilize large groups of older persons. The efforts required for stimulating the appearance of employment in such areas may be so great as to make it impossible for private industry to provide adequate opportunities for older persons.

American trade-unions have already sounded the warning that industry may be required to employ certain percentages of older persons by law. This is a course which may have to be followed. The more immediate and constructive alternative is to concern ourselves with the maintenance or re-creation of a continuing economy of full employment. In such a state, the problem of the older worker will not require unusual treatment and could be handled in terms of individual cases.

SELF PROVISION FOR THE AGED

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WHETHER OR NOT an older person can help himself depends upon the same qualities and conditions which determine the likelihood of self help at any age level. The qualities of resourcefulness and resiliency and the condition of opportunities for fulfillment of desires are essential whether one is seven or seventy. Self help does not imply the absence of community resources but rather the utilization of those resources. If the resources for self expression are absent or are denied to the old by tradition or practice then self help is denied its possible effectiveness. On the other hand if oldsters fail to use the available community resources, whether through ignorance, timidity or lack of imagination, their life is also limited.

The limitations of older persons are, many of them, not inherent in age. They do not occur because one has reached 60 or 75. The explanation is as frequently found in the framework of attitudes toward the aged and in the resultant acceptance of social inadequacy by the aged themselves. Limitations also arise because of the habitual routines carried on for so many years that one is fearful of attempting the new.

However, I do not wish to leave the impression that all of the aged accept the role and limitations which society in its negligence seems to impose upon them. In reading the personal records of many hundreds of elderly persons and in my personal acquaintance with them, I have come to hold a high regard for their resilience and their insistence on new life experiences after the long mid-age experiences are behind them.

It is a fallacy to assume that the areas of living for which self provision can aid are significantly different for the aged than for other age groups. Whether 10, 30, 50, or 70 we meet up with problems of health and housing, and minimum respectability. We are also faced with those interests which give meaning to life whether those interests be recreational, social, or economic in nature. If there is any difference to be observed between the aged and younger persons, it is a difference of degree and not of kind.

Whether self help is to be effective in the older years depends in part on attitudes toward self, health, capacity, and status. If the man of 75 demands a continuance of all the rewards which he enjoyed

at 50, or if he is unwilling to withdraw from any areas of competition and activity, then all the self help in the world will not make him a contented being. For our own personal satisfaction we should, as in racing, learn in what competition we belong. Withdrawal to areas of competition and activity which do not threaten our self respect is a wiser course of action. Self respect is less related to the status of one's position than to the integrity of that position.

Economic Self Help

I shall not here discuss the various possible programs of provision for economic security in old age. Many workers cannot and only a few, where wage permits, will make adequate savings for old age. The majority of workers are unwilling to effect the necessary self denial to themselves and family during the working years to insure full provision for an uncertain and indefinite old age. Retirement pensions and other old age provisions make, in part, a social provision for these later years of life.

Self provision for the economic demands of old age are more frequently made during that period of life. It is made in part by a reduction in living costs, cheaper rents, less entertaining, reduction of expenditures for clothing, and the elimination of many former expenditures. Self help is also found in the seeking of part-time or full-time jobs often to provide necessary additional income and frequently to give the satisfactions which come from job experience.

In my own studies of over 900 retirants, 57 per cent of the retired professors, one-half of the retired industrial workers, and two-thirds of the retired ministers reported jobs. Many were part-time jobs and a few did not involve remuneration. These studies were made during the labor shortage years of the early post-war period and reflect a higher incidence of employment than is likely in periods of more ample labor supply. In fact, about one-fourth of the employed professors and nearly one-half of employed industrial retirants indicated the temporary wartime nature of their employment.

Kaighn's¹ study initiated in 1941 doubtless gives a fairer picture of peacetime years. His survey of retired YMCA men revealed that some 80 per cent of those retired less than four years and nearly 60 per cent of those retired ten years or more reported employment.

¹ Raymond P. Kaighn, *After 60—What?* (New York: Association Press, 1942).

The vast majority of these several groups devoted their time and usually their interest to hobbies, to gardening, to free public services, to aiding others in a variety of ways, or to securing remunerative employment. A number, for economic reasons, found it necessary to supplement retirement annuities. A much larger number, whose annuities appeared ample for retirement living, still sought paying jobs. A few, who regarded the working for further remuneration as not befitting the retired professional man, for the most part gave satisfactory accounts of useful activity. Several, mostly from the industrial group, were deterred from seeking remunerative work lest they lose their social security annuity for the period of employment.

I have selected some 42 of the positions or jobs reported by the retirants. The purpose is to indicate the range of retirement activity and must not be regarded as a complete census of all reported jobs. With one possible exception, these activities are for remuneration or its equivalent. Since retired ministers, YMCA officials, education and industrial workers comprise the group here studied, the former activity is in some cases mentioned to indicate either similarity or differences between pre-retirement and post-retirement work :

- Local agent, life insurance company
- Field Director, American Red Cross
- Secretary-Treasurer, Mutual benefit insurance organization
- Superintendent, boys' home association
- Assistant Professor, Health and Physical Education (YMCA retirant)
- Clerk, large department store
- Salesman, furniture house
- University Professor of Religion (YMCA retirant)
- Worker, aircraft factory (former oil company worker)
- Technical librarian
- Landscape gardener
- Assistant to minister (YMCA retirant)
- Pastor, rural community church (retired professor)
- Local correspondent for paper
- Consultant engineer (retired professor)
- Fruit farmer
- Librarian
- Minister (retired teacher)
- Physician
- Salesman, veterinary supplies (industrial retirant)
- Night clerk, motel
- Reporter for Dunn and Bradstreet and other bureaus
- Building foreman
- Filling station operator (YMCA retirant)
- Caretaker, boys and girls camp

Financial campaigner
 Pastor, church of another denomination (retired minister)
 Rubber welder (retired minister)
 Caretaker of apartment (his own)
 Night clerk in hotel
 Dean of College Chapel (retired minister)
 Visitor of rest homes
 Pastor of local church (retired minister)
 Executive Secretary, pension fund
 Superintendent of mission
 Salesman, vacuum cleaners
 University teacher (YMCA retirant)
 Janitor, small apartment house
 Real estate salesman
 College director of physical education (YMCA retirant)
 Pastor's assistant (YMCA retirant)

Self provision for the later years frequently involves self-employment in a home shop, garden, or ranch. Many men in their later years develop a nostalgia for the rural setting of their youth. Memories of joyous, carefree childhood days on the farm tend to blot out memories of the less pleasant and more arduous aspects of farm life. A considerable number of these rural born and some who have had no previous experience with a farm dream of retiring on a small ranch or acreage. Possibly the choice of a farm results from the desire to direct one's own activities after years of having one's work directed by others. The farmer, however, soon discovers that he has new and more inexorable overlords in terms of weather, seeding, harvesting, and selling. These may prove as unpleasant as the nine o'clock appearance at the office. Wisely chosen and wisely limited, the farm may furnish much delightful freedom and leisure, but it does call for a rigid self direction which many are unwilling to exercise. Furthermore, this freedom from the city further removes one from the many services and aids which characterize urban life. The greater isolation calls for more self help.

A few who wait until retirement to test out the farm as a retirement location report dissatisfaction. More universally contented are those who have located their farm several years before retirement. They are less likely to make an unwise choice, and the problems of adjustment to the new way of life have already been anticipated and in fact experienced long prior to retirement day. What is perhaps more important, enduring interests have been established which when retirement comes at once claim the time and energy of the retirant.

Social Relationships

The older person, if he is to live the good life, must give attention to other items than those which may be producers of income. He must actively concern himself with his social relationships if he is to avoid loneliness in the later years.

If one's present social groups are satisfying and if one senses no desire for the stimulation and growth which comes from proving oneself anew in different groupings, the chances are that an older person will remain in his former social setting. But not all who elect to stay in the home town find the solution as simple as this. Old friends die or move away and unless one constantly adds new friends in the later years, he will soon discover that the companions in the later years are constantly reduced. He will further discover that many former associations which took on meaning during the employment years now may become less meaningful. This is especially true of those connections, such as union or faculty, which are definitely related to one's work. Similarly one may sense less participation in many other formal social groupings, especially those in which participation depends partly upon one's status in the world of employment. One's informal groupings are less likely to suffer in this respect.

In the long run it makes little difference whether one remains or leaves the home community so far as the desirability of taking on new friends and associates. If one stays, the change is more gradual, but because it is, new associates may be neglected too long. Further, it must be realized that the retired professor will not usually find satisfying associations among the new faculty members nor the worker among the newer workers in the shop. The old sources of informal companionship are of limited value; new ones must be created. It is easy to say that new friends must be made, but it is equally important to establish those connections through which such friendships may develop. Most of us are not free-lances in the creation of our friendship group. We utilize almost entirely the associations in school, shop, faculty, church, lodge, or neighborhood in the selection of friends. For many during their employment years the shop, office, or faculty connections may suffice. In retirement the choice of new friends will normally come from other groupings. One professor anticipating this became a member of the local Masonic lodge in his early sixties as an escape from the narrower academic association. Still others have established closer association with a church group, always a possible source of new friends.

It may be that the retirant cares little for the ritual of the lodge or church or the worked-up enthusiasm of the average luncheon club. He will, however, find among the members of the lodge, church or club those who will provide the more satisfying social relationships which he craves.

There is the occasional individual who will make his social way without benefit of such sources. Most of us depend upon them for discovery of companions. If we are in the latter class, it is wise that we give some attention to such sources either before or by the time of retirement. To wait five or ten years when we sense the full loss of friends is frequently too late. One must anticipate the social needs of 70 or 80, certainly by his fifties or early sixties. In this preparation it appears essential that during the later working years one establish social contacts entirely independent of those determined by office, shop, or profession. To do otherwise may result in the "aching void" reported by one retirant.

Those who move to a new location for retirement are compelled to look to their social outlets. The same established social groups will be of assistance here that aided in their former community.

It must not be denied that certain retirants live lonely lives and report the inability to make new friends. A closer examination of their records often reveals attitudes of withdrawal, definitely "set ideas" about life, and unwillingness to share the "give and take" of social relations. One professor reports that people with whom he comes in contact have little interest in things intellectual. It may be questioned whether people object to the discussion of things of an intellectual nature or to the stilted classroom presentation which he chooses to call intellectual. Possibly his new associates object no more than did his students before the day of his retirement. One may question further the apparent unwillingness of this retirant to be interested in the affairs of his neighbors. One can scarcely hope to be happy with a "marble hall" attitude in the retirement years.

Aside from the family circle and lodge and church associations, there is a tendency for the social contacts of the aged to be restricted to other aged persons. If such contacts can be freely chosen and result from a selection of available elders, life can be rich and stimulating. That close association with others their own age frequently lack such stimulation is suggested by many retirants. In fact many seek definitely to avoid associates their own age. In the opinion of these, other elderly persons are too old and inactive, they are forlorn,

they look to the past and they have too many complaints. One wonders if he looks as old as his contemporaries. A retired minister comments, "I decently avoid intimacies with the old fellows." Most of the retirants who report in this vein prefer association with younger persons or at least they desire to balance the old with those younger.

Those who remain in their own communities appear to resent too close association with those their own age more than do those who seek retirement areas. Possibly this is because the retirement area provides a wider range of untested friendships and experiences and permits the establishment of social relations outside the framework of the acceptable and unacceptable so often found in the former home locality. One may find in such areas old folks' clubs by whatever name they are known. The widely publicized Three-quarter Century Club of St. Petersburg not only provides the bases of new social contacts with dances, shuffle board contests, and a variety of other activities, but the membership of some 3,000 makes possible the desired selection in the choice of ultimate friends.

Other and often different problems in social relationships exist for the widowed, the one who takes residence with children, and the member of the old persons' home. The widow or widower has usually suffered a loss in emotional security which without remarriage may never be replaced. While the proportion of those who desire another marital partner can never be determined, one needs only to observe the park benches in retirement centers to realize that they number many. Perhaps this type comes in greater number to locations where they believe "the pickings are better." Even those who seek no mate may share a freer social life than by remaining in their old community where they are more restrained in the role of widow or widower. Since over one-fifth of all men and nearly one-half of all women between ages 65 and 75 are mateless, the quest for love is frequently added to that for friends.

The Provision of Non-Work Interests

Successful aging calls for preparation in still other areas besides the economic and social. If one is to find interest and satisfaction in the venture of living in the later years one must give attention to hobbies, habits, memories, attitudes, and a number of other items. Some of these will be discussed in following pages. Perhaps the key-stone of this other preparation has already been suggested: namely,

the acceptance of old age as a period of life which can be filled with venturesomeness and new experience. By the very nature of the normal working life, one can share only those areas of life permitted by remaining energy after work is done and only those which can be enjoyed in the spare hours of the day and in brief vacation periods. For those who have continued in their adult years to dream and to desire and whose dreams and desires are not defined by material possession or conspicuous living, there is a whole world yet to be discovered full of adventure enough for any age. That world of discovery may lie as close as the workshop, the library, or the back yard. Those without vision may not perish, but they make up a considerable fraction of those who find retirement a dull experience. What we are talking about here is the mental and spiritual resources, a quality which many lack either in this or other stages of life.

That a number give no previous attention to the changes which retirement brings is evident from the records which were accumulated for this study. Others entertain only vague notions of travel or some other interest but make no accounting of enduring interests or available finance. They close their eyes to the inevitable adjustment.

In contrast there are those, and they are many, who give careful consideration to their retirement activities and interests. Some discuss the matter with friends and try to anticipate the potential satisfactions or disappointments involved in different adjustments. Others experiment during leisure and vacation periods as to possible interests and locations.

There are those who need not give special conscious attention to the problem. They have known for years what they want to do and they have always managed well in new situations. They have never been dependent on a single pattern of life. They are not monogamous in loyalty or association. Perhaps these fare best. One comments that he just transferred his thinking to his new activity and "left to others the worries and responsibilities and great satisfactions of the job I left."

In all this discussion of preparation for later years it is essential to realize that what we arrive with at 60 or 65 is what we have been building for many years.

Provision of Job Substitutes—Hobbies

The entrance into retirement with one's hours no longer commanded by his profession or job presents a test of resourcefulness

which many persons have not previously experienced. In the years before, the pattern of life was dictated in part by the nature of work, the working associates, and the hours of labor. With retirement comes a freedom which one may not know how to utilize and sometimes wishes he did not possess. With retirement many of the masks of office and position come off, one is on his own and has to again prove himself either master or weakling. Those who have something to retire to often welcome the new experience; those who have accumulated only something to retire on may cringe before the prospect. New interests and new routines must replace the old. If one has not provided reservoirs of enthusiasm and activity other than those of the previous work, life becomes vacuous and dull.

Hobbies and avocations take on added importance after retirement. They furnish creative and recreative outlets for both interest and energy. But one must realize that hobbies are not something to be picked at random from the counter on retirement day. To be most effective they should have been nurtured in both interest and leisure periods in the years before. Unhappy is the man who does not have one or more areas of consuming interest to which he may turn. Landis² in his study of old people in Iowa found that those with hobbies fared much better in the older years than those without.

The careful studies by both Landis³ and Nestruck⁴ support the view that effective hobbies in older years usually have their birth in earlier years. The same conclusion is reached from my reading of the records of some 900 retirants. Few reported new hobbies undertaken and continued since retirement. In contrast many reported the continuance of old hobbies. It is further observed that many of the hobbies undertaken for the first time after retirement were soon discarded.

Let us now consider what may be called home and back yard hobbies. Many of these require little expense and may pay dividends in enthusiasm and interest. Gardening claims the attention of many. As Malloch suggests, "Whoever makes a garden has never worked alone."⁵ Likewise the yard accommodates the small telescope for

² Judson T. Landis, *Attitudes and Adjustments of Aged Rural People in Iowa* (Unpublished Ph.D. thesis, Louisiana State University, 1940).

³ *Ibid.*

⁴ W. Virgil Nestruck, *Constructional Activities of Adult Males* (Bureau of Publication, Teachers College, Columbia University, 1939), p. 84.

⁵ Douglas Malloch, *Live Life Today* (Chicago: The Reiley and Lee Company, 1938), p. 186.

those who find interest in the stars. The woodworking shop turns out furniture, storm windows and other items. Within the house there are all the games and all the books which command one's occasional interest. A woman of 80 has made a collection of simply constructed mechanical toys which children can make and enjoy. She adds: "I still hope to prepare a series of drawings and directions for making these as my last contribution to child welfare."

Breaking With the Past

Opinion and reaction is decidedly divided over the question as to how much the retirant should hold to the associations, relationships, and memories of his immediate past. Clearly many who have not made preparation for this experience have nothing else to hold to but the past. In contrast, those who have planned for the new activities and the new world which lies ahead will naturally release many of their old relationships with ease. It is not that they discard former friends and pleasant memories. They do not. It is only that the new experiences and relationships assume central importance and the old must naturally give way.

For those whose retirement means moving to another location the break is forced and the natural processes involved in such moves make easier the letting go of the old. For those who remain in the community of their previous work the process of change in loyalty and interests proceeds more slowly for many and with great resistance among some. For those who resist the shifting to new enthusiasms and new interests life grows increasingly empty. For the retirant of 65 to return to the shop or the office during the first year of retirement may bring many friendly greetings, but I fear he will find his former associates a bit too concerned about matters and experiences which he has not shared. At 70 the same retirant, though welcomed, discovers new faces which knew him not and many who identify him only as a man who once worked here.

We are not warranted in laying down any general rule for all to follow. However, the experiences of the over 900 reviewed here and the work which others have done on the point appear to justify the following position. For those who elect to retire and are sufficiently resilient in attitudes for that experience, there is some evidence to suggest that a clean break with the past gives promise of a happier adjustment than any attempt to hold fast to experiences and relationships which are now only memories. Doubtful is the real satis-

faction derived from forever reliving experiences of the past. Real life satisfactions come from active participation in the here and now. Frances Conkey⁶ found this to be the case in her study of fifty older men and women. She observes that holding to the past hindered adaptation to the present. Both the keeping of relics and conversations about the past prevented satisfactory adjustments.

Both blessed and dangerous are the memories in old age—blessed because they provide the record of the epic of one's earlier years; dangerous because too close attention to them blocks one from the continuing epic which should be his. Memories of the old, like visions of the young, have their place in the scheme of living, but exclusive attention to either blocks the fulfillment of life.

Provision in Attitudes and Habits

Examination of the expression of attitudes from those in the later years reveals the same wide range of hopes and fears, likes and dislikes that one might discover in any age group. There are those who chant a Pollyanna theme, and there are those whose remaining life agenda would test the energies of even younger men. Careful re-examination, culling, and grouping of the attitude expressions suggest at least two which bear significantly upon happiness in retirement. These are attitudes regarding self and those reflecting growth or crystallization, since these two appear basic in any list of attitudes whatever the number.

The way one regards himself is important at any age. It is no less important in old age. Some go through life regarding themselves as unique and acting as though only they ever experienced any of the misfortunes or suffering in life. When retirement comes, they cry out about a basic injustice but seldom has their voice been raised against the practice before. Further, one would assume that their own enfeeblement is unique and that nature had played them a dirty trick. Fortunately, the number of self-centered is small. Their protests, however, are loud and might lead one to believe that retirants are disgruntled persons with infantile reactions. The lot of the self-centered is frequently an unhappy one whether in retirement or prior to that period.

In contrast there are those in retirement who refuse to be old in spirit. That many still have the same degree of enthusiasm and relish for life that they enjoyed in earlier years is supported in many

⁶ "The Adaptation of Fifty Men and Women to Old Age," *Journal of Home Economics*, Vol. 25 (1933), pp. 387-389.

of the records. They refuse to be disturbed by their accumulated years. One 76 year oldster advises that he cannot answer one of the questions until he "gets old." Still another reports that "it is as much fun to have a birthday after seventy as it is before seven." These are not people attempting to deny their years. Instead they attempt to carry hope into their older years. They are the ones whom Oliver Herford had in mind when he adapted the Greek proverb to read: "Those whom the gods love, die young—No matter at what age."

It is not essential that aims be high, and it is indeed foolish for the older person to try to prove to himself and the world that he has lost none of the abilities which he possessed in earlier years. But it does appear important that one escape a sense of futility. In fact, there often exists a direct relationship between exalted aims and this sense of futility. So much depends on what gives one contentment and satisfaction.

Perhaps the most disturbing tendency of many older persons is the crystallization of attitudes in terms of some earlier periods of their life experience. Loyalties and hates, conceptions of the world that should be, and reactions toward a variety of behavior have become fixed and finished. This reaction, above all others, accounts for much of the avoidance and shunning of elderly persons although this tendency to crystallize is by no means confined to the aged. We are not concerned with the rightness or wrongness of such views! It is one thing to be dated by experience but quite another to see all the world through attitudes that were already jelled by 1915 or even by 1932. The oldsters' worst foe is not age but the dreary habits and attitudes which sometimes are concomitant with it.

So far in this discussion but minor attention has been given to habits in retirement except for mental habits. Many of the habit variations in this period are of no more importance than they are in other periods. Whether the retirant follows the Spartan discipline of rising at 6:30 each morning and shaving or whether in Epicurean fashion one eats, drinks and lolls in bed 'till ten is of little consequence if such behavior is to the liking of the retirant. One person may find it necessary to be busy all the time for self approval but another may have acquired the arts of leisure with equal satisfaction.

Welfare Services

A very considerable number of older persons find meaning to life in free service to the community, organizations, or groups. Many

regard retirement as the period for fuller spending of themselves for others, and a few indicate that their previous remunerative work was a means to the rendering of present service. The Biblical paradox that those who lose themselves will by that means find themselves is borne out in numerous reports.

The nature of the services rendered are as varied as human needs. A retired minister spends his time calling on the sick in the north woods country where there are few ministers. A retired professor finds satisfaction in repairing old clocks for friends and acquaintances. A retired woman gives her time in aiding the foreigners and colored folk in her university. A music instructor, now 76, has set for his task the organizing of old folks' social clubs.

Many become almost chronic solicitors for worthy causes, community chest, good will industries, bond sales, church drives, etc. Others render service to churches and reform organizations. One takes pride in his reorganization of a Sunday School previously dormant for fourteen years which under his guidance has become the largest in the township. Still others command their free time in services to Red Cross, Community Centers, Girl Scouts, Planning Board, O.P.A., the improvement of parks, the provision of swimming pools and other civic activities. One woman reports 2,000 hours of knitting since Pearl Harbor.

In this connection Bertha Terrell of Vermont deserves special mention. Retirement for her opened a new vista of activity and permitted a continuing aid to the self-help students on her campus. After taking instruction from a Norwegian weaver in Montreal she returned to Burlington. The creations from her looms include purses, knitting bags, table linens, scarves and baby blankets. The profits from this work all go to a fund for self-help girls at the University of Vermont.

Conclusion

The task of meeting the personal problems of old age are as varied as at any other stage of life if our later years are to be full and meaningful. Too often in the past we have limited our thinking to the provision of the economic needs. The aged like other age groups "live by more than bread" and occupation. They also must give attention to the social. They should carry into old age the interests which give depth to life as well as having concern for those habits which make them wanted social beings. All of this calls for living in the present and what is still more important, living in the future.

RETIREMENT AGE AND SOCIAL POLICY

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THE TIME HAS COME to reconsider the thinking that has been done about the problem of economic security in old age. The problem has been conceived as primarily one of providing income for retired persons. This is too narrow. A principal part of the problem is how to prevent premature retirements and thus how to reduce the real costs of retirement to a minimum. The age of retirement has been dropping appreciably during the last 60 years, particularly in the urban industries, and there is good reason to believe that most of this change represents premature retirements. In 1890 about 68 per cent of the males of 65 years of age or more were in the labor force. By 1940, the proportion had dropped to about 42 per cent. The proportion of women of 65 years of age or more in the labor force dropped from 7.6 per cent to 6.0 per cent.

The loss of production from premature retirements has become one of the principal wastes in the economy. It is conservative to estimate that the labor force is nearly 1.5 million smaller than it would be if the workers rather than the employers usually determined the time of retirement and that the loss of output from premature retirements is over \$5 billion a year. Indeed, the loss of production from premature retirements is undoubtedly far greater than the loss from all the featherbedding rules of all of the unions in the country. It is ironic that the problem of premature retirements has been aggravated by the spread of pension plans.

Optimum Age for Retirement

The expression "premature" retirements implies that there is a "best" age at which retirement should occur. What is the optimum age for retirement? One might regard it as the age at which the return (psychic and pecuniary) from working merely compensates for the cost of working. At this age the cost of retirement to the individual worker is zero. At any earlier age retirement would entail a sacrifice because the loss of income to the worker would exceed the gains from the avoidance of the discomforts of work.¹

¹ Even retirement at the age when the cost to the individual worker is zero entails the loss of product to the rest of the community.

This analysis, however, is an oversimplification because it takes no account of the fact that the importance of the money return from employment depends upon the property owned by the workers and the size of the pensions or old-age assistance available to them on retirement. If the worker has no property and is entitled to no pension, the money income from working (his alternative to living from charity) may be so important to him that he continues working at great discomfort and perhaps at risk to health or life itself. Hence, if the best age for retirement is the age at which the return from working merely compensates the cost of working, the arrangements in the community for providing income for retired workers are themselves an important determinant of the best age of retirement. The more liberal the pensions or old-age assistance payments, the lower will be the age of retirement at which the returns from working merely compensate for the costs of working. A worker by devoting a part of his earnings to buying an annuity would lower the optimum age of retirement *from his individual* point of view. The lower the worker's rate of discounting future income, the larger the annuity he would be willing to buy and the lower he would make the age at which he would choose to retire rather than to continue working.

Different countries will have different ideas as to what are reasonable pensions. Most persons would probably agree that pensions should have a higher ratio to earnings in the case of low-paid workers than in the case of high-paid workers. In the United States a pension of roughly 40 per cent of fairly recent earnings seems to be regarded as fair for skilled or semi-skilled workers. For less skilled workers a higher ratio of pensions to earnings seems to be regarded as fair.²

Arrangements which make workers prefer to retire even when they are still quite productive may not be desirable from the standpoint of the rest of the community. And even generous pension plans will not eliminate the danger that men will be retired when they prefer to continue working because retirements may occur as a result of the decision of employers rather than the decision of workers. The customary wage systems in most plants give older workers the same

² The estimate of the ratio of pensions to earnings that is regarded as "fair" is based upon the pensions payable under the public old-age and survivors plan as amended in 1950 plus the supplementary pensions payable under typical company plans to recipients of government pensions. It seems to be generally accepted by employers and employees alike that the pensions payable under the old-age and survivors plan need to be supplemented.

wage as younger employees doing the same work. Since the older workers in many occupations often are slower than the younger ones, employers prefer to retire men who are still quite productive and replace them with younger men who are paid no more than the older workers. This is good for the employer but bad for both the older workers and the community. Moreover, employers are often under pressure from younger men to retire older workers in order to accelerate the promotion of the younger men. Hence, under the wage structure and wage policies that are prevalent in American industry, one may expect employers to drop men who are able to produce substantial amounts and who would prefer employment even to retiring on a liberal pension. Indeed, liberal pensions, while reducing the age at which employees prefer to retire, also reduce the age at which employers are willing to retire men.

Reasons for Premature Retirement

What is the evidence that premature retirements are occurring in large numbers? It is not sufficient to point out that the proportion of older persons in the labor force has been dropping rapidly. The crucial point is that most of these retirements occurred at the volition of the employer, not of the employee. The significance of this fact may be questioned on the ground that during the period 1890 until the present the pensions or old-age assistance available to most persons have been quite inadequate. Under such conditions the fact that retirements usually came at the instance of the employer might simply reflect the inadequacy of pensions or old-age assistance. Would not more liberal pensions or old-age assistance make workers themselves quite willing to retire at the present age of retirement? In other words, might not more liberal pensions or old-age assistance make retirement usually occur at the decision of the worker rather than the decision of the employer without changing appreciably the usual age of retirement?

The answer to these questions is "No." Abundant evidence is furnished by enterprises with liberal private pension plans and by the railroads, which have a liberal public plan, that men who are in good health usually prefer employment at their customary jobs to even liberal pensions. The great majority of men who retire of their own volition do so because of ill health. It is scarcely conceivable that pensions will be made so large relative to earnings that employees will be willing to retire at about the same ages that employers

would like to retire them. The explanation is simple. The sense of participation in the affairs of the town (or the world) that men derive from working more than offsets the leisure and freedom that they gain from retirement. This is true more than ever in this age of the five-day week, the eight-hour day, paid holidays, and paid vacations. Employment carries with it so much opportunity for leisure that the leisure of retirement loses much of its attractiveness. As the customary working hours continue to drop and as the number of paid holidays and customary vacation periods continues to increase, the leisure of retirement will continue to lose in attractiveness relative to the leisure associated with employment.

An Incentive Plan to Reduce Premature Retirements

What can and should be done about the tendency for employers to retire men at an age when the men prefer to continue working rather than to begin drawing liberal pensions? Such retirements are usually a misfortune to the retired workers themselves, cut their money incomes and, still more, diminish their happiness. Furthermore, the retirements are bad for the community because they reduce the size of the labor force, the volume of output, and the standard of living. If the ratio of employed workers of 65 years of age or over to the population under 65 years of age could be raised to the ratio of 1890, employment would be about 1.5 million larger than it is, and the national product would be about \$5 billion a year larger than it is. This gain in output from raising the usual age of retirement would be far larger than the cost of all the pensions now paid to retired workers. As persons of 65 years of age or more become a larger proportion of the population, the cost of premature retirements will rise. Consequently, the problem of keeping premature retirements to a minimum is one that will greatly increase in importance.

Since employers, if given a free hand, will retire men who are still capable of producing a substantial amount, some check on the employers' decisions to retire men is needed. In a few cases union opposition to premature retirements will be strong and effective, but these instances will be few. The majority of union members are young men who wish the older workers retired in order to create opportunities of promotion for the young men. A flexible wage plan, by which the wages of men go down as their efficiency drops, would help prevent premature retirements. Piece work and most bonus systems provide such flexibility. Piece work makes the direct labor

cost the same for the fast and the slow workers—not, of course, for the *very* slow men who fail much of the time to earn even the guaranteed minimum. Where straight piece work is employed, some unions report a virtual disappearance of the efforts of employers to retire older workers who have become less productive than young men. Bonus plans do not ordinarily assure the same direct labor costs per unit of output for slow workers as for fast ones, but they usually make the difference less than it is under time work. In the case of workers who are paid by the hour, it is not as a rule practicable to cut the hourly rates of individual workers as their productivity drops, and neither management nor employees would wish to see it attempted.

Since unions cannot be counted on to protect workers against premature retirements and since the wage system under which most workers are paid gives employers an incentive to retire men who are still able to produce a considerable amount, employers need a special incentive not to drop men who are still useful. A simple and effective arrangement would be to pick an age at which the likelihood of retirement at the instance of employers is fairly great and to give employers an incentive to keep men beyond this age. The selection of the age at which the incentive should begin has been made fairly easy by the large number of enterprises that have established 65 as the retirement age for men and 60 for women. The incentive, therefore, should encourage employers to keep men and women above these ages.

Since the retention of employees beyond an age at which they might otherwise be pensioned would save money to the pension scheme, the incentive payments should be financed from the pension plan itself. The incentive might take the form of a subsidy related to the annual earnings of the worker. For every year beyond 65 (or 60 in the case of women) that the employer retains persons covered by the pension system, he might be given a subsidy of one-fourth of the annual earnings of the worker. Thus the employer would have an incentive to keep workers who were worth anything more than three-fourths of their wages. Such subsidies would help compensate for some of the uneconomic rigidities in present wage policies—the failure of compensation to be adjusted to the decline in the productivity of workers.

The money costs of pensions and subsidies today under this plan might be no less than the money costs of pensions under a pension

scheme which gave the employer no incentive to keep workers beyond the age of 65 or 60. Indeed, it is possible that the money cost of pensions plus subsidies might be a little bit greater than the money cost of pensions alone under a non-incentive plan. The incentive plan, however, would have the important virtue of reducing the *real* costs of retirement. A good incentive pension plan, by raising the usual age of retirement, could reduce the real cost of retirement nearly to zero. It is not unrealistic to expect an incentive pension plan to increase the size of the labor force and the volume of employment by 1.5 million, thus raising the output of the country by about \$5 billion a year and eliminating most of the present loss from premature retirements. In addition, an incentive pension would do much to open employment opportunities to older workers. Today the man of 62 or 63 often finds it difficult to obtain employment in competition with men who are 30 or 40 years younger—though the number of entrances into the labor force by older workers is surprisingly large.³ If employers were able to obtain a subsidy for keeping men beyond the age of 65, they would be much more willing to hire men who were slightly below 65 years of age.

Labor Supply and Employment Volume

Would not encouraging employers to retain more older workers simply mean fewer jobs for younger workers? Would not the community be better off with more young persons at work and more older persons on pensions than with more old persons at work and more young persons unemployed?

Implicit in these questions is the assumption that the volume of employment is limited—a belief which is widely held these days. In a sense the volume of employment *is* limited. At any given time, an increase in the demand for goods would pull more people into the labor force and also reduce the amount of unemployment. But it is also true that the volume of employment shows a remarkable capacity

³ The number of persons of 65 years of age or more who entered the labor market during the first half of 1950 was as follows:

Between January and February	190,000
February and March	251,000
March and April	206,000
April and May	201,000
May and June	233,000
June and July	185,000

U. S. Bureau of the Census, *Current Population Reports*, Series P-59, Nos. 13-18.

to adjust itself to changes in the size of the labor force. As population and the labor force increase, the volume of employment grows. It grew from about 35 millions in 1910 to about 60 million in the first half of 1950. The processes by which employment adjusts itself to long-run increases in population are not fully understood. Most of the time the process seems to be one of an increase in expenditures rather than a drop in prices. Today's expenditures are closely related, on the one hand, to yesterday's income and, on the other hand, to tomorrow's needs and expectations. Most of the time (but not all of the time) expenditures have been growing. This means that today's expenditures are usually a little larger than yesterday's income. The growth in expenditures has come about, not as a result of a tendency to spend money more rapidly, but as a result of an increase in the quantity of money to be spent. In general the increase in the quantity of money has come about partly as a result of the production of gold but mainly as a result of the willingness of people to go into debt in order to spend a little bit more than their recent incomes.

There are two principal ways in which an increase in the size of the labor force, such as would be brought about by a rise in the usual age of retirement, will bring about a growth in the volume of employment. One way is through the effect of the increased supply of labor upon the rate at which wages rise. The second is through the effect of the increased labor supply upon public policies.

An increase in the supply of labor would tend to retard the rise in wages until the increase in the supply of labor had been absorbed. I am not asserting that a rise in the supply of labor increases employment by causing a drop in the level of money wages—though if a surplus of labor persisted long enough, wages might fall in response to it. The resistance of employed workers to cuts in wages, however, prevents any immediate drop in wages in response to a rise in the labor supply. But I do assert that the response of wages to the normal increase in the productivity of labor would be retarded until the increase in the number of workers caused by a rise in the usual age of retirement had been absorbed. The process of adjustment would be no different from the one that goes on constantly. Both the supply of labor and the productivity of labor are rising more or less steadily. Wages adjust themselves to these changes in supply and in productivity in such a way that employment rises at about the same rate as the labor force increases. In other words, about the same proportion of the labor force (subject to cyclical fluctuations) re-

mains employed. The gain in the size of the labor force from a rise in the age of retirement would tend to hold back the rise in wages until the new supply of labor had been employed.

The absorption of the increased supply of labor might also be accelerated by public policy. If a rise in the usual age of retirement were to occur quite rapidly under circumstances that produced an appreciable rise in unemployment, public policies would undoubtedly be modified to stimulate an increase in employment. Everyone agrees that public policies can affect the volume of spending—they can either discourage the tendency of men to spend a little bit more than their recent incomes, or they can encourage this tendency. Furthermore, public policies are likely to be affected by the volume of employment and unemployment. The larger the volume of unemployment, the more vigorous and persistent are likely to be the efforts to stimulate an increase in employment. The effect of an incentive pension system, therefore, is likely to be to cause the makers of public policy to raise their sights—to cause them to endeavor to create a larger volume of employment. In other words, if the labor force, as a result of an incentive pension system, has 65.5 million members rather than 64 million members, one may expect that public policy will endeavor to create a demand for 1.5 million more jobs than it otherwise would do. The reason for this conclusion is that the main determinant of public policy will be the volume of unemployment.

Pensions and the Price Level

Although this analysis has been focused upon the problem of reducing the real cost of retirements to a minimum and has paid no attention to the problem of providing incomes for retired persons, one neglected aspect of the latter problem should receive brief discussion. Pension plans have been designed, up to now, on the fundamental assumption that the price level would not rise appreciably in the long run—that changes in the price level would be pretty much confined to short-run fluctuations. It has now become evident that these assumptions are not likely to be true. The full employment policy to which the community is committed, plus the great bargaining power of trade unions at high levels of employment, plus the fact that the demand for services from the government outruns the willingness of the community to pay taxes create the strong probability that the long-run movement of prices will be upward. The quickening conflict between the United States and Russia strengthens the prospect of a rising price level.

Since the price level is likely to increase over the long run, the federal pension plan should be designed to take account of that prospect. There are several ways in which pensions might be adjusted to rising prices. One would be to review the pension plan through an advisory council about every ten years and revise the benefits to offset changes in the price level. Such a comprehensive review at about ten-year intervals would probably be needed even in the absence of a steadily rising price level. Another arrangement would be to provide a benefit formula that would cause the average pension to rise more or less automatically as prices increased. This might be done by making pensions a given fraction of the workers' last ten years of earnings and by providing, in addition, that pensions would be adjusted each year or each half year for changes in the cost of living. The tax base would also need to be adjusted at least annually for changes in the price level of more than a minimum amount—say 5 per cent.

It is not my purpose in this paper to analyze the relative merits of these two ways of adjusting the pension scheme to a rising price level. It is simply my purpose to point out that the fundamental assumption underlining the design of pension plans in the past—namely that the price level in the long run would not change—is no longer defensible. If the community adopts policies that make a long-run rise in the price level more or less inevitable, it does not provide security for retired workers unless it assures them that their pensions will be protected against drops in the purchasing power of the dollar.

SOCIAL PROVISIONS FOR THE AGED

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SOCIAL PROVISIONS for the aged have dealt mainly with the maintenance of income and, to a lesser degree, with custodial and medical care. Recently, some beginnings have been made to provide for other needs of the aged and to approach the problems of the older people in their entirety.

Social provisions for the aged are mainly governmentally created and operated. Some of these provisions are exclusively for older people—old-age insurance and non-contributory retirement systems, homes and hospitals for the aged, old-age assistance, and many of the recent attempts to provide for other needs, such as research on the diseases of old age, special housing for the aged, and educational, psychological, and recreational services. Other public programs, while not exclusively for the aged, have many older people as their beneficiaries. Among these are general assistance, veterans' pensions, and medical care for assistance recipients and the medically indigent.

The term "social," however, cannot properly be confined exclusively to governmental provisions. It includes, also, private institutions of a collective or associational character. Of these, the most extensive are the industrial pension plans which have grown phenomenally in the last year. Also included are the non-profit homes for the aged and the individualized services for older people undertaken by many private welfare agencies.

*Need for Social Provisions for Income Maintenance*¹

A minimum income sufficient for a decent existence is an absolute essential of the aged, as of all other people. The minimum costs of living of old people are, on the average, less than those of younger adults with family responsibilities. Some costs, particularly those for medical care, are much greater in the advanced years of life than at younger ages. Illness becomes a more serious hazard with each year of adult life and chronic illnesses, which require the longest and most expensive treatment, predominate in the advanced ages. Most other

¹ A convenient source of up-to-date information on the economic situation of the older people and their prospects are the two booklets prepared for the National Conference on Aging (August, 1950), respectively, by the Federal Security Agency and the Bureau of Labor Statistics, entitled, *Some Facts About our Aging Population* and *Employment Problems of Older Workers*.

costs are less, mainly because older people have fewer dependents; but many older people have dependents to provide for as well as themselves. Two thirds of all men of 65 and over are married but only one third of the women of this age group have husbands. Between 10 to 15 per cent of all people of 65 and over have children and foster children (usually grandchildren) under 18 who are dependent upon them. The period of old age, moreover, is a long time. The present average life expectancy of above 13 years at age 65 represents a period more than one fourth as long as the entire average working life expectancy of present-day Americans.² Half of the people who attain age 65 live longer than the average of 13 years, some of them nearly as long as the entire average work life expectancy. Moreover, in recent years, life expectancy after age 65 has been improving and seems likely to increase more rapidly in the not distant future. Even the present average life expectancy after age 65 is so long that savings of about \$17,000 are required to give a person of that age an income of \$100 per month from this source for the rest of life, utilizing for this purpose the entire principal and all interest earnings.

Savings of such an amount are impossible for many Americans. While average family income in this country is now above \$3,500 per year, a fourth of all American families have incomes of less than \$2,000.³ Total and average savings have been increasing, but nearly one fourth of all urban working men's families had no savings at all in 1945, and more than one half of all families had savings of less than \$500.⁴

Earnings are the largest single source of income for older people, as they are for the entire population. They represent the principal support of nearly half of the men of 65 years of age and over and of a sixth of the women of that age, counting the earnings of their husbands as well as their own. But only 45 per cent of all men and 9.5 per cent of all women of 65 or over were in the labor force in 1950. Except for the last decade, in which we enjoyed nearly full

² Tables of working life expectancy for men have been developed by the United States Bureau of Labor Statistics, in a project it has had under way since 1945. By October 1, 1950, only a general summary of the major conclusions to be drawn from these tables had been published, but the entire study was to appear soon in a Bulletin of the Bureau of Labor Statistics.

³ United States Congress, Joint Committee on the Economic Report, Subcommittee on Low-Income Families, *Low-Income Families and Economic Stability* (Senate Document 146, 81st Congress, 2nd Session, 1950).

⁴ U. S. Bureau of Labor Statistics, *Workers' Savings and Income in 1945* (Washington: February, 1947) 4 pp.

employment, the percentage of the older people in the labor force has been declining for years. The principal reason for this trend appears to be a shift in occupations from those in which many older people are employed, like farming and railroading, to industries with low percentages of older workers. There is now much emphasis upon widening the employment opportunities of our older people in the labor force. This is most desirable but, clearly, not all of them are employable. Progress against the diseases which disable so many in the older ages may make a higher percentage of the older workers employable, but today the gap between life expectancy and work life expectancy is still widening. Most workers keep on working as long as they can, but the length of the retirement period is increasing.

Regardless of what may be accomplished in the future in reversing these trends, the fact is that today many older people have neither earnings nor savings sufficient to support themselves and their dependents. Support by children also is becoming less common with the present-day wide distribution, geographically, of the members of families after attaining adult ages, and the often crowded living quarters of the young urban families. Private charity is not now, and never has been, an important source of financial support for older people, although it provides valuable specialized services. Probably about 40 per cent of all people of 65 years of age and over, today, need help from outside sources to enable them to have a minimum income sufficient for a decent existence. Many factors are at work to increase this percentage; we will do well to prevent it from rising.

Industrial Pensions

In considering the present and probable future needs of older people for public provisions for old-age support, some consideration must be given to industrial pensions. The oldest industrial pension plans date from the late nineteenth century, but their greatest development was during and subsequent to World War II and, particularly, in 1949 and 1950. The early industrial pension systems were all established unilaterally by the employers and were viewed with much suspicion by the unions. In recent years, unions have been demanding industrial pensions and nearly all such systems have been established through collective bargaining.

An estimate made by the New York Legislative Committee on Aging gives the number of workers covered by industrial pension systems in the summer of 1950 as 11,500,000, and the total of the

annual employer and employee contributions to industrial pension funds as \$1,350,000,000, with most of the money coming from the employers.⁵ The estimated coverage represents approximately one fourth of all industrial workers, and the employer contributions exceed their total tax payments under the federal old-age and survivors' insurance system.

The number of former employees who are actually receiving industrial pensions is less impressive. The New York Legislative Committee gives the number of pensioners as 250,000, a large percentage of them executives and supervisory officials. Because many industrial pension systems have been in operation but a short time, the number of recipients of industrial pensions will increase very considerably in future years. But it seems certain that the great majority of workers who are employed by companies having industrial pension plans have but small prospects of ever receiving benefits, unless these plans are radically changed. Nearly all of the existing plans require long years of service. Practically none of the new plans provides for the vesting of employee credits, so that they are lost on termination of employment prior to retirement age. Many of the plans are inadequately financed and will cost the employers a great deal more in the years that lie ahead than they are now putting into them.

Governmental Programs Other Than Old-Age Assistance and Old-Age Insurance

Governmental programs providing income maintenance in specified contingencies which are not especially designed for older people currently benefit many more of them than do industrial pensions. These include the social insurance programs of workmen's compensation, unemployment insurance, and disability compensation. All these are for employees and, as the percentage of the employed is smaller among the older people, they benefit relatively less from these programs than younger workers. An unknown but certainly a large number of the older people, however, derive a sizable amount of income annually under these programs.

Many older people also are on general assistance rolls. General assistance is the present-day form of the old institution of poor relief, which was brought to the Colonies from England and estab-

⁵ New York State Legislative Committee on Problems of the Aging, *Youth At Any Age* (Legislative Document No. 12, 1950), p. 24.

lished in every state soon after the organization of its first government. During the great depression of the nineteen thirties, a very disproportionate number of older people were on the relief rolls, many more than on old-age assistance, which was then in its infancy and operative in only part of the country. Since enactment of the Social Security Act in 1935, the bulk of the aid given to needy old people has been provided through old-age assistance. A considerable number of older people lacking other means of support and ineligible for old-age assistance are, even today, on general assistance, the old undifferentiated poor relief.

More important are military pensions. They date back to the earliest years of the Republic but reached large totals only after 1880. They are not restricted to older people, but these constitute a high percentage of all who are on the pension rolls. Not only have military pensions provided support for many of our older people, but they served to condition American thinking to look favorably on pensions for civilians who, after a lifetime of work, are left without adequate means in their old age. When old-age assistance developed, it was regarded as something radically different from public assistance and similar to military pensions. To this day, the conflict between the assistance and pension concepts, which arose from the dual ideological origins of the institution in this country, is the source of one of the basic difficulties with old-age assistance.

Old-Age Assistance

Of all existing programs to assure older people a minimum income sufficient for a decent existence, the largest at this writing, in the number of beneficiaries and the total of the benefits paid, is old-age assistance. Nearly 2,800,000 people of 65 and over were on the old-age assistance roll throughout the country in June, 1950. This number constituted somewhat more than 24 per cent of all people in this age group. The total of the old-age assistance grants in this month was above \$122,000,000—a rate only slightly below \$1.5 billion per year.

Old-age assistance in the United States is paid under state laws, which differ in some respects from state to state. It is administered either directly by the state governments or by county governments under state supervision. The national government, however, pays a large part of the costs of old-age assistance and fixes some standards which the states must meet to receive federal aid. Of the total

expenditures for old-age assistance, a little less than 60 per cent now come from the federal grants-in-aid; most of the rest come from the state governments, with small amounts from the counties. The federal aid is provided through an annual appropriation by Congress made from the general fund of the Treasury. Some states raise their share of the costs through special taxes, such as liquor and gambling taxes, but most of them meet these costs from their general tax revenues.

The federal grants-in-aid are made on a quarterly reimbursement basis, under the following formula: states receive four fifths of the first \$25 of their average monthly old-age assistance payments, plus one half of the next \$10, plus one third of the remainder within individual maximums of \$50 per month. This formula limits the federal aid to a maximum of \$30 per month per case and operates to give the largest amount of federal aid to the states whose average payments are \$50 per month or more. In addition to thus sharing the payments made to beneficiaries, the national government reimburses the state for one half the costs of administering old-age assistance.

The federal grants-in-aid are subject to a number of conditions set forth in the Social Security Act. Reimbursement is made only for assistance payments to people who are 65 years of age or over. Further, the state law must meet certain specified standards to entitle the state to any federal aid. It must provide for payments only to old people who are in need. But need may be defined as each state sees fit, subject only to the condition that in determining need the income and resources of the applicant from other sources must be taken into account. Other provisions place limitations upon the conditions which the state may impose as conditions for the granting of assistance. Of these, the most important is that no state may require a longer residence within the state than five of the last nine years preceding the application—and uninterrupted residence for at least the last year.

Other conditions governing federal aid relate to administration. Old-age assistance must be in operation throughout the state and, if administered by the counties, must be state supervised and provide for an appeal to the state authorities if applicants claim they have unfairly been denied assistance. The people administering old-age assistance must be selected on a merit basis, and the administration must be satisfactory to the agency of the national government which allots the federal aid, the Bureau of Public Assistance of the Social

Security Administration, which is in the Federal Security Agency. The national government has no contacts with the beneficiaries, and payments to them are made by state or county check. But it has exerted a wholesome influence toward non-political and efficient administration.

Each state is free to determine all conditions governing old-age assistance payments to individuals. Naturally, states seek to satisfy the conditions governing the granting of federal aid, but most states pay old-age assistance to some people whom they would not have to include. Only a few states, however, pay old-age assistance to anyone under 65. In contrast, many states pay at least some people more than \$50 per month, which is the maximum payment which will be taken into consideration for federal reimbursement. Thirteen states paid more than \$50 per month on the average in June, 1950, all but three of which were Rocky Mountain or Pacific Coast states. In the entire country, old-age assistance averaged \$43.85 per month, with a range of from \$21.52 in Mississippi to \$70.68 in California. An even wider range exists in the percentage of all people of 65 and over who are receiving old-age assistance. While the average throughout the country is 24 per cent, the range is from less than 10 per cent in several of the Middle Atlantic states to above 80 per cent in Louisiana. Similar, although less extreme, variations often exist both as to average payments and the percentage of beneficiaries, among the counties of the same state.

Part of the explanation of these variations lies in the differences with regard to need among the older people, both between and within states. It was not intended that the payments should be the same to all beneficiaries. In all assistance programs, need is determined on an individual or family basis, and the benefits are based on the amount required to meet these needs less the individual's income and available resources from other sources. As the needs and the income and resources of individual beneficiaries differ greatly, both the benefits paid and the percentage of the beneficiaries are bound to vary considerably.

The existing variations, however, are not only due to such entirely proper reasons but, also, to differences in state laws and, still more, in their administration. These differences concern principally the determination of need. In most states, need is determined on an individual basis. In some areas, however, all older people are assumed to need a specified minimum dollar income. Variations also exist

because some types of income are not taken into consideration in some states in determining the old-age assistance payable to beneficiaries. More widespread is the failure to make a thorough investigation of the other income or resources of applicants for old-age assistance. Back of all these differences in law and practice are, to some extent, the conflict between the pension and assistance concepts of old-age assistance which have never been completely resolved in the popular thinking on the subject. In states where the Townsend movement and the sentiment for universal pensions are strong, the percentage of all people of 65 and over who are on the old-age assistance rolls is likely to be very high. In such states, also, the payments tend to be flat amounts to all beneficiaries, in contradiction to the assistance concept.

Variations in old-age assistance payments also result from the differing ability of states to finance their part of the costs. The range in average per capita income between the highest and lowest states is as three to one. This situation led the Social Security Board (the predecessor of the present Social Security Administration) to advocate "variable grants," under which the federal aid would vary inversely to the state's ability to finance its own old-age assistance costs. Congress has never been willing to do this, but since 1946 has prescribed a formula under which the states paying low average benefits receive reimbursement for a larger part of their outlays, but with the largest aid per case still going to the states paying the higher average benefits.

The number of persons on the old-age assistance rolls, the average payments, and the total cost have all increased rapidly. Eleven states enacted old-age assistance laws in the nineteen twenties, but less than 5,000 people were on the old-age assistance rolls at the end of the decade. Five years later, when the Social Security Act came before Congress, 28 states had laws and slightly more than 200,000 old people were on the rolls. By 1940, the old-age assistance rolls totalled 2,000,000. Their growth was halted by the ease of getting jobs during the War, but since then, another 800,000 people have been added. Old-age assistance grants averaged a little more than \$18 per month during the first year of the Social Security Act and have since increased nearly 150 per cent. The total costs of old-age assistance have trebled in a decade, and the federal grants-in-aid have increased even more, due to liberalization of the formula governing partial federal reimbursement.

In many states, old-age assistance frequently has become a political issue. Pressure groups have been formed among the old people to "up" the "pensions" and ease the conditions under which they are allowed. Politicians have catered to these pressure groups, and there have been instances of manipulations of the grants before elections for campaign purposes. But real scandals and very serious abuses have occurred in only a few states.

Old-Age and Survivors' Insurance

Basic Characteristics. The other major program whose objective it is to assure a minimum income sufficient for a decent existence in old age is old-age and survivors' insurance, which was established by the Social Security Act of 1935 and is an exclusively federal program. In June, 1950, about 1,950,000 people over 65 years of age received benefits under this system, of whom 1,300,000 were retired workers and the rest, wives, widows, and parents of insured members of the system. Another 800,000 beneficiaries were younger survivors of deceased members. The 1,950,000 older people receiving old-age and survivors' insurance benefits numbered 850,000 less than the old-age assistance recipients and constituted only one in six of all people of 65 years and over. Under the Social Security Act Amendments of 1950, however, the number of older people receiving benefits is expected to increase rapidly and will soon pass the number of old-age assistance beneficiaries. The total costs of the system have been greater from the beginning, amounting to \$2.1 billion in the fiscal year 1949-50, more than 40 per cent in excess of the expenditures for old-age assistance.

Old-age and survivors' insurance differs from old-age assistance in many basic respects. It is a social insurance, not an assistance, program. The right to benefits is not dependent on need. The system has its own financing. Its revenues come from so-called "payroll taxes," which bear close resemblance to ordinary insurance premiums. These are imposed at equal rates upon employers and employees so that prospective beneficiaries consciously contribute to the costs of their benefits. No general tax revenues are used either for payment of old-age and survivors' insurance or the administration of the system. Conversely, the payroll taxes are not co-mingled with the general revenues of the United States and cannot be and are not used for any purpose other than the payment of benefits and the costs of administration.

Coverage. The existing old-age and survivors' insurance system is very complex and has many deficiencies. Not all Americans or even all employees are included within the system. President Roosevelt's Committee on Economic Security, which prepared the original Social Security Act, recommended compulsory coverage of all employees and voluntary coverage of others than employees. Congress adopted a more restricted coverage. Extension of coverage, thereafter, was recommended in presidential messages, reports of the Social Security Board, and by both of the Social Security Advisory Councils (1937-38 and 1947-48) which were organized at the instance of the Senate Finance Committee to make recommendations on needed changes in the law. Congress, instead, narrowed the coverage in 1939 and again in 1948. In the Social Security Act Amendments of 1950, the coverage was considerably broadened.

As it stands, coverage in the old-age and survivors' insurance system depends upon the industry and occupation in which a person is engaged. There are no exclusions of small establishments, as is customary in American labor legislation. But coverage, generally, is limited to employees. In the 1950 amendments, however, a beginning has been made with the inclusion of others than employees. Most urban self-employed persons were brought within the system, the exceptions being professional groups whose representative organizations asked for exceptions (lawyers, doctors, chiropractors, Christian Science practitioners, funeral directors, and some others). Employees, as well as employers in many lines of work, are excluded. Among these, the largest group are the agricultural employments, although the recent amendments do include some regularly employed farm workers. People engaged in domestic service are treated similarly. Also excluded, until now, have been all federal, state, and local government employees. Under the 1950 amendments, the states may contract with the Social Security Administration for the inclusion of state and local government employees who are not included within any retirement system of their own. Excluded heretofore, also, have been the employees of religious, charitable, educational, and other non-profit organizations. Other than clergymen and members of religious orders, these employees may now be brought under the Act at the employers' option and on a two-thirds vote of the employees. The 1950 amendments appear to have increased the coverage by at least 7,000,000 persons and potentially by as many as 10,000,000. But still excluded are at least one job in

every four, to say nothing about housewives and others who are not classified as being in the labor force.

Eligibility for Benefits. Coverage in the old-age and survivors' insurance system relates to being taxed and developing credits which once earned are never lost. Not everyone who is covered for tax purposes is entitled to benefits on attaining age 65. In the original law, any coverage in five different years sufficed for eligibility. In the 1939 amendments, the conditions for eligibility for all persons, other than those close to 65, were made much more restrictive. People 65 and over who retired in the first quarter of 1940, the earliest date of possible inclusion on the benefit rolls, could qualify on a showing that they had paid payroll taxes on not less than \$50 per quarter in six of the twelve quarters which had elapsed since January 1, 1937, when the old-age insurance system came into operation. But people not 65 until later also had to establish coverage in half of the quarters after 1936. With the lapse of time, the required number of quarters of coverage steadily increased, being 28 in the last quarter of 1950. This rule operated to make ineligible to benefits a very large percentage of all workers covered for tax purposes. These were the people who shift between covered and uncovered employment or who drop out of employment altogether. It operated to exclude the great majority of all women workers and also was very unfair to the veterans, who not only received no credit for their service with the colors but had the period during which they served counted against them in applying the rule of coverage in half of the quarters elapsed since 1936.

In the Social Security Act Amendments of 1950, these injustices of the 1939 Act have been partially corrected. This has been done by establishing January 1, 1951, as a new starting date for the application of the half-of-the-quarters coverage rule. Quarters of coverage earned prior to January 1, 1950, may be counted even when that starting date is selected. The effect is that after July 1, 1952, some old people, including retired people previously not eligible, will once more be able to qualify on as few as six quarters of coverage. But as the half-of-the-quarters rule is retained, people not eligible to retirement until later will have to show a constantly increasing number of quarters of coverage, up to a maximum of 40. For veterans, however, the injustices of the prior law have been completely corrected by counting time spent with the colors as covered employment and crediting their accounts with earnings of \$160 per month (or more, if higher) for their time of service.

Benefits. The benefits payable on retirement at age 65, or later, to eligible persons (referred to as "fully insured" in the law) have been increased by a reported average of 85 per cent by the Social Security Act Amendments, 1950, but still are not large. They greatly exceed in value, however, the payroll taxes that the employees and their employers must pay into the system. The new formula⁶ provides for a monthly benefit (termed the "primary benefit") to retired, fully insured persons of 50 per cent of the first \$100 per month of their "average wages,"⁷ plus 15 per cent of the next \$200. The minimum primary benefit is \$20 per month; the maximum, \$80.⁸ Immediately prior to the 1950 amendments, the average primary benefit was \$26 per month. This average is expected to increase to \$45 within a year and to \$50 in 1960 and thereafter.⁹

In addition to these primary benefits, the Social Security Act since 1939 has provided benefits to some of the dependents of retired workers—wives of 65 years of age and over and children under 18. Such dependents can get a benefit of one half the primary benefit. These benefits are not genuine dependents' allowances going to workers for the support of their wives and children, but are benefits these dependents can claim in their own right. No allowance is

⁶ Previously the primary benefit was 40 per cent of the first \$50 per month of the average taxable wage, plus 10 per cent of the next \$200, all increased by 1 per cent for each year of coverage. The new 1950 formula given in the text applies to persons retired after September 1, 1950. The 1950 amendments also increased the benefits of all persons already retired under a somewhat different formula, which it is estimated will increase these benefits an average of 77½ per cent.

⁷ "Average wages" are determined by dividing the total wages on which an individual has paid payroll taxes after 1950 or 1937 (whichever is more favorable to the retired employee) by the number of months which have elapsed in the interim, including months in which an employee was not in covered employment. This results in "average wages," for purposes of determining benefits which are often far below the actual wages while employed in covered employment, for all persons who drop out of employment, are irregularly employed, or shift between covered and uncovered employment.

For persons who do not have at least six quarters of coverage subsequent to 1950, the beginning date for computing average taxable wages is January 1, 1937. For younger people, who will not be eligible for primary benefits until distant future years, but whose dependents may be eligible for survivors' benefits should they die before retirement, the starting date, both for determining eligibility for benefits and the average taxable wages, is the twenty-first birthday. Taxable wages earned prior to that birthday, however, are included in the total wages used in computing average taxable wages.

⁸ Neither a primary nor any other benefit is payable in any month in which a beneficiary earns \$50 per month in covered employment. This figure was increased from \$15 per month by the 1950 amendments.

⁹ These figures are taken from the *Actuarial Cost Estimates for the Old Age and Survivors' Insurance System as Modified by the Social Security Act Amendments of 1950*, published by the House Ways and Means Committee, p. 8.

made for the support of wives who are under 65 years of age although dependent upon the retired worker. When married men are 65 years of age, their wives are, on the average, between 5 and 6 years younger, and this difference increases to 8 years when married men are 80. Only in less than one third of the primary benefit cases are there any wives or children's benefits, although two thirds of all men over 65 are married and legally responsible for the support of their families.

The Social Security Act, since 1939, also has provided for benefits to surviving dependents of insured workers—the spouse, children under 18, and if there are no closer dependents, dependent aged parents. These benefits are either three-fourths or one-half the primary benefit of a deceased “fully” or “currently” insured worker. “Fully insured” in this connection means the same thing as in determining eligibility for primary benefits; “currently insured” means tax payments on at least \$50 per quarter in six of the last twelve quarters before death.

Trust Fund and Invested Reserves. The other major provisions of the federal old-age and survivors' insurance system are those relating to financing. As has been noted, all benefits and the costs of administration are met from a special trust fund, the old-age and survivors' insurance fund. This is under the management of a statutory board of trustees composed of the top officials of the departments which have to do with the administration of the old-age insurance system. Into this trust fund are paid the entire proceeds of the payroll taxes on employers and employees. Amounts not required immediately for benefit payments and administration costs are invested by the trustees in securities of the United States, and the interest earned is credited to the fund. The reserve funds thus invested totalled not quite \$13 billion on June 30, 1950.

Although there are many other trust funds which the national government maintains and administers in the same manner,¹⁰ critics of old-age insurance have claimed that because the reserves are invested in United States securities, they are, in fact, used to pay the current expenses of the Government and, having been spent, are

¹⁰ Among these are the soldiers insurance fund, the unemployment trust fund, the railroad retirement fund, the United States civil service employees retirement fund. This method of handling the taxes and reserves in the old-age insurance system was copied from the method developed by Secretary of the Treasury, Andrew Mellon, for meeting the costs of the Soldiers' Adjusted Compensation (bonus) Act of 1922.

not available for old-age insurance purposes. This is a tricky, but completely false argument. The United States Government borrows from the trust fund when the fund invests in its securities and it, of course, uses the money on which it pays interest. But the transaction does not differ basically from that involved in private lending to the Government, whether by insurance companies (which hold far more Government securities than does the old-age and survivors' insurance fund) or by private individuals. There is no better guarantee that money invested will be repaid than a security of the United States Government. To the extent that interest is earned on the securities owned by the trust fund, future payroll taxes necessary for the payment of old-age insurance benefits are lightened.¹¹

Taxes. The present payroll tax rates on employers and employees are 1.5 per cent on all wages and salaries in covered employments up to \$3,600 per year. Under the present statute, the tax rate is to be increased to 2 per cent in 1954, to 2½ per cent in 1960, to 3 per cent in 1965, and to 3¼ per cent in 1970.¹² This tax program is comparable to that included in the original law of 1935, which began with a 1 per cent rate on employers and employees and was to be increased, at three-year intervals, to a maximum of 3 per cent in 1949 and thereafter. Acting on the slogan, "pay-as-you-go," Congress in 1939 reduced the tax rates by postponing the taking effect of the first increase in tax rates for three years. Thereafter, it annually "froze" the original rates, so that it was not until 1950 that the rate became 1.5 per cent on employers and employees.

The taxes collected to date have been more than sufficient to pay all current benefits, but they have not met the true costs of the system. "Pay-as-you-go," as the term has been used in controversies over old-age insurance, means merely meeting current disbursements and ignoring accruing liabilities. It is a method of financing which necessitates sharp increases in tax rates later on and results in higher

¹¹ The only conceivable alternatives to the present method of handling the reserve funds are to leave these funds idle or to invest them in housing or enterprise. The former method would result in increased costs, as the interest earnings would be lost. The latter would put the trust fund into business, in competition with private lenders and entrepreneurs.

¹² These taxes are collected quarterly from the employer, who deducts the employees' taxes from the wages paid to them.

For self-employed people, brought within the system by the 1950 amendments, the rates are 2¼ per cent in the years 1951-1953; 3 per cent, 1954-1959; 3¼ per cent, 1960-1964; 4½ per cent, 1965-1969; and 4¾ per cent from 1970 on. This is a rate 50 per cent higher than the employee's tax, but 25 per cent less than the combined employer-employee taxes. Self-employed people get benefits on the same basis as employees.

rates than would be necessary if accruing costs were met currently. Actually, we have had only an approach to such a "pay-as-you-go" method of financing, as we have collected annually in taxes more than was needed for current disbursements. But with the expected rapid increase in benefit costs in the years which lie ahead, we may come to regret that higher taxes were not collected in the prosperous war and post-war years, when they would not have been burdensome and would, moreover, have had an anti-inflationary effect.

The present combined 3 per cent tax rate on employers and employees will, according to the actuarial estimates published by the Ways and Means Committee, be sufficient to meet the estimated disbursements under the present law until after 1955. But the true costs, on a level premium basis, are above 6 per cent.¹⁸ The tax rate increases included in the 1950 amendments, which will reach the combined rate of 6.5 per cent by 1970, are expected to yield an equivalent total revenue in the years up to 2000. This ultimate rate is higher than it would need to be if accruing liabilities were more nearly being met currently. But this is a matter of choice, rather than a serious defect, in the present program. Tax freezes and tax reductions in the next years, under the misleading slogan of "pay-as-you-go," however, might well doom the entire insurance system and would certainly increase its costs.

More clearly unsound in the present law is the feature establishing the maximum tax base at \$3,600 per year. In the original law, and until the recent amendments, this limit was \$3,000. With changing wage levels and the decreasing value of the dollar, however, an equivalent limit to this \$3,000 in the original law would now be above \$5,000. The effect of this limit is to exempt from taxation a large part of the wages and salaries of executives and other high-paid employees while taxing the entire earnings of lower-paid workers. As even the highest paid employees do not begin to pay the full costs of their old-age and survivors' insurance benefits, this favoritism to them is indefensible.

Appraisal. The old-age and survivor's insurance system is the world's largest insurance institution. Well above 80,000,000 living Americans have credits in this system. It has always been efficiently administered, as even its most severe critics acknowledge. Not only has it been free of all scandals, but it has been administered at the remarkably low cost of 2.5 per cent of the tax collections.

¹⁸ *Actuarial Cost Estimates, op. cit.*, p. 17.

No one, however, is satisfied with the existing old-age and survivors' insurance system. The system is so complex that few people not connected with its administration have an even reasonably good grasp of its provisions. Many of those provisions are illogical and most inequitable.

The Social Security Act Amendments of 1950 improved the system in many respects. They also introduced some new inequities and undesirable features. It is, for instance, very unfair that states which have not made any provisions for old-age security for their state and local government employees are permitted to bring them into the old-age and survivors' insurance system, while those which have made such provisions may not give their employees this additional protection. Equally indefensible is the feature of the present law that employees covered by private pension systems are included while those covered by public retirement systems are excluded. Even worse is the abandonment, in the new law, of any increment in the primary benefit for years of tax payment.

The law finally enacted was in many respects less satisfactory than either the original bill or the measure passed by the House. Congress, while anxious to improve the law, seems to have been still more concerned with keeping down costs. As on former occasions, when amendments to the Social Security Act have been under consideration, far too much weight was given to the views presented by representatives of the private insurance companies and the American Medical Association, which, shortsightedly, were also supported by the major business organizations.¹⁴

Alternatives. Although the law, despite material improvements, is still far from satisfactory, what should be done with old-age and

¹⁴ Some insurance people gave valuable aid when the original Social Security Act was under consideration by publicly coming out for the measure. The gentleman who has served as the chief spokesman for the insurance companies ever since, however, urged Congress not to enact the law. This gentleman has probably had greater influence upon subsequent amendments than anyone else. The American Medical Association, long strongly opposed to health insurance, in 1950 joined with the insurance companies to fight the inclusion of permanent total disability benefits in the old-age and survivors' insurance system, as provided in the bill passed by the House and in substantially all old-age insurance systems in foreign countries. Few businessmen presented any views to the Congressional committees, but the representatives of the major business organizations endorsed the position taken by the insurance companies and the American Medical Association. But companies with private pension systems were known to favor liberalization of the old-age insurance benefits, as most of these plans provide that any benefits paid to a retired worker under the Social Security Act shall be deducted from the promised industrial pensions.

survivors' insurance clearly depends upon the alternatives which have some chance of adoption.

One of these is some sort of a universal pension plan. Under such a plan, everybody who attains the retirement age would be paid a flat rate old-age pension, regardless of his income from other sources. The costs would be met from general tax revenues or an earmarked tax levied upon the entire population. This sort of an old-age program is associated with the Townsend Plan but many variations have been proposed and still others are possible.

Universal old-age pensions, financed by general taxes, have a strong appeal but are subject to many objections. One of these is their great cost. A pension of \$100 per month to everybody 65 years of age and over would cost \$14 billion in the very first year, and the cost would double in a generation. Such a pension would be 50 per cent more costly if 60 were made the pension age. For many recipients, the only value of the pension would be to increase the estates left to children. For others, even a \$100 pension would have to be supplemented by public assistance because they have large medical expenses or many dependents. Most serious is the objection that non-contributory pensions tend to become a political football, with the consequent dangers of runaway costs, inflation, and constant uncertainty.

The other major alternative is to abolish both old-age assistance and old-age insurance and substitute for them a single federally administered system, supported by a personal income tax, under which benefits would be paid only to old people having less than a stated amount of income. This plan was originally proposed by Lewis Meriam of the Brookings Institution in his book, *Relief and Social Security*, published in 1946. It is now before the country as "the universal pay-as-you-go citizens' pension plan" of Senator Butler (Republican-Nebraska).¹⁵ Under this plan, everybody would be taxed at the rate of 3 per cent on his income up to \$3,000 per year, without any exemptions. Pensions of \$50 per month would be paid to all people of 65 or over whose income from other sources is not more than \$600 per year. These pensions would be reduced by \$1 per month for every \$50 of additional income, with no pension being paid to anyone with an annual income of \$3,000 or more.

¹⁵ A laudatory exposition of this plan is the long article by Emily C. Hammond, "Citizens' Pensions—An American Plan" in the New York *Herald-Tribune* of September 30, 1950.

This plan is now receiving a good deal of support in some conservative circles. It is attractive to these people because it would do away with the tax upon employers for old-age insurance purposes. It would also shift the costs of old-age assistance, now paid from general taxes, falling in large part upon business, to the proposed special income tax, which would fall mainly on wages and salaries and exempt all income above \$3,000.

It is probable that the tax proposed would produce a yield far short of that required to finance even the modest pensions proposed. More important is that it involves the complete abandonment of old-age insurance and the adoption of a federalized old-age assistance program. And this assistance program would be financed mainly by taxes upon the workers. Such a monstrosity will have little appeal to most Americans, save for its promise of lower costs. This promise, however, is likely to prove very illusory as the pensions would, doubtless, soon be increased and need defined more liberally. Further, under such a system, in which employers contribute nothing to the costs of depreciation of the human beings whom industry employs for its profit, it is a safe prediction that labor will demand more and higher non-contributory industrial pensions.

Improvement of the Old-Age and Survivors' Insurance System. The soundest policy seems to be to work for the improvement of the existing old-age and survivors' insurance system. All gainfully employed people should be brought within the coverage of the system. Existing inequities in the conditions governing eligibility for benefits should be corrected. Benefits should be improved, particularly by providing for genuine dependents' allowances. The sooner we realize that the needs of our older people cannot be financed on a shoestring and levy taxes to more nearly meet the obligations we are incurring, the better. All these improvements are feasible and have, in fact, been presented to Congress in bills which it has rejected or watered down.

A contributory insurance system, in which benefits and costs are directly associated is the best protection this country can have against unmanageable public costs for old-age support. It is a program entirely consistent with the principle that people should, as far as possible, provide for their own support. Realistically developed along the lines in which it was originally conceived, it should prove a bulwark to our economy of free enterprise and our American way of life.

Public Employees' and Railroad Retirement Systems

In addition to the old-age and survivors' insurance system, there are many retirement systems established by governments for their own employees. There are around twenty such systems for employees of the national government. This number is expressed approximately because there is doubt whether the retirement programs for some classes of federal employees are to be regarded as retirement systems, since they have no separate funds and little, if any, separate administration. Among these, are the retirement plans for the several branches of the Armed Services, for former members of Congress, and for federal judges. There also has been much legislation providing pensions to ex-Presidents and their widows, and to still others to whom the country feels especially indebted.

The largest of these retirement systems is the Civil Service Employees' Retirement System, which includes most of the civilian employees and officers of the national government. This is a contributory system in which the employees contribute 6 per cent of their salaries, and the Government matches the employees' contributions and assumes the entire costs of past-service credits. Above 150,000 older people now receive benefits under this system, with the retirement allowances averaging close to \$100 per month. Most of the other federal retirement plans, except those of the Armed Services, are small. Many are non-contributory but provide much larger pensions than does the federal old-age and survivors' insurance system.

On the state and local levels of government, there are numerous retirement systems but in only a few states are these systems coordinated. Some cover state and/or local government employees generally, while others apply only to special groups of employees such as policemen and firemen, teachers, and judges. Except for policemen and firemen's and judges' funds, these retirement systems are contributory but often provide only inadequate benefits. For more than one third of all state and local government employees there are no retirement programs at all.

A final special program is the nationally established and operated railroad retirement system. This is a system which includes all railroad employees and is administered by an independent agency of the national government, the Railroad Retirement Board. This system is financed by payroll taxes of $6\frac{1}{4}$ per cent each on the railroads and their employees. It allows past-service credits and pays higher

benefits than does the national system. Around 250,000 older people and a large number of survivors of deceased railroad men are on the benefit rolls.

The major policy question raised by these special retirement systems is that of the soundness of having any such special systems. The case seems clear for special systems for government employees providing more generous benefits than are possible in an old-age insurance system for the entire population. As an employer, the government should provide conditions of employment as good as those of forward-looking private employers; and industry today is providing industrial pensions to supplement the benefits of the national system.

A separate railroad retirement system is less easily justified. Separatism developed in this case, not because it was required by logic, but because it was wanted by both the railroads and their employees. This is still their attitude, and they have been willing to pay much higher contribution rates to "run their own show" and enjoy larger benefits.

Provisions Other Than Income Maintenance

While there has developed within recent years widespread recognition that older people need many things for a satisfying life besides a minimum income sufficient for a decent existence, public provisions for meeting these other needs are still very inadequate.

The oldest of these institutions is the poor-house, or poor-farm. Originally an institution providing custodial care and maintenance for the undifferentiated group of the poor (including the insane and the petty criminals), it has in recent years often become the public "home for the aged." But, generally, it is still a pretty bad place, although there are some model public homes for the aged. Private homes for the aged, conducted by religious, fraternal, and charitable organizations, may be a little better, on the average, but also suffer from inadequate financing. Around 200,000 older people are now in institutions providing custodial care, other than in mental institutions. These are pretty evenly divided between public and private institutions. Significantly, few new private homes for the aged have been established in recent decades. Provision of custodial and medical care for older people who need such care is increasingly becoming a public responsibility. These should be met in a better manner than herding helpless old people into poor-houses and insane asylums.

The larger problem of medical care for the older people has received real attention only in the last years. Such attention includes research study of the diseases of old age and their cure or alleviation, hospitals for the chronically ill, special institutions for the senile aged, and much more medical treatment than has been available to older people heretofore. Most of this progress has been made at public expense, but private charity has had some part in this development.

Progress has also been made with educational, psychological, and recreational programs and special social services for older people. These include special recreational centers and facilities, adult education classes to prepare people for old age and to keep them occupied when old, visiting practical nurses and housekeepers to help the ill and infirm among the aged, and old-age consultants or counsellors. Emphasis in many of these services has been upon helping the old people to help themselves. Private welfare agencies have become interested, in many places, in services of this kind for the older people, but the outstanding leader has been the state of Michigan through the Bureau of Human Adjustment of its University.

Increased employment opportunities for older people have come to be recognized as one of their most vital needs. But public provisions for meeting this need have lagged. Two states have tried to deal with the problem by criminal statutes. Louisiana penalizes the establishment of hiring age limits under 50. Massachusetts makes it an unfair labor practice to discriminate against workers on the basis of age. Positive approaches to the problem by way of special divisions and services in the public employment offices are still pretty largely in the discussion stage. Still lacking, also, is concrete information about the work older people have been doing in industry, for the study of which the World War II experience would seem to be a fertile field.

Also still largely in the discussion stage is the matter of provision of housing suitable for older people. A few notable shelters for homeless (usually single) old people have been developed by welfare agencies. Some private housing for older people has been constructed in southern California and, perhaps, elsewhere. Public housing, especially for older people, is being debated but seems unlikely in the near future.

Finally, note must be taken of attempts to consider and deal with the problems of the older people in their totality rather than in separation. Indicative of this approach is the Bureau of Human

Adjustment of the University of Michigan, previously noted, the New York State Joint Legislative Committee on Problems of the Aging which has functioned for several years, and the Commission on the Care and Treatment of the Chronically Ill, Aged, and Infirm in Connecticut. On the national level, a National Conference on Aging was held in August, 1950, in Washington, under the auspices of the Federal Security Agency, in which about 800 invited delegates participated and emphasis was centered upon the many-sided approach which is necessary to convert our aging population into a national asset rather than a liability. Considerable research emphasizing this unified approach is also now in progress, both in Government agencies and in universities.

Concluding Observations

In the emphasis on the non-economic aspects of the problems of our aging population, there may be an element of wishful thinking to get away from the unpleasant subject of the large costs to employers and the public which the economic needs of the older people will entail. A minimum income sufficient for a decent existence is an absolute essential for all older people, as it is for all the rest of the population. Attempts to play down this truth will not get rid of the problem.

But people who, like the author, have been interested in trying to find solutions for this central economic problem need to recognize that it is by no means all there is to the well-being of our older people. Only a many-sided approach can possibly meet the entire problem.

To social scientists, as to all others in our country, this is both an important and a fascinating subject. At this stage, much badly needed knowledge still awaits discovery by qualified research workers. Every type of research, intelligently conducted, should yield results. But an inter-disciplinary approach, or perhaps better still, a study of the problem by broad-gauged people who can grasp its many ramifications, would seem most fruitful.

This is, also, a field in which experimentation is possible and desirable. The social scientist cannot set up experiments to find out the truth in the fashion of the natural scientist. In relation to the public provisions for the aged, experimentation with new techniques and policies is occurring on many sides. If social scientists carefully observe what is going on, they can, at least to a degree, overcome the disadvantages of being unable to conduct controlled experiments.

Part III

**RESEARCH—PRESENT AND
PROSPECTIVE**

PERSONAL AND SOCIAL ADJUSTMENT IN OLD AGE

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THE ADJUSTMENT of old people, like that of any group in our society, has two aspects, personal and social. Personal adjustment represents the changes which a person makes in his attitudes and behavior when confronted with a new situation. Successful personal adjustment means that the individual satisfies his own needs and aspirations and at the same time the expectations and the demands of society. Failure in personal adjustment signifies that the person is incapable of making, or unwilling to make, changes in his attitude and conduct which are required to adapt to a new situation.

Social adjustment is the adaptation of society or of one of its component institutions or groups to social change. It means revision of policies, programs, and procedures in the interest both of the general welfare and of the happiness of its individual members.

There have always been, of course, problems of personal and social adjustment to aging. In the past these have been of relatively minor consequence. In the last fifty years, however, they have become increasingly important and are today a matter of great public concern. A number of different factors operating together have contributed to this end. Three of these are:

1. *The transition from a rural to an urban civilization.* Rural life was particularly adapted to successful adjustment in old age since both the husband and the wife could progressively reduce their work activities with decreasing physical vigor. At present, less than one-fifth of the population of the United States lives on farms. In the city the older person not only finds himself discriminated against in employment, but often relegated to a lower social status than he enjoyed in a rural society.

2. *Rapidity of social change.* In American society the tempo of change has increased, creating problems of adjustment for all age groups. These are presumably most difficult, other factors remaining the same, for older people. Technological changes, for example, resulting in a new invention may result in unemployment in an enterprise rendered patronless. The older people without jobs find it difficult to master a new trade or skill or to obtain an opportunity to secure training.

3. *Changing family relations.* The role of the aging person in his family relations has undergone a great change. To a large extent these shifts are interrelated with the transition from rural to urban life, but they also transcend this explanation. In the country the youngest son and his wife lived on the farm and in the home of their aging parents. But the ownership of the property and at least the nominal management of the farm and of the housekeeping remained with the old couple. The commodious dwellings in good agricultural areas readily accommodated three generations. Even with failing physical vigor there were chores and activities to keep aging persons busy and contented. Then, too, in the past in the rural community the family was largely a unit in church attendance and in recreational activities. Furthermore the kinship group typically tended to be almost self-sufficient for social life. Often it was customary for all the married sons and daughters to gather together with the parents and grandchildren at one of the homes for Sunday dinner and for afternoon sociability.

In the city, and to an increasing extent in the country, this solidarity of family relations has changed. The smaller number of children decreases the spreading of economic support of the aging parents. Family dwellings in the city are being built to accommodate only husband, wife, and children without the extra room for a relative or a guest. The multiplication of labor saving devices in the homes of the country as well as the city has reduced the chores and the tasks which the grandparents formerly performed as a real service. Only baby sitting has emerged as an activity appreciated by the young married couple, but often resented by the aging person as a symbol of his anomalous role in the family. The fact is that the family is no longer a recreational unit. The most significant leisure-time activities for each member of the family are often those that he carries on independent of the others. Often the aging persons because of differences in attitudes and opinions embarrass the young couple on occasions when age in and of itself would not be a bar to their participation. Yet if they have moved to live with a child, they may not have formed any satisfying social contacts.

These three factors—the transition from a rural to an urban society, the increased tempo of social change, and the breakdown of family relationships—combined with other factors to accentuate the problems of older people and to make more difficult their solution according to customary procedures. Finally the depression of the thirties

high-lighted the plight of the aged. Hundreds of thousands lost their life savings. Their sons and daughters could no longer be relied upon to support them; in many instances they also were forced to apply for relief. It was only too evident that new ways of providing for the subsistence of older citizens must be found.

The solution adopted by Congress with wide popular support was Old-Age Assistance and Old-Age Insurance as a part of the Social Security program. This action further shifted the responsibility for the care of aged parents from their children to the government. The inevitable result was a loosening of family ties and other shifts in the complex of family relations that have not as yet been studied adequately.

With provisions for the aged by Old-Age Assistance and other Social Security measures the experts in this field as well as the general public considered the problem of old age as virtually solved. All that remained for further study and discussion and decision were questions upon the adequacy of pensions and assistance, age at retirement, and the extension of social security to the groups not yet covered by legislation. The problem of old age was thought to be essentially economic.

It was soon apparent, however, that providing an economic basis of support, while necessary, was not enough. Old people, like all other persons, want not merely to subsist, but to live. It was evident that in addition to the economic adjustments to aging there were those which were social and personal. These personal and social adjustments were very real to older people but more difficult to study than their economic needs.

Research completed and in progress upon these personal and social adjustments will be presented in the context of the changing social and economic status of the old in our modern society. They will be discussed under six headings: (1) changes with aging, (2) measures of personal adjustment, (3) factors associated with personal adjustment, (4) self-conceptions and social roles, (5) social adjustments in the interest of older people, and (6) problems for further study.

Changes with Age

The study reported in *Personal Adjustment in Old Age*¹ of 499 men and 759 women provides interesting data on trends with aging,

¹ R. S. Cavan, E. W. Burgess, R. J. Havighurst, and Herbert Goldhamer, *Personal Adjustment in Old Age* (Chicago: Science Research Associates, 1949).

many of which are not available in census reports. This group was not selected as a representative sample of the general population. It was chosen rather to include adequate proportions of different age periods, occupations, employment, and economic status for purposes of comparison. The group was deficient in number of persons 90 years of age and over, unskilled workers, and wealthy persons.

In enumerating below the chief trends associated with increasing age, the comments include the most recent census findings whenever they are available.

1. *Lower average years of schooling.* This finding is in agreement with census data for the United States. It reflects the fact that each younger age-group in our society has had on the average more education than the preceding age-group.

2. *A higher percentage of widows and widowers.* This trend emphasizes the increase in number with increasing age of persons bereaved by the loss of a spouse who do not remarry. It is much greater for women than for men. In 1949 of all persons 65 and over, 24 per cent of the males and 54 per cent of the females were widowed.

3. *A higher percentage living in dependent family relationships—* in institutions, with sons or daughters, or with relatives.

4. *A decrease in amount of close companionship.* This is caused not only by the death of spouses but by the loss by death, change of residence, etc., of intimate friends.

5. *A decrease in participation,* as shown by attendance at meetings, offices held, number of hobbies, and plans for the future.

6. *A decline in the gainful employment of males.* Of all men 65 and over in 1949, less than one-half (44 per cent) were gainfully employed.

7. *Greater dependence on pensions, old-age assistance, and children for support.* Of all persons 65 years and older in the United States in 1949 about one in four received social insurance and related benefits, and about one-fourth were on old-age assistance rolls.

8. *Increased feeling of economic security in spite of lowered amount of income.* The greatest economic insecurity seems to be in the sixties when the adjustment to loss of employment is necessary. In each succeeding decade the economic condition of the person becomes more stabilized.

9. *Increase in physical handicaps,* illness, nervousness, and a decrease in feeling of satisfaction and health.

10. *Increase in religious activities and dependence upon religion.* Frequency of church attendance drops in the eighties and nineties. Incapacity to go to church, however, is more than made up by listening to church services over the radio and by Bible reading.

11. *Decrease in feelings of happiness, usefulness, zest, and a corresponding increase in lack of interest in life.*

12. *Lower median score, indicating poorer adjustment.* Attitude scores are representative of the way older people react to their experiences in the major areas of their life such as work, family, friends, recreation, leisure, and religion. They include, also, their statements of attitudes on health, economic security, zest for life and happiness. The way in which these attitude scores are obtained will be described in the next section.

The above trends are, of course, not a complete listing of the economic, social, and personal changes and crises which accompany aging. They are, however, the more measurable and among the most important. It is necessary to realize, also, that these trends represent averages. There are great individual differences both in the incidence of these changes and crises and in the reaction of persons to them. It is therefore desirable to have at least two instruments to measure personal adjustment to aging: one that will identify changes of activity with aging and another that will reveal attitudes of satisfaction and dissatisfaction with one's self and one's experiences.

Measure of Personal Adjustment

A measure of personal adjustment in old age was early recognized as desirable. In fact such an instrument was essential in order to determine the factors associated with successful and unsuccessful adjustment.

An early, if not the earliest, systematic study of personal adjustment in old age was made in 1933 by Christine M. Morgan.² She studied by the interview method 170 men and 211 women who were receiving public relief in selected New York counties. The adjustment of the person was determined by answers to questions upon his happiness. She found five factors associated with "good adjustment and happiness." These were: good health, satisfactory social and emotional relations with friends and family, hobbies and outside

² C. M. Morgan, "The Attitudes and Adjustments of Recipients of Old Age Assistance in Upstate and Metropolitan New York," *Archives of Psychology*, No. 214 (1937).

interests, living in one's own home, and some form of work or useful activity.

A second study was made by Judson T. Landis³ of aged rural people in Iowa. These included both financially independent and dependent families. He determined the adjustment of these persons by their answers to the following five subjects: amount of daily activities, desire to visit more often, greatest worries and pleasures, enjoyment of life, and number of enjoyable activities. He weighted the replies to each question and added these to obtain a total adjustment score. Good adjustment was associated with higher educational level, married and living with one's spouse, good health, employment of men, lack of feeling that work is a burden, activities such as gardening, hobbies, visiting, and church attendance.

The most systematic attempt to construct an index of personal adjustment was made by E. W. Burgess, Ruth S. Cavan and R. J. Havighurst and reported on in the book *Personal Adjustment in Old Age*.⁴ The attempt was made to devise two instruments, one to measure the degree to which the person participates in activities, the second to gauge his attitudes of satisfaction or dissatisfaction with his status and his activities. The first of these is called an Inventory of Social Participation, the second an Inventory of Attitudes.

The Inventory of Social Participation is made up of nineteen items. These include four questions on health since health is an important factor conditioning activities. The health items are: the number of serious physical problems, the number of minor physical difficulties, days confined in bed in a year, and amount of care required. The activity items are as follows: use of leisure time, number of hobbies, extent of reading, number of organizations in which person is active, number of club or other group meetings per month, living arrangements, employment, frequency of listening to radio, attendance at religious services, frequency of reading the Bible, frequency of seeing friends, frequency of seeing children and young people, frequency of seeing family or close relatives, frequency of spending holidays with family or relatives, and things given up because of reduced income.

The answers to these items were scored and ranged from 3 to 43 on the experimental group of 102 persons on whom they were standardized. The schedule may be used cautiously with individuals

³ *Attitudes and Adjustments of Aged Rural People in Iowa* (Unpublished Ph.D. thesis, Louisiana State University, 1940).

⁴ Pp. 102-48.

as a quick way of getting a picture of their participation in activities and for purposes of comparison with others. In research it may be employed in making comparisons between groups, as for example, if it is desired to find out the difference in social participation between old people residing in their own homes as compared with those between older people living in institutions, or with their children. It is evident that personal adjustment cannot be measured adequately by items on activity and health alone. The attitude of the person to them is just as, or even more, important. Therefore, it was desirable to devise a second instrument which would get at the subjective reaction of aging persons to their activities and their all-round report of happiness, feelings of usefulness, and zest for living.

The Index of Attitudes as a measure of personal adjustment included three criteria :

1. *Satisfaction with activities and status.* The Index was constructed to permit an older person to report his feelings of satisfaction or dissatisfaction on four fields of activity (family, friends, work, and religion) and in two categories of status (health and economic security).

2. *General happiness.* A number of questions were included to ascertain the general state of happiness of the person. The purpose was to obtain an over-all subjective expression of feelings of well-being or discontent without specific reference to a given area of experience.

3. *Feelings of usefulness.* This criterion of personal adjustment is an over-all evaluation of the person's satisfaction with his present existence but in terms of service to others.

The Attitude Index consists, accordingly, of eight groups of seven questions each upon the following topics: family, friends, work, religion, health, economic security, happiness, and feelings of usefulness. The question on religion may serve as an illustration of the method of constructing the Index :

Agree Disagree ?

1. Religion is important in my life.
2. I have no use for religion.
3. Religion is a great comfort to me.
4. Religion doesn't mean much to me.
5. I don't rely on prayer to help me.
6. Religion is the most important thing in my life.
7. Religion is only one of many interests.

Three of these statements are positive (Nos. 1, 3, 6), the strongest being "Religion is the most important thing in my life." Three are negative (Nos. 2, 4, 5). The strongest of these is "I have no use for religion." One statement is neutral, "Religion is only one of many interests."

After experimenting with the scoring of answers to the questions, the most satisfactory method proved to be to add the favorable or positive answers and to subtract the negative replies, giving no score to the neutral response. Each of the seven other components of the Attitude Index were scored in a similar way. Each person filling out the schedule could then be scored separately on each part of the Index or be given a total score which was the sum of the scores on the eight components.

There are available, then, two instruments for the measurement of personal adjustment derived from replies given by persons filling out a schedule. One is an Inventory of Social Participation which is a more or less objective statement by the person of his degree of participation in activities and of his health and economic status. The other, the Attitude Index, provides a numerical expression of his statement of satisfaction or dissatisfaction with his activities, with his health and economic status, and with life in general. They are moderately correlated with each other (Pearsonian $r .78 \pm .10$) which means that to a great extent they measure the same thing (at least 60 per cent) but in part that they are independent indications of personal adjustment. In short, while personal adjustment is to a large extent associated with participation in activities, there are other factors, such as those of personality differences, that are also important.

A third measurement of personal adjustment is an Adjustment Rating. This is made not by the person but by another person or persons who rate the person's adjustment on the following six points:

1. Intimate association with family and friends.
2. Group associations and/or contact with the world through reading and radio.
3. Individual activities and hobbies.
4. Feelings of emotional security in relation to friends, family or religion.
5. Feelings of status or social recognition.
6. Happiness and contentment.

The older person is rated by a judge or judges on each of these areas on a ten-point scale. After this is completed, the judge or judges give a master rating. This is not obtained by getting a sum

total of the scores of the person on the above six areas. It is rather an over-all intuitive rating taking into account a review of these data, but including also all the information that can be secured by interview. In its initial development by Ruth S. Cavan,⁵ the judges also read the data on activities entered upon the schedules. The rating can of course be made without reference to schedule data by a judge who is well acquainted with the older person or who interviews him.

The statements in the scale for the over-all intuitive master ratings are as follows:

- 1-2 Seriously maladjusted socially; many gaps in social participation; much emotional disturbance.
- 3-4 Meager social life; some emotional disturbance and discontent.
- 5-6 Moderate degree of social participation; effective compensation for inadequacies; fair adjustment to emotionally disturbing events.
- 7-8 Fairly well developed social life; no serious gaps in participation and activities; general feeling of happiness, contentment, and being loved.
- 9-10 Well-rounded social life of all kinds and many activities; very good emotional reactions.

It will be noted that the scale assumes a one-to-one correspondence between social adjustment and the emotional reaction of the person. The data from the different studies indicate that this is the case without giving any conclusive evidence of which is cause and which is effect.

These three instruments (Inventory of Social Participation, Attitude Index and Adjustment Rating) for the measurement of personal adjustment have made feasible a series of studies of factors associated with personal adjustment and of numerous comparison by age, sex, occupation, and social class. Findings from certain of these inquiries will be reported in the sections that follow.

Factors Associated with Personal Adjustment

Findings are available from three studies which attempted to ascertain the relation between various factors in the background, characteristics, and experiences of older people and their personal adjustment as measured by the Index. The first group has already been described and was studied by Cavan *et al.* The second group which was comprised of persons on old-age assistance in a middle-grade rooming district in Chicago was studied by Ethel Shanas.⁶ The third sample

⁵ Ruth S. Cavan, and others, *op. cit.*, p. 129.

⁶ Ethel Shanas, *The Personal Adjustment of 388 Cases of Recipients of Old Age Assistance* (Ph.D. thesis, University of Chicago, 1950).

composed of 747 cases from Kansas City, Kansas and Akron, Ohio was investigated by John Frank Schmidt.⁷ His cases were selected on a quota basis. His group of older persons who returned the schedules was designed so that age, sex, and socio-economic areas were controlled by a combination of quota and stratified sampling procedure. He also kept separate for purposes of tabulation and analysis the cases from Akron and from Kansas City. The number of cases 50 to 59 years of age in each city was approximately equal to the number 60 years of age and over.

Twenty-three factors were found to be associated with good adjustment in old age in two or all of these three studies. The findings are presented in Table 1.

These findings indicate that the principal factors associated with good adjustment as measured by the Attitude Index are those in the fields of good health, the maintenance of marital and family relations and of friendships, leisure-time and other activities, membership in at least one organization, no discrimination or unhappy period in life, conception of oneself as middle-aged rather than elderly, old, or aged, feeling of permanent economic security, no lowered social status, plans for the future, church attendance and belief in an after-life.

There is presumptive evidence that these 24 factors are correlated with scores for good adjustment obtained on the Attitude Index. It is important to verify these findings in new studies that would employ other criteria of personal adjustment, such as the Cavan Rating Scale for Personal Adjustment, or a psychiatric personality inventory such as the Minnesota Multiphasic test.

Up to this point the main emphasis has been upon the personal adjustment of older people in our society. Inventories of Activities and Indexes of Attitudes need to be complemented by research upon the self-conceptions of older persons and the social roles which they play in our society.

Self-Conceptions and Social Roles

There is an increasing body of research under way which takes as its central point of orientation the concepts of self-conceptions and social roles. These studies recognize that an important aspect of the problems of aging inheres in the expectations of the person in interaction with the expectations of society.

⁷ John F. Schmidt, *Patterns of Poor Adjustment in Persons of Later Maturity* (Ph.D. thesis, University of Chicago, 1950).

TABLE 1
Factors Associated with High Scores for Good Adjustment in Old Age
in Studies by Cavan, by Shanias, and by Schmidt

Factor	Category Favorable To Good Adjustment	Studies of Older Persons		
		CAVAN U. S. Total group	SHANIAS Chicago Old Age Assistance 127 men 261 women	SCHMIDT Kansas City- Akron 747 persons
1. Age.....	Younger	x		x
2. Nativity.....	Native-white	x	x	
3. Marital status.....	Married	x	x	x
4. Family relationships.....	High Score—11 or 12		x	x
5. Living arrangements (with whom).....	Living with spouse	x	x	x
6. Friends.....	More than 25		x	x
7. Intimate friends.....	More than 10	x	x	x
8. Health.....	Fair or better	x	x	x
9. Physical problems.....	Less than 4	x	x	x
10. Health score.....	High—5 or 6	x	x	
11. Leisure-time activities.....	Six or more	x	x	
12. Organizations.....	Belong to one or more	x	x	x
13. Activity Score.....	High—20 or more	x	x	x
14. Church attendance.....	Once a week or more	x	x	x
15. Feeling of Permanent Economic security.....	Yes		x	x
16. Age-group.....	Thinks himself middle-aged		x	x
17. Discriminated against in life.....	No		x	x
18. Health Compared with 10 years ago.....	No marked decline		x	x
19. Social status compared with 10 years ago.....	The same or upward	x	x	
20. Evaluation of marriage....	Happy	x	x	
21. Unhappy periods in life....	None	x	x	
22. Future plans.....	Yes	x	x	x
23. Belief in after-life.....	Sure		x	x

First to be considered are the self-conceptions of people in relation to aging. At what age does a person become old? Do persons in the later decades think of themselves as "old"?

Several studies have asked the question "In what age group do you feel that you belong?" with the opportunity afforded to check

one of the following replies: "aged," "old," "elderly," and "middle-aged." The first group studied⁸ was composed of 499 men and 759 women, with a median age for the men of 73.5 years and for the women of 71.7 which was six years higher for the men and four years higher for the women than the median age of all men and women 60 years and over in the general population of the United States in 1940. Very few of the persons filling out the schedules regarded themselves as "old" or "aged." In fact half the men (54.2 per cent) and two-thirds (66.6 per cent) in the age group 60-64 designated themselves as "middle-aged." Not until they reach the decade of the seventies do a majority of the men and of the women think of themselves as "elderly." Only in the age period 80-84 do a bare majority of men and women (51.6 and 51.5 per cent respectively) admit to being either old or aged. Even when they are in the nineties less than forty per cent of older persons in this particular study think of themselves as "aged."

The findings of this pioneer study have been confirmed by the results of later research on groups as divergent as those living in old people's homes and on old-age assistance. Similar results are found in special occupational groups such as teachers and physicians. The replies of a random sample of persons 59 years of age and over in a Chicago local community provides supporting evidence.⁹

The two closely related concepts of role and of status are important for understanding the attitudes and behavior of older persons. A chief factor in their difficulties in personal adjustment is their ill-defined role and uncertain status in modern industrial society. In the rural society of the past the old had a definite and responsible role and high status. The activity of farming and ownership of land still give the farmer and his wife a sense of usefulness and a place in the community. This is in marked contrast to the majority of older persons in the city who become unemployed after forty or fifty years of age and find it difficult and sometimes impossible to obtain a new job and who may be required to retire from work while they are physically able and mentally active. Then, too, it must be remembered that today only one-fifth of older persons live on farms.

For purposes of research the terms "role" and "status" need to be clearly differentiated. The social role of a person is an activity which

⁸ For characteristics of this group see Ruth S. Cavan, and others, *op. cit.*, pp. 46-61.

⁹ Study in progress under direction of Ethel Shanas, Committee on Human Development, University of Chicago.

he performs as a member of society or of one of its component groups. Typically any given role of a person embodies the expectations both of himself and of society. Every society and every group have a repertory of roles corresponding to the diversity of functions required to carry on a common life and to achieve desired objectives. Members aspire to and are assigned different roles. They play these roles acceptably or unacceptably; excellently, well, poorly, or badly.

The status of the persons in a social group or in any society is the position which he achieves or is awarded in a continuum from the lowest to the highest standing. Actually the status of any person is evaluated in three different ways. First, it is determined by the standing of the groups of which he is a member, e.g., class, occupational and ethnic. Second, it is influenced by his status in the most significant group to which he belongs. Third, his status is affected, to a greater or lesser extent by his standing in all other groups of which he is a member.

The pioneer study of social roles and status was carried out in Midwest, a town of 6,000 inhabitants. The subjects reported on here were 100 men and women over 65 years of age. They were selected by the quota sampling method in order to give representation of those married, widowed, or single within the various social classes.

Eleven different roles were defined. These were great grandparent, grandparent, parent, home responsibility, kinship, social club activity, business club, church activity, peer participation, civic activity, and business or occupation. Of the 100 persons, 23 were great grandparents, 70 grandparents, and 78 parents. Those who could be graded with reference to participation in a business or occupation numbered 53 and those engaging in a business club activity 48. All 100 persons were rated on their other roles. It is interesting to note that of the 11 roles mentioned, 5 have to do with the family.

Within each role the person was ranked on a 10-point scale, with 0 for non-participation to 9 for highest participation. For example, the weight of 0 in the religious role was assigned to a person who was not only not a church member but did not attend or listen to religious programs over the radio or give other evidence of religious interest or activity. But a score of 9 was given a person with a position of highest responsibility within the church such as superintendent of the Sunday School or president of the Board of Trustees.

The highest participation of persons over 65 years was found, as might naturally be expected, in family and home activities. The

lowest degree of activity was reported in social clubs, business groups, and civic activities. Participation in informal activities with one's peers was intermediate.

The degree of participation in each social role was next correlated with the index of attitudes which measures social adjustment. All but one role, that of business club activity, showed a statistically significant association. The two highest correlations with personal adjustment were the great grandparent role and peer participation (Pearsonian $r .64 \pm .10$). In general, it is evident that the degree of participation in roles and the status achieved in these roles is associated with personal happiness.

Societal and Group Adjustments to Aging

The data already presented indicate that certain conditions, economic, social, familial, and personal, are associated with the success or failure in personal adjustments to aging. Many of these conditions, especially in the economic and social spheres, are not susceptible to control by older persons acting as individuals independently of others. If certain adverse conditions could be changed, however, many problems of adjustment of old people would be made much easier. Their change would require action by society and sometimes by the government.

In one area the government, as we have seen, has intervened, namely, in the field of economic support by measures of old-age assistance and by social insurance. But common sense observation and data gathered by studies show that while economic security is essential it is not enough.

The findings of one study provides data in some detail to document the general lack of community provision for older persons. This report, by Ruth S. Cavan, is on Rockford, Illinois with a population in 1940 of over 100,000 in the municipality and its immediate adjacent suburbs.

Dr. Cavan shows that in many respects the characteristics of persons 65 years of age and older are like those in the United States population. For example, women exceed men in number; widows and widowers become, with advancing age, an increasing proportion of the old-age group; about one in four receives old-age assistance and an additional 13 per cent old-age pensions.¹⁰

¹⁰ The national average in 1949 is estimated as around 25 per cent.

Dr. Cavan points out that the old people constitute a higher proportion of the population in districts near the business area and thin out in the newest suburbs at the outskirts. She says: ¹¹

The old people constitute a higher percentage of the population in the areas near the business center of the city. A few of these areas have as high as 12 or 13 per cent of the population who are 65 or older. These areas are the old parts of the city. In the better class old areas old people live in homes which they have lived in and owned since their youth. Near the business center are also the rooms and flats over stores and the large homes converted into light housekeeping rooms where rents are low. Into these quarters move the old people whose income is low. Three or four families may share one bathroom and many of the old houses do not have central heating. Some of the old people who have never had a high standard of living are content and happy; for others who at one time lived comfortably but now have a small income the change has brought bitterness and resentment. Other old people live in hotels or in rooming houses near the center of the city, where they are conveniently near restaurants, stores, and motion picture houses. Rockford requires an inspection by the Health Department of all rooming houses which cater to six or more roomers. There are ninety rooming houses in Rockford, most of them within two-thirds of a mile of the central business district. Not all of these rooming houses serve old people, but some include a few old people and others are operated especially for them, with the landladies providing meals as well as rooms and a certain amount of care in case of illness. Some of these rooming houses and boarding homes that cater to the old charge as much as \$125 per month; others will accept the amount received by old-age pensioners, averaging \$41 per month. The old people who are scattered throughout the residential districts live in their own homes, with their children, or in private families that take only one or two roomers and hence are not included in the official list of rooming houses with six or more roomers.

These living arrangements of older people are probably much the same in other midwestern industrial cities of the same size. Dr. Cavan points out other conditions of life for the aging population of Rockford:

1. No comprehensive planned attempt has been made to provide for old chronic invalids. Partial provision is made by the convalescent ward of the County Farm, by one small private hospital that caters to the old, six private nursing homes, and the facilities of the general hospital.

2. Little provision is made by institutional homes (which care for 150 old people) or by other institutions for old couples who are either not accepted or are required to live in separate wards for men and women.

¹¹ "Old Age in a City of 100,000," Illinois Academy of Science *Transactions*, Vol. 40 (1947), pp. 156-159.

3. No community provision is made for finding jobs or providing recreation for old people.

4. With advancing age and with increasing physical disabilities, many old people are confined to their residences or immediate neighborhoods. Some of them may spend weeks and months without contacts with friends.

5. Many old people find it impossible to make adjustments to changes resulting from old age without assistance.

6. There is no special agency in Rockford to offer information, counseling, or guidance to older people. At present they turn to the minister, to the police, and to the county welfare bureau with their problems and grievances.

In certain larger cities agencies have been established to offer special services to older persons. Two of the first counseling centers were the one opened by Dr. Lillian Martin¹² in San Francisco and the second by Dr. George Lawton in New York City.¹³ In Chicago, under a three-year grant from the Wieboldt Foundation, the Welfare Council of Metropolitan Chicago instituted the Community Service for the Aged under the directorship of Elizabeth Breckinridge.

These and other services represent the present trends to (1) personal counseling where the needs of older persons are considered individually rather than in the mass and (2) the establishment of a central coordinating service with a view to a community-wide and comprehensive service to aging persons.

Further Research

An excellent outline of a research program upon the social aspects of aging is contained in the research planning report prepared for the Social Science Research Council by Otto Pollak and published under the title *Social Adjustment in Old Age*. The projects proposed are discussed under six headings: psychological analysis of individual adjustment to aging, old age and the family, old age and making a living, attitudes toward retirement, adjustments to retirement, and old age adjustments in other institutional fields.

No attempt will be made in this paper to outline a similar detailed program of research projects. Only a few problems which seem to the writer as being particularly promising will be mentioned.

¹² Lillian J. Martin, *A Handbook for Old Age Counsellors* (San Francisco: Gurtz Printing Co., 1944), p. 182.

¹³ George Lawton, editor, *New Goals for Old Age* (New York: Columbia University Press, 1943).

Variables in research in aging. Before describing particular projects, one point of significance for many research projects in this field should be stressed. It is important to recognize that activities, attitudes, and personal adjustment may vary markedly with the degree of the presence or absence of certain variables. These should be controlled.

Sex should always be subject to comparison. On many factors no sex differences are to be found but on some, like the stress on work and retirement for men, considerable differences are found.

Trends in activities, attitudes, and personal adjustment with age have already been demonstrated to exist. The differences by chronological age, however, are probably not as great as would be the variations by physiological, psychological, and sociological age when such measures become available.

A recent study indicates that differences in personal adjustment by residence in areas of high, middle and low economic status, at least as measured by the Attitude Index, are few and rather slight.¹⁴ Nevertheless, studies should continue to control factors such as education, occupational level, and social class until their influence is definitely determined.

Marital status certainly should be controlled as evidenced by the different findings already found in activities, attitudes, and personal adjustment among the married, single, widowed, separated, and divorced.

Regional and ethnic differences should be controlled by the design of the study. Variations in customs and in values are often so great by region and national origin as to counteract the effect of other factors.

An interesting and valuable study could be made to determine the relative role in personal adjustment of each of the above variables when the others are held constant.

Utilizing personality tests in the study of changes in aging. As already pointed out, there are three standardized measures of personal adjustment, already described, available for use. In addition there are various psychiatric, psychological, and social psychological tests which can be used significantly to compare changes with age and to measure individual differences.

Only three of these will be discussed briefly. The Minnesota Multi-phasic Personality Test was constructed by the cooperation of a

¹⁴ John F. Schmidt, *op. cit.*

psychiatrist and a psychologist. It has the advantage as a measure of emotional disturbance of having been standardized for its component traits by a comparison of mental patients with persons in the general population. It could be used advantageously, therefore, for validating the reports of older persons as recorded in the Attitude Index.

The Vernon-Allport Personal Value Test might be utilized to show changes in value with age. The Rorschach Test has already had a preliminary use with older people but with too few cases to determine its validity for distinguishing between persons with good and poor adjustment.

Longitudinal study of aging. The great majority of studies of the social aspects of aging have been cross sectional. It is evident that knowledge of the process of growing old will best be achieved by studying the same group of people over a period of years. Ideally such a study should be from the cradle to the grave. Practically an age period before retirement (such as 55 to 59 years) may advantageously be selected. A study of this type is now under way by Robert J. Havighurst, Ethel Shanas, and the writer. Certain occupational groups, like teachers, physicians, office workers, skilled and unskilled trades, are being selected so as to control both the problem of sampling and of adequate representation of a few occupational groups.

Changes with aging in interpersonal relations. Family and friends are important at all ages, but are subject to their greatest strain and breaking-up in old age. Several fruitful research projects can take their point of departure from the assumption that intimate relations with one's family and/or close friends are as essential to personal adjustment in old age as in childhood or adolescence.

One interesting study in this field should be made in communities of different sizes and in different regions of the United States. It would center its focus on factors making for happiness or unhappiness of the couple as they enter and pass through the sixth, seventh, and eighth decades. Certain variables like age, economic status, and ethnicity should be held constant or utilized for purposes of comparison.

Other studies in this general area can be only briefly enumerated. Under what conditions do widowed persons make successful or unsuccessful adjustments to the death of a spouse? In what different ways do single persons succeed or fail in adjusting to the vicissitudes of aging? What are the factors entering into maintaining old friendships and the making of new acquaintances and intimates?

Community studies. There is a real need for intimate and revealing studies of the role and status of old people in communities of various types: rural, town, small city, large city, suburb, urban, and local communities within the metropolitan community. Various techniques are required for such a study, some of which have already been described. A new instrument devised by Robert J. Havighurst is a Public Approval Index. It is composed of 91 activities. One thousand persons of all age groups 20 and over passed a judgment on each of these (strong approval, mild approval, indifference, or disapproval) when performed by old people. A pilot community study on roles and status of people 65 and over in a midwest town is being completed¹⁶ and will be helpful in planning other community studies.

Experiments and the prediction of personal adjustments. The construction of instruments of measuring personal adjustment makes possible the use of experiments in the study of aging. One such controlled experiment could be made in an old people's home which has a waiting list of applicants. To have a controlled experiment those admitted should be matched with those who are refused. At the time of application a test of personal adjustment would be given and repeated after a certain time interval. In this way the advantages and disadvantages of institutionalization and their effects could be compared with those of other types of living arrangements. Predictions might then be feasible for new groups of applicants.

Many other examples of the use of this "before and after" technique will occur to the reader. Older persons might be invited to become members in two social groups. They would be assigned arbitrarily to one or the other of these groups. These groups might vary according to any desired factor as by type of leadership, formal or informal program, kind of activity, etc. Again at an appropriate time a measure of personal adjustment might be used to determine the variation in the influence of the two groups, if any.

Conclusion

This paper has presented the present status of research in personal and social adjustment to aging. It has indicated feasible and promising directions for further research. More important, however, are the growing number of students entering this field of study and the raising of standards of their training for research.

¹⁶ See page 150.

THE POLITICS OF AGE

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A PAPER under a title such as this is clearly a premature undertaking. It is a subject which might or might not warrant a paper even if a good bit were known about it. In the present state of knowledge it runs the double risk that the conception may not be a fruitful one and even if it were, there might be very little that could be said about it with any assurance.

What will follow, therefore, must be speculation, an attempt to set forth, on largely *a priori* reasoning, the grounds on which it might be supposed that an inquiry into the politics of age would yield intellectually respectable results, and an attempt likewise to mention briefly at least the grounds on which such an enterprise might be seriously questioned.

Relation of Politics and Age

The single assumption with which one begins is deceptively plausible. Briefly stated it is the supposition that the age of the citizen makes an observable and describable difference in his political belief and behavior. If this is true, it ought to be possible to say something of the respects in which the old differ from the young and therefore to say something about the political consequences which can be reasonably anticipated from the apparent demographic fact that the population is aging and that within 25 years there will be an additional ten millions of persons, with voting privileges, who are over 65 years of age.

Political parties have disputed the age qualifications for the vote at least as far back as the French Revolution and it requires no deep political intuition to guess that the conservative party has argued for the higher age qualification and the liberal or radical party the lower age qualification. As a matter of political judgment, the more or less practical politician has assumed that age is positively correlated with conservatism. The basis for this supposition was probably the further assumption that age was positively correlated with property ownership and that it was not the age but the property ownership which would secure the conservative results.

But what warrant is there for assuming a politics of age at all? Age is not a social integer. It will always appear in association with other attributes. There are the aged rich and the aged poor, the aged farmers and the aged city dwellers, the aged mechanics and the aged clerks, the aged Protestants and the aged Catholics, and few of these coupled characteristics are incompatible with third, fourth, and fifth variables as well. In each of these instances there would be respectable grounds for believing that any simple analysis which showed that the old behaved differently from the young was rather an oblique reflection of wealth, occupation, or religion than of age.

To this it may well be replied that the explanation of social phenomena is always complex since behavior is influenced from many sources and the isolation of age as a factor presents precisely the same problems as the isolation of any other single factor.

Statistical Approaches

It is also true that there are relatively simple statistical techniques by which the influence of single variables may be considered separately from the amalgam in which they are found in society. But this takes data, large quantities of data. For each variable which we recognize as important and attempt to control, the size of the sample required increases greatly. If we find ourselves dealing with four or five variables, the size of our observed population must be very large, so large indeed that the student seldom has access to data adequate to the analytic task. The result is the one we see so often in the social sciences. A series of four students observing the behavior of a male, Protestant farmer of 65 will respectively attribute the behavior to sex, religion, occupation, and age.

However, since these are not theoretically difficult problems and since the techniques for handling them are reasonably satisfactory even if the data are not, perhaps they are not too important. No more is intended here than a general warning against the attractions of broad *ceteris paribus* assumptions as an answer to the deficiencies of the data.

Some relevant data exist and a collection of these data has begun at the Institute of Industrial Relations at Berkeley. Virtually every public opinion poll has enumerated the approximate or actual age of each person polled. Even where the polling organization was indifferent to any particular relation of age to the opinion expressed, age has almost invariably been employed as one of the means of sample

control. This in itself is interesting. The polling organizations, particularly those concerned with national samples, have obviously assumed that a distortion in the age structure of the sample will produce a distorted set of results, thereby implying that a person's age will affect almost any opinion he holds. But this kind of confirmation ought to be received with restraint for it may be more a matter of statistical convenience than of intellectual conviction. It is possible, then, to collect the results of a large number of polls within which it may be feasible to differentiate opinion, and sometimes behavior, according to age and to determine whether youth, middle age, and old age appear to make much difference in what a man believes and how he behaves.

At this point we face the temptation of a *ceteris paribus* assumption directly. The samples are too small to allow extensive statistical manipulation. A national sample of 3600 responses will give us a fair number of cases in each five-year age classification. Many polls will provide some indication of economic status and perhaps occupation as well. If the analysis of the effect of age were to be made even within such broad economic groups as lower, middle, and upper income groups, the single sample, barely adequate in size to begin with, would now become three samples with only a third the number of cases in the five-year age groups. If we allow ourselves to be influenced by the consideration that the behavior under observation may also be significantly affected by sex, religion, or geography, we are driven to the hard choice of a broad *ceteris paribus* assumption or to abandoning the enterprise. Possibilities of avoiding or at least minimizing these problems may exist by combining samples and thus substantially increasing the opportunity for statistical manipulation.

A second source of data for the study of political behavior as it is influenced by age is afforded by the joint analysis of election returns and the population reports of the U. S. Census. The simple, mechanical requirements of such a study are reporting areas which are coterminous or nearly so for both census returns and election returns but which are not so large as to obscure the variations which might explain differences in election results. Election returns are reported by voting precincts which are smaller population groupings than any used by the U. S. Census in their published reports. However, census data are also collected and commonly tabulated by enumeration districts even though they are not published in this form. The enumeration district is a much smaller population grouping than is the census

tract and often will correspond in boundaries to one or more voting precinct.

Within any sizable geographic area substantial variation will be found in the population characteristics of the several enumeration districts. It will be possible, for instance, to develop an array of enumeration districts based on the varying proportions of adults over 55 to 60 years of age. If the effect of age on political behavior were strong enough to overpower other variables such as economic status, then, by the simple analysis of covariance of election returns and age distribution, we might reach conclusions about some of the political consequences of an aging population. Some of the western states, notably California, Oregon, and Washington, have made extensive use of the initiative and referendum. A number of issues have been presented directly to the voters. These have included liberalization of old-age pensions, measures for the control of labor unions, public housing, and race relations, among others. If age has a significant effect upon voting behavior, one would expect it to be strongly indicated by the response of the electorate on some of these issues. Once again, however, some means must be found of controlling other major variables if meaningful results are to be expected. The Institute of Industrial Relations at Berkeley is now experimenting with this type of analysis to determine how serious its difficulties may be.

The direct manifestations of group cohesion around issues vital to that group are not the most interesting of the problems which might be investigated by the analysis of voting results of referendum measures. It would surprise no one if farmers voted heavily for agricultural price supports, veterans for bonuses, negroes for F.E.P.C., and the aged for old-age pensions. What is more interesting and perhaps more important is the analysis of voting configurations. Each of these special interest groups is a minority which must depend for its legislative success upon gaining support for its program from other voters whose group identification lies elsewhere. This is well understood by the political leaders of the special interest group. A lively market has grown up in which political support is traded. In Congress the practice of "log-rolling" is one form of the exchange. In many states of the United States and in several of the provinces of Canada political alliances have been formed between leaders of the labor movement and leaders of the old-age movement. The terms of exchange are always likely to be favorable as between any two single-minded groups with narrow objectives. The costs to the labor

movement of an endorsement of more liberal old-age pensions will be negligible as compared with the benefits of support in the fight to repeal the Taft-Hartley Act. It can probably be set down as a general principle that the narrower the objectives of the pressure group the wider the network of alliances which are possible to it. Thus when a single legislative enactment becomes the dominating aim of group policy, it can do business with a variety of other groups similarly narrow in their objectives, however different the ends sought may be. Compatibility of interest is not the necessary principle of alliance. All that is required is that the interests be not incompatible.

But these are alliances at the formal level where the political calculations are made more rationally than by the individual member of the group. What of the individual voter himself? Does the insecurity of age have any general political effect upon the voter? Granted that it may predispose him toward more adequate support for the aged, does it develop in him any greater kinship with the trade union member and the member of the racial minority both of whom claim to be the objects of special discrimination as well? Is there any evidence of a political league of the frustrated and the insecure? At one level it may be argued that such evidence exists. The political successes of the Democratic Party are owed in some measure to its ability to combine within its program measures in behalf of these groups and thus to draw heavy support from the members of widely disparate interests. But this is not really conclusive evidence. A negro, a trade union member, a farmer, and an old-age pensioner may each vote for a Democrat but this is no evidence that they would vote for each other.

One of the potentialities of the analysis of voting returns on referendum issues is the examination of this question of the voting configuration of the older voter. If the growth of old-age movements is an evidence of radicalization in European terms, of the development of class consciousness, then there ought to be evidence found in the congruence of voting results on measures such as low-cost public housing, measures for the control of labor unions, and measures to eliminate discrimination in employment. This is a type of analysis which is quite as applicable to any special group which can be identified and distinguished within the population as it is to the older voter.

These are the statistical approaches to the problem that appear to offer some promise. There are in addition direct manifestations of the effect of age on political behavior. These are the old-age movements themselves.

Analysis of Old-Age Movements

Some form of differentiation is the precondition of any organization. The completely homogeneous population will find no principle of difference around which to organize. The existence of organization therefore always implies a statement of community of interest among the members of any organization and a statement of difference which distinguishes the members of the organization or those eligible for membership from other persons. Thus race, religion, occupation each provide a basis for organization into the National Association for the Advancement of Colored People or the Japanese American Citizens League, the B'Nai B'rith or the Knights of Columbus, the Farm Bureau Federation, the Brotherhood of Locomotive Engineers or the National Association of Manufacturers. The conditions of eligibility for membership represent the organizational statement of both community of interest and diversity of interest.

One of the striking features of the last twenty years in the United States is the emergence and proliferation of old-age movements. If we were viewing these organizations from the vantage point of 1940 rather than 1950, they might easily have been interpreted as depression phenomena, simply a few among many groups which organized to demand assistance from the government when personal resources seemed hopelessly inadequate. The Townsend movement, once the strongest of the old-age organizations, has lost much of its strength. But more than compensating for these losses has been the development of strong political movements among old-age pensioners or would-be pensioners organized upon a state rather than a national plan. They have not only survived the depression but the war prosperity as well and appear to be a more or less enduring feature of the American political scene.

More than this, it is the impression of those who have observed the California and Washington pension movements that they are extraordinarily well disciplined groups, acting cohesively and following faithfully their political leadership.

A study of old-age movements, in addition to the obvious task of appraising their political importance and effectiveness, might inquire

into several problems. There is to begin with the question which is important to ask of any group—upon what basis does the group organize and survive? It must be assumed that any enduring group is organized around some interest which the members share and which non-members possess to a lesser degree or not at all. To put this a little differently, the question is what is the common interest which, by reason of its intensity, segregates this group from the citizenry at large. Certainly age is the common expectation of all of us and casts its shadow before it so that most persons in middle age are likewise concerned with the problems of support when their productive efforts can no longer find a market. There are also excellent grounds for assuming that the younger worker, if not concerned with his own support when past 65, may yet be concerned with that of his parents who may have already reached that age.

We do not know with any reliability what the structures of the old-age movements are; their age distribution; the extent to which they consist of pensioners with problems comparable to those of workers serving a common employer; the selective attractions which they may hold for the rural or the urban person; whether their appeal is sectarian and denominational; whether they attract the unskilled and semi-skilled, the white collar worker, both husband and wife. If I were to guess, and it would be only a guess which I would not attempt to defend, I would suppose that the membership in California pension organizations would run heavily to persons of rural or small town background with a tendency to fundamentalism in religious belief. I would suppose also that women were more nearly the equal of men in numbers than would be true of most political organizations.

The curiosity about the composition of old-age movements is not entirely idle. It will be from an understanding of this structure that we will gain our insights into the political effectiveness of the old-age movements. Size is only one and perhaps not the most important of the measurements of political effectiveness. At least as important is the ability of the organization to secure disciplined action from its membership.

There is not much which can be said at present about those characteristics of groups which make for disciplined action by their members. One hypothesis worth exploring, however, is the suggestion that discipline is positively related to social segregation. I doubt whether the hypothesis can be stated in a sufficiently refined form to warrant the quantified version that the higher the degree of segrega-

tion the higher the degree of group discipline. Furthermore it is not likely that it will prove possible to agree upon either a scale of segregation or a scale of group discipline. Nonetheless the suggested relationship can be explored, initially at least, even though a quantitative scale may not be developed.

One way of examining the relationship is through an inquiry into the number and kind of other groups to which the members of any given group belong. One of the indexes of segregation will be the pattern of group membership in which the individual participates. Membership in other groups, particularly groups with divergent or even conflicting aims and philosophies, will tend to compromise conviction and attenuate action. The individual who is at one and the same time a member of a Townsend Club and of the California Tax-payers Association will, unless his membership in one of the groups is nominal, suffer cross-pressures and be the object of conflicting appeals. Where the groups are in conflict, membership in one or the other may be dropped. But the multiplication of group memberships in itself, even if there is not obvious conflict among them, will subtract from the loyalty of the individual to any one of the groups. It expresses a diversity of interest which is antagonistic to segregation.

We have no way of knowing at present whether the old-age movements would score high on such a measure of segregation. It is one plausible explanation of the disciplined political behavior of such groups. It is not, however, the participation in pension movements which produces the segregation although this is doubtless a reinforcing factor. It is far more probable that it has been the segregation of the aged which brings about the development and strength of the old-age movements.

Age is one of the characteristics around which segregation occurs. The shift in population from rural to urban areas has greatly facilitated the process. The family in urban industrial society is no longer a working unit and with the loss of the productive importance of the family, one of the important ties which connected the old with the young has been weakened. The household itself has diminished in size and where it once covered three generations now commonly spans only two. Thus the older member of society is differentiated from other age groups in society by changes in the family structure, by discrimination in employment, and by the fact that the social organizations around which leisure time might be organized tend to be age selective.

If these are considerations of consequence, a study of the pattern of organizational membership and participation of members of old-age movements should disclose the evidences of segregation. The community life of elderly persons, on this hypothesis, should be more completely bounded by their church and their old-age organization than would be true of younger persons. If a narrowing of interests accompanies age, it may both help to describe the social segregation to which I have referred and to explain the qualities of organizational discipline which have so often been attributed to old-age movements.

Were such facts to emerge from a study, democratic theory would suggest certain obvious interpretations. Group identification, in itself, is no threat to democratic institutions. It may in fact be a necessary condition of democratic institutions. But when such group identification tends to become exclusive and all-embracing, when loyalties are increasingly confined to a single identification, when one single interest of the citizen tends to absorb him completely, then a threat to democratic institutions does exist. Whatever threat is implied in bloc voting within the electorate and in log-rolling within the legislature arises from the emergence of some single interest or narrow group of compatible interests to a position of controlling influence with the citizen or the legislature.

Analysis of Party Platforms and Legislation

Finally, the politics of age might be investigated through the study of its more conspicuous manifestations in party platforms and in legislation both in America and abroad. Doubtless the scope of such a study would need to be broadened to social security programs of which old-age pensions were a part. Every major nation has encountered the demand for increased social security for its citizens. The variety of their response and the reasons therefor offer a wide and varied field for inquiry.

Here I shall mention only a few of the more obvious problems that rise quickly to the surface. It seems to be true that despite the nearly universal demand (among citizens of Western nations at least) for increased social security, the United States appears to be unique in the development of pressure groups with these particular aims and legislative proposals. This may be simply part of the general phenomenon often noted that pressure groups develop strength in inverse relationship to the strength of political parties, and political parties are notoriously weak in the United States. The reasoning

would then be something like this: where the habit of party loyalty and party regularity exists and the means for enforcing party discipline upon its legislative representatives also exist, the party becomes the vehicle for any particular reform demanded and the pressure group if it operates at all must operate as a faction of the party. Only by a show of force within the party can any given legislative objective be achieved. Where parties are weak and lack the means for enforcing party decision upon their legislative representatives, each legislator is more or less free to respond to the logic, threats, and inducements of extra-party groups organized to achieve given legislative results.

Whatever the reasons that may finally be ascribed to the path of development of social security programs, the political careers of these programs offer an opportunity to understand a good deal about the "process of government," to use Bentley's phrase. Much of the rich political fabric of modern industrial society is likely to be revealed more clearly when the political and economic circumstances are understood in which they had their first development, their failures, and their successes; when the roles of the political parties with reference to them are elucidated; when the ambiguous and fluctuating social security policies of trade unions are made clearer; when it is understood how these programs have been used both to further and to thwart socialist policies and programs. There is perhaps no other issue which is more common to the politics of all nations and more varied in the political response it has elicited.

Consider simply a few of the better known instances. In the United States labor and management are currently engaged in trying to find their bearings on the social security issue. Few employers remain who oppose social security in principle, although fifteen years ago the number was much larger. In one sense social security has been taken out of politics. But in another it is still deeply in politics. The issue is no longer posed as to whether there shall be collective responsibility for certain hazards to which all workers are subject — industrial accidents, unemployment, and old age. The current issue is which of various collectivities shall assume that responsibility. One portion of the business community, with a feudal image before it, calls for welfare capitalism and the open acceptance by the modern employer of his responsibility for the economic security of his worker. Much of labor and another group of employers now agree that security programs are matters to be settled by collectively bargained contracts.

Still other groups of unions and employers and most professional economists and welfare workers believe that social security must be a governmental function. There is no longer any issue of collectivism as such; this is conceded. The debate continues, however, over private vs. public collectivism.

The political history of social security legislation in Germany, the first major nation to develop a systematic state insurance program, illustrates the complexity of the political issues involved. The German system, for a long time a model for other Western nations, came into being as a well conceived plan by Bismarck to destroy Socialist power in Germany by appropriating to the state the services and promised services upon which trade unions and socialist societies made their popular appeal. Social insurance was introduced into Germany upon the insistence of Bismarck, with the somewhat bewildered support of the Junkers and the military and over the bitter opposition of the Socialists and liberals of the period.

The experience in England was a different one. The Beveridge report was commissioned in 1941 by a coalition government. On the broad political principle, at least, there was no disagreement. Whether this agreement ought to be laid to the unity of a nation at war and to the brave and hopeful promise of a better day to follow, or to the traditional farsightedness of British conservatives in meeting the more pressing problems of industrial capitalism on their own initiative and thus blunting the edge of socialist criticism, is immaterial here. What is material is that the politics of social security is so general a problem among nations and the forms which it takes both in tactics and programs so intimate a reflection of the political characters of the nations that a comparative study of the politics of social security promises rewarding results.

No more is intended in this short paper than an indication of a few of the dimensions of the politics of age and a few of the paths down which such an inquiry might lead. There are obviously many others which might equally have been urged. These, however, are the research areas in which the Institute of Industrial Relations at Berkeley proposes to work. For the next little while at least this is what we will mean when we use the phrase "the politics of age."

THE CONTRIBUTION OF PSYCHOLOGY

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MANY OF THE PROBLEMS of older workers and the aged in industrial society have psychological aspects. This chapter will attempt (a) to present in broad outline the current status of our knowledge about the psychological characteristics of older people, (b) to identify the problems to which psychology can make significant contributions, and (c) to indicate what is needed to implement psychological research on these problems. With the exception of the studies of Jones and Conrad¹ and Miles,² most of our knowledge of the psychological characteristics of old people is dependent upon isolated observations incidental to other investigations, so that the information is widely scattered. Reviews of psychological studies include those of Miles,³ Kuhlen,⁴ Kaplan,⁵ Lorge,⁶ Donahue,⁷ Granick,⁸ and Shock.⁹

¹ H. E. Jones and H. S. Conrad, "The Growth and Decline of Intelligence. A Study of a Homogeneous Group Between the Ages of Ten and Sixty," *Genetic Psychology Monographs*, Vol. 13 (1933), pp. 223-98.

² W. R. Miles, "Reaction and Coordination Speed with Age in Adults," *American Journal of Psychology*, Vol. 43 (1931), pp. 377-91.

³ W. R. Miles, "Age and Human Society," Chap. 15 in C. Murchison (editor), *Handbook of Social Psychology* (Worcester, Mass.: Clark University Press, 1935), pp. 596-683.

W. R. Miles, "Psychological Aspects of Ageing," Chap. 28 in E. V. Cowdry (editor), *Problems of Ageing* (Baltimore: Williams and Wilkins, 1st Edition, 1939), pp. 535-71.

Ibid., 2nd Edition, 1942, pp. 756-84.

W. R. Miles and C. C. Miles, "Mental Changes with Normal Aging," Chap. 5 in E. J. Stieglitz (editor), *Geriatric Medicine* (Philadelphia: W. B. Saunders, 1st Edition, 1943), pp. 99-117.

Ibid., 2nd Edition, 1949, pp. 91-104.

⁴ R. G. Kuhlen, "Age Differences in Personality During Adult Years," *Psychological Bulletin*, Vol. 42 (1945), pp. 333-58.

⁵ O. Kaplan, *Mental Disorders in Later Life* (Stanford, California: Stanford University Press, 1945).

⁶ I. Lorge, "Intellectual Changes During Maturity and Old Age," *Review of Educational Research*, Vol. 11 (1941), pp. 553-61.

Ibid., Vol. 14 (1944), pp. 438-45.

Ibid., Vol. 17 (1947), pp. 326-32.

⁷ W. Donahue, "Changes in Psychological Processes with Aging," Chap. 4 in C. Tibbitts (editor), *Living Through the Older Years* (Ann Arbor: University of Michigan Press, 1949), pp. 63-84.

⁸ S. Granick, "Studies in the Psychology of Senility: A Survey," *Journal of Gerontology*, Vol. 5 (1950), pp. 44-58.

⁹ N. W. Shock, "Gerontology (Later Maturity)," *Annual Review of Psychology*, Vol. 2 (1951), In Press.

*The Psychological Characteristics of Old People*¹⁰

For purposes of discussion, we may classify research results under the following broad categories: (a) perception, (b) motor responses, (c) intellectual functions including achievement, intelligence, memory, and learning, and (d) personal and social adjustment.

Perception. Everyone has observed the increasing incidence and severity of impairments in hearing and in vision with increasing age. However, carefully controlled laboratory investigations have been required to evaluate the nature of these impairments. In the case of hearing, it has been shown that the gradual impairment begins earlier and is more common for higher tones than for lower. Since the perception of higher frequencies plays an important role in the understanding of conversation when several people are speaking at the same time, this finding is of both psychological and sociological significance. It is also important to note that the incidence of hearing impairment is greater in the lower socio-economic groups than in the higher. The impairment of visual acuity and the increased incidence of farsightedness in older people are also well known. The range of accommodation diminishes progressively with age. However, both of these limitations may readily be corrected in most people by appropriate glasses which will permit them to continue their social and occupational activities. Laboratory investigations have shown that the minimum amount of light required for visual stimulation increases significantly with age; that is, older people with adequate visual acuity can see less well at low levels of illumination or in the dark than can young and middle aged people. The quickness of visual perception has been shown to decline even over five-year periods in individuals between the ages of 20 and 45. The rate of decrement was greater in the older subjects than in the younger and was greater the lower the level of illumination. Other complex visual tasks, such as perception of incomplete pictures, required more time in older subjects than in younger. All of these findings have important indications for the utilization of older workers in industry.

Motor Responses. Numerous laboratory investigations have shown that the speed of many motor responses declines gradually beginning at the age of 40 to 50 years. Decrement is greatest in the less practiced activities and in tasks involving strength and quickness of response. Responses involving habits established and maintained

¹⁰ Detailed references to the scientific reports summarized in this section are given in the review by Shock, footnote 9.

through exercise and use showed little decrement with age. There is, however, a wide range of individual differences among older subjects so that the performance of the fastest one-third of the older age group may be as good as the average performance of young subjects. Thus it is impossible to predict for an individual subject what his speed of response will be on the basis of his chronological age. The speed of simple and choice reaction time to both the sound and light stimuli also diminish significantly with age. Whether this slowing down of the speed of reaction can be attributed to physiological changes, is at present completely unknown. Attempts to relate reaction time to changes in excitability of nerves or muscles have not been successful. The speed of complex manual activities also diminishes gradually with age between 20 and 60. Beyond the age of 60, there was a sharper decline in rate. The effect of practice is of greatest importance. For instance Miles¹¹ found that older men with mechanical training maintained the young adult speed on a mechanical assembly test into late maturity and were significantly faster than a group (aged 50-69) of mechanically untrained men of equal intelligence and a similar amount of formal schooling. Another test of manual skill (McFarlane Coat Assembly Test) showed a wide sex difference attributable to experience. Women surpassed men in this test at every decade. Even at age 70 the average woman was more proficient on this test than the average 20-year-old man. The effectiveness of practice was demonstrated by showing that men tailors equaled the women's speed score. Thus skilled operations, where habits play an important part, do not show as much decline in speed with age as do non-practiced activities. The training inherent in older workers may thus readily compensate for any loss in speed with age. Since a slowing in the speed of response with increasing age is a general phenomenon which appears not only in motor tasks but also in intellectual performance, further investigations should be made.

Intellectual Functions. Psychologists have been quick to point out that many major contributions in art, music, literature, and science have been made by individuals at advanced ages. It is apparent, however, that significant contributions in certain fields of science, such as chemistry, physics, biology, and medicine, are less commonly made by individuals over the age of 60. Since advances in these fields are dependent upon technical skills and knowledge which

¹¹ *Op cit.* in footnote 3.

may change rapidly and radically, the older individual is apparently under some handicap. In the fields of art, literature, and music, which are largely dependent upon inner resources, age in itself is no handicap to productivity. It has also been observed that many present day leaders in government, religion, education, etc. are significantly older than were those who previously held the same nominal positions. This does not mean that present day leaders are more competent than their predecessors since many such positions are attained either as a result of age itself or on the basis of work done at an earlier age. Since contemporary society is not organized to encourage productivity among older individuals, we simply do not know their creative potentialities.

The average performance on tests of intelligence begins to decline in the twenties and continues at an increasing rate up to the age of 60. The extent and nature in the decline of performance beyond the age of 60 is still uncertain since adequate samples of adults in the age range have not been systematically studied. It must be realized that factors other than intelligence may contribute to low performance scores on such tests. Thus the factor of speed of performance is heavily weighted in some of the tests. Furthermore middle aged and elderly people are unfamiliar with the test material and the test situation. Their defects in vision and hearing may also play an important role. Neither can it be said that the intelligence tests currently available have high enough ceilings to test superior adult ability. Throughout adult life many factors contribute to make individuals less similar in habits, work, and activities. The problem of devising tests becomes more and more difficult. Thus our present tests fail to allow for increased knowledge and experience of elderly people. A great deal of research is required to devise test material in situations which will eliminate some of these difficulties.

Analysis of performance on the various sub-tests contained in intelligence test batteries gives us some lead as to the nature of the intellectual changes with age. While the average loss in total score is approximately three I. Q. points per decade, the decline with age varies for different kinds of test material. General information, for instance, shows an increment rather than a decrement up to the late forties with only a slight decline after age 50. There is very little loss in ability to define word meanings. Logical relations and syllogisms suffer slightly greater decrement. Arithmetic computation, reasoning, and number series completion tests show the greatest

decrement with age. Thus it is generally agreed that the most rapid decline in performance appears in those tests which measure the ability to deduce relations and correlates. It is also found that tests which require the subject to break away from old mental habits and to adapt to unfamiliar situations are the most difficult for older people. It should be emphasized that all studies have shown individual differences in the decrement of performance with age; that is, a fair proportion of the older individuals has shown performances equivalent to that of the average of the young adults. Another important finding is that the age decrement in performance is greatest in subjects with poor performance ability. In fact when performance of the upper five per cent of the population was considered, the observed decrement with age was very small or even absent. Thus among specially competent professional people, the bright and successful senescent subjects showed few unambiguous signs of psychological decline.

Although it is commonly observed that memory, particularly for recent events, declines with age, experimental studies on memory and learning ability have shown that the magnitude of the defect is a function of the material learned. Here again the degree of impairment is much less in simple memory tests, such as visual memory for digits, than for more complicated tests, such as the learning of a new language. It is also evident that loss is greater in the less accomplished individuals than those with outstanding ability. All the evidence now at hand indicates that the older individual can learn, but we do not know whether the optimal conditions for learning in middle-aged and older people are the same as those established for young adults and children.

Personality and Social Adjustment. Our knowledge of the personal characteristics of middle-aged and old individuals is at present scanty and unsatisfactory. Part of this is due to the lack of fundamental knowledge about the dynamics of personality; part is due to the inadequacy of methodology for investigating personality; and part is due to the lack of experimental subjects for study. Furthermore, many of our popular conceptions about the personality traits of older people are based on inadequate evidence and will probably have to be revised. The belief that older people are more conservative in their attitudes and opinions than are younger adults has not always been confirmed in experimental studies. In the field of market analysis, no conflict between conservatism of the old and

progressiveness of the young could be found in relation to acceptance of new industrial products, method of packaging, etc. Where there was a conservative majority among the old, there was a conservative majority among the young. Similarly no relationship between age and liberality of political opinion has been established. The whole question of measuring attitudes and the methods for altering them is one which requires extensive research.

The most extensive evaluation of personal adjustment in older people has been reported by Cavan, Burgess, Havighurst, and Goldhamer.¹² Using both questionnaire and interview techniques, they have attempted to determine factors which contribute to good and poor adjustment in older people. Although it is true that they have found greater maladjustment among older people than among younger, careful evaluation of this data indicates that social and economic factors play a very important role in adjustment. Under appropriate circumstances many older people may be very well adjusted. Although economic security plays a part, one of the most important factors in good adjustment is the maintenance of activities and interests of social importance. For the most part elderly people apparently do not desire the inactivity frequently forced upon them by our current social pattern. However, counseling, both vocational and psychological, is greatly needed among middle aged and elderly people since apparently they, as individuals, are unable to utilize their own inner resources without assistance and guidance from others. The success of the few counseling centers now prepared to handle adjustment problems of the aged speaks for the widespread need for such services.

What are the Problems?

Before forceful recommendations can be made to industry with respect to the employment of older workers, it is essential that we know more about the performance abilities of older people. Tests must include psycho-motor as well as intellectual performance. Collaborative studies with physiologists and physicians will be needed to identify and evaluate the contribution of physiological variables to performance. One difficulty peculiar to gerontological research is the necessity to take into account the effects of pathology and disease that are often present in elderly people. The clinical evaluation of

¹² R. S. Cavan, E. W. Burgess, R. J. Havighurst and H. Goldhamer, *Personal Adjustment in Old Age* (Chicago: Science Research Associates, 1949).

elderly subjects will require the cooperation of physicians in many studies. Laboratory investigations can also throw a great deal of light on the mechanisms involved in mental changes that take place with increasing age. We will need to devise new tests and procedures to evaluate the more complex aspects of performance. While many of these studies, including the development of new techniques, can be carried out effectively in the laboratory, we must ultimately find methods for assessing performance in real-life situations. Studies of this nature will require the cooperation of leaders in both industry and labor for their prosecution. It is important that we keep in mind the simple fact that the best way to evaluate the abilities of old people is to observe old people.

Another important technical problem in gerontological research is the development of methods for the analysis of age changes. Very few of the statistical techniques now available are appropriate for the analysis of time series—the essence of gerontological research. New methods must be devised which can be used for the analysis of both individual and group data.

Having identified the abilities of old people, our next problem is to devise ways and means whereby these abilities can be utilized for the good, both of the individual and of society in general. This raises the important question of continued employment or a gradually reduced level of activity as compared with abrupt retirement. It is obvious that part of this problem is an economic one which will require the best efforts of economists for its solution.

The psychologist can play an important part in the determination of attitudes of older individuals toward aging and also of the attitudes of young and middle-aged people toward the aged. Fortunately the techniques are available for setting up and standardizing quantitative scales of attitudes. These methods should be applied with vigor to the problem at hand. However a quantitative description of present attitudes will not be enough. Cooperative studies with sociologists are needed to assess the effectiveness of various medias of communication and various techniques designed to change community attitudes toward the elderly.

The problem of adult education is also of great importance, not only because of its relationship to the practical aspects of retraining middle aged and older workers for new jobs, but also because of the part it can play in the development of inner resources to aid elderly people in maintaining active interests in the community. Although

many studies have indicated that older people can learn effectively, very little work has been done to find out whether the optimal conditions for learning are the same in older people as in children and young adults. Although research in physiology and medicine may succeed in further extending the human life span, it will be of little moment unless we are able to give to the older persons opportunity for continued activity and usefulness. Whether it is economically feasible to support the growing numbers of old people in complete idleness or whether our economy will demand the active participation of this older group is a problem for the economist. However it is clear that adequate counseling and preparation for changes in activities with advancing age is an area which must be actively developed by psychologists if we are to avoid discontent and unhappiness among this segment of our population. Either fortunately or unfortunately our present cultural pattern emphasizes dollar income as a primary index of the usefulness of the individual to society. Changes in our whole set of values may be necessary in adjusting to the rising tide of older people. It may be necessary to find ways of impressing upon older people the value of socially useful activities which may not result in monetary rewards. All of these problems have psychological aspects and many are questions which can be answered by research both in and outside of the laboratory.

How Can These Problems Be Solved?

It is obvious that a great deal of laboratory and field research must be carried out in order to give us the facts on which to base action programs. It is, therefore, desirable to know what psychologists are now doing in this field and to get some idea of our research potential with respect to personnel, facilities, and programs. Some idea about current research activities in the field of aging may be obtained from the results of a questionnaire submitted to all Fellows and Associates of the Division of Maturity on Old Age of the American Psychological Association in the summer of 1949. Among 81 Fellows and 57 Associates of this Division, 20 reported active research programs on a total of 40 projects. These 40 projects included studies on personal and social adjustment of the elderly, the attitudes of elderly people, the attitudes of young and middle-aged people toward the elderly, studies of sensory-motor performance in the aged, intellectual functions including mental deterioration and personality characteristics. A large proportion of the research activity is con-

centrated on attitudes and personal adjustment of the elderly. Relatively few projects were directed toward the measurement of age changes in specific psychological processes and functions. Although some of the studies involved the use of community populations, none of those reported was concerned with performance of the elderly in industry. Questionnaires, interviews, and rating scales were the research tools most commonly used. In none of the investigations reported had quantitative attitude scales been developed, and in only a few were psychometric tests a part of the program. A few studies reported the use of standardized personality schedules and tests as well as projective techniques. Many of the projects were dependent upon verbal reports of behavior made by younger people about elderly acquaintances or relatives or on retrospective statements by the elderly. Much of the current research on the psychological aspects of elderly people is dependent on methods whose limitations have been previously demonstrated by psychologists. It is clear that a great many methodological studies are required which will utilize and adapt psychological techniques developed in other fields to the problems of aging.

The results of this survey also give us some indication of the research potentialities both with respect to laboratories and workers available for studies of aging. All of the research projects reported originated from eleven laboratories. These laboratories are located in Baltimore (U.S.P.H.S.), Boston, Chicago, Columbus, Hollywood, Minneapolis, New York, San Diego, Stanford, Syracuse, and St. Louis. Of the 40 projects reported 75 per cent originated from 3 laboratories—Chicago, Syracuse, and Baltimore. The total number of investigators in the field including graduate students was only 50—and half of the workers were located in the 3 most active laboratories mentioned above. We may, thus, conclude that more research centers devoted to the problems of aging are urgently needed and that steps must be taken to attract new workers into the field. Although more workers are needed, it is encouraging to note that during the past ten years—1940 to 1950—there has been a significant increase in studies on psychological aspects of aging. In the extensive survey of gerontological research conducted by Dr. Stieglitz¹³ in 1940, only eleven projects either in operation or contemplated were reported for the entire field of psychology. One device which

¹³ E. J. Stieglitz, *Report of a Survey of Active Studies in Gerontology*, U. S. Public Health Service, Unit on Gerontology, 1942.

would lead to an increase in the number of young workers in the field would be the introduction of lectures devoted to the findings of gerontological research into course material in our universities at both the undergraduate and graduate levels.

In addition to expansion of laboratory studies on aging, steps must be taken to secure the cooperation of leaders in industry and labor to assist in establishing field studies and programs that will deal with the practical aspects of these problems. For instance, there is very little specific information available about the work productivity of older people in industry. This vital information can be assembled only by cooperative efforts. The introduction of flexibility of retirement will also require the development of cooperative programs. Although determination of retirement policy for an individual will obviously involve physiological and medical issues as well, the psychologist has an important contribution to make in assessing performance in complex mental functions, such as judgment, reasoning, etc. Setting up of retirement boards, whose decisions will be based on performance records in work situations as well as everyday activities, should be encouraged and tried out in pilot studies with industries or universities. Psychologists have an important part to play in securing the active interest and participation of industry and labor in forwarding such programs.

The problem of securing adequate samples of middle-aged and elderly subjects for study must also be faced. With the exception of a few studies, most of our knowledge about adults has been obtained on hospital patients or institutionalized groups. The effects of this sampling bias on the results obtained cannot be determined. One solution of this problem lies in the direction of utilizing for study specifically defined groups. However, with adequate community education, it is possible to enlist the aid of adults who are still living successfully within the community. One such study is now in progress in Minneapolis.¹⁴ In this study over 300 successful business men between the ages of 40 and 45 years serve as laboratory guinea pigs for one day each year over a period for five or more years. This problem of community education for research is one for which the psychologist should be peculiarly fitted. The spontaneous formation of groups of elderly people for recreational and social activities offers

¹⁴ A. Keys, "Some Preliminary Findings from the Research Program on Cardiovascular Degeneration at the Laboratory of Physiological Hygiene," *Bulletin of University of Minnesota Hospital and Minnesota Medical Foundation*, Vol. 20 (1949), pp. 403-10.

a unique opportunity for research. If universities could make space available to house these activities and to offer certain services, such as adult education classes, these groups of middle-aged and elderly people could serve as subjects for many research programs. Such groups could be studied in much the same way as nursery schools were used in child development research programs. Studies on adult education, social group structure, and techniques for developing attitudes and broadening interests could all be tested in such laboratories. These centers could also be used to train personnel in the techniques most appropriate for handling groups of older people. The effects of counseling and guidance could also be evaluated. Thus a threefold program could be developed within the same setting: (a) research on the characteristics of older people, (b) practical testing programs for re-education and reactivation of the elderly, and (c) the training of workers who would be prepared to set up and operate similar programs in other areas throughout the country.

The effective development of our resources for research on problems of aging will require increased financial support. Since aging is a long-term process, we must be prepared to commit research funds for long-term support of these programs. Unlike research in other fields, where results may be expected within a 1-3 year period, studies on aging, particularly in the human, might well require 10-20 year periods before significant results were forthcoming. This simple fact must be widely publicized and well documented if we are to obtain the needed support. In the past most long-term studies, as for instance in the field of child development, have been financed by grants from foundations. However, the present trend is for greater and greater dependence upon public tax funds for the support of research. A large share of these funds are made on the basis of annual grants. The long-term studies required in the field of gerontology cannot be adequately developed on this basis. Although every effort should be made to educate those responsible for policy decisions with respect to long-term financing of research in governmental agencies, we should not disregard other potential resources of support. For instance, certain of the laboratory aspects of these problems may well be carried on as part of university research programs. Other aspects of the problem, such as studies on productivity and retirement, might well be financed in part by industry. The preservation of the productivity and usefulness of top-flight administrative and technical personnel should have a definite appeal to

industry. Similarly many social agencies ought to be persuaded to put a part of their funds into research which could in time reduce many of the problems with which they are concerned. One aspect of the problem of financial support for research is thus an educational one.

Summary

A brief summary of our knowledge of the psychological characteristics of elderly people has indicated a gradual diminution in sensory acuity and the speed of psycho-motor performance. Many outstanding achievements in the fields of art, music, and literature have been made by individuals in advanced ages. Significant contributions in fields dependent upon technical advances are less likely to be made by individuals over the age of 60, but there is little evidence that age itself is a deterrent to creative ability. Although overall performance on psychometric tests diminishes with age, there is good evidence that many extraneous factors enter to reduce the performance scores of older people. In both psycho-motor and intellectual tasks, older people show greatest decrement in tests involving speed. In all measurements considered, individual differences increase markedly with age and many older subjects show performances as good as the average of young adults. It should also be emphasized that the decrement in performance with age is much less in the especially competent individuals than in the less competent ones and is less in habitual performances that are maintained by practice than in new tasks. Although evidence has been presented to show increasing incidence of poor personal adjustment with age, it should be pointed out that the cause of this maladjustment may often be related to the social and economic characteristics of our culture. Since most of our information about aged people is based on peculiarly selected samples, additional research is required on middle aged and elderly subjects who are still successfully competing in the community.

Problems for psychological research in this field include the assessment of performance capacities in older people and the devising of ways and means whereby these abilities can be utilized within our social structure. Problems of adult education and the assessment of measurement of attitudes and the development of methods whereby they can be altered also require investigation.

Certain limitations in current research programs and methods for their improvement have been pointed out. Although facilities for

research both with respect to laboratories and personnel have been improving, much remains to be done. Many new tests to evaluate complex mental functions must be devised.

A program for centers, which will utilize groups of elderly people for research and for developing programs of re-education and re-activation and for training workers in this important field, has been outlined. The need for adequate long-term financial support has been emphasized and suggestions for obtaining support have been offered.

THE EMPLOYABILITY OF OLDER PEOPLE

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AT FIRST SIGHT it seems presumptuous for psychologists to write about the employability of older people since, on the one hand, there is little psychological knowledge relevant to this problem and, on the other, industry has had to deal with this problem in a practical way for many years, and has managed to solve it with reasonable success in a number of cases. However, opinions and policies about older people in industry differ and even where they work reasonably well, it is often recognized that they might be improved. They are also liable to become conventionalized so that policies designed to meet one set of circumstances may sometimes be applied to others although they are not really appropriate. Moreover, many "solutions" which are satisfactory to those responsible for framing them are not really solutions at all: for instance, the policy of rigidly fixing recruitment and retirement ages, while solving the immediate problem for industry, is clearly unsatisfactory from the wider social standpoint, and in times of full employment may not be in the best interests of industry itself.

It is therefore clear that research on the capacities of older people besides being of academic interest can be of practical importance if it is directed to the discovery of specifications for work which can be carried out efficiently by older people. Our knowledge has still to go a very considerable way before such specifications can be made in detail but some general principles and lines of approach seem to be emerging with tolerable clarity. These principles and approaches are not yet without their weaknesses and there are so far few if any directly relevant theories which can be regarded as adequately proved. A number of researches, however, provide important suggestions. We shall, in this chapter, outline some of these researches, attempting to indicate what positive contributions they have to make and wherein their present shortcomings lie.

Experimental Researches on the Performance of Older People

It is well-known that many anatomical and physiological changes, which become striking in old age, begin early—as soon as the mid-twenties in some cases. Parallel to these is the finding that various sensory functions such as the threshold for light, visual acuity, crit-

ical flicker frequency, and the highest audible pitch, show deterioration after the twenties. A fall has also been observed from about the same age in a number of simple performances such as time taken to respond to a stimulus with a simple hand movement (e.g. Ruger & Stoessiger; Bellis),¹ strength of grip (e.g. Isakowa),² swiftness of blow (Ruger & Stoessiger), etc., although the manner of the decline and the age of best performance vary somewhat with the methods and criteria used by the experimenters.

It seems possible that different methods of testing would indicate that the decline in some of these supposedly simple functions is even more severe than is normally supposed. For instance, Weston,³ using a task demanding fine visual discrimination, carried out under pressure of speed, obtained scores which fell sharply from the twenties to the forties, especially in dim illumination or where the contrast between the printed test material and the background was poor. This was surprising because his subjects had before the experiment been matched for visual acuity by means of the unsped tests usually used by ophthalmologists. It seems possible that in this case we see the working of a mechanism in which speed of operation is dependent upon the strength of signal applied, and which becomes insensitive with age in the sense that a stronger stimulus is required to maintain any given speed of operation.

Such findings do not constitute a connected body of knowledge and have often been noted only as incidentals in other work. They have aroused interest, however, because they indicate deterioration of functions which have been widely regarded as basic to almost all performances and which have for this reason, therefore, been considered as factors which ought to be taken into account in the selection of workpeople. Measures of sensory functions and very simple performances do, however, appear to correlate poorly with performances at most realistic tasks. It seems clear that their deterioration with age, while it may indicate that older people are unsuitable for certain jobs which make special demands, does not indicate that older people will be unsuccessful at industrial work as a whole.

¹ H. A. Ruger and B. Stoessiger, "Growth Curves of Certain Characteristics in Man," *Annals of Eugenics*, Vol. 2 (1927), p. 76.

C. J. Bellis, "Reaction Time and Chronological Age," *Proceedings of the Society of Experimental Biology and Medicine*, Vol. 30 (1933), p. 801.

² T. Isakowa, *Power of Grip as Measured by Dynamometer* (Kirashaki: Report of the Institute for Science of Labour, No. 12, 1932).

³ H. C. Weston, "On Age and Illumination in Relation to Visual Performance," *Transactions of the Illuminating Engineering Society of London*, Vol. 14 (1949), p. 281.

At more complex tasks the relationship between performance and age is variable, but in a great many cases it appears to remain at a high level until early old age. Some decline is usually present at the upper end of the age scale, and when it comes it may be relatively rapid; but in middle and early old age, achievement is often closely similar to that found in the twenties and thirties. Thus, Miles,⁴ measuring reaction time by a method which used a rather more complex responding movement than that commonly employed, found reaction time fairly steady from the early twenties to the late fifties.

Experiments Analyzing Performance

Continuance of high achievement at complex tasks until a late age is not, however, universal and it is important to recognize that even where it does occur, measures of over-all achievement often fail to reveal profound changes in the manner in which the achievement is attained. The reason appears to be that in most real life tasks and many used in the laboratory, performance is not normally carried out to the utmost limit of ability, but to meet some standard of performance imposed either by the nature of the task or by social norm or by some expected standard brought to the task by the performer. The subjects' efforts are directed to the maintenance of this standard and they will attain it provided the demands made by the task do not push any part of the "mechanism" involved beyond the limits of its capacity. Even if some parts of the mechanism are pushed beyond their capacity, compensation will often be possible by a change of method. This will only be so, however, when the task permits of attack by a variety of slightly different methods, so that if one method is beyond the limits of capability, another may be used instead. When performance is closely constrained to a rigidly defined pattern, no compensation will be possible, and any fall of capacity in the mechanism involved, whether due to age or anything else which brings the ceiling of ability below the requirements of the task, will result in a lowering of achievement.

In less constrained tasks, however, it seems that with a progressive fall of capacity there is likely to go a series of changes of performance thus: First, the original performance is maintained, but only by means of increased effort. Second, a change of method may enable achievement to be maintained or even improved. Finally, some fall

⁴ W. R. Miles, "Reaction Speed and Age," *American Journal of Psychology*, Vol. 43 (1931), p. 377.

of achievement occurs—that is to say the maximum possible compensation fails to be wholly effective—but the fall is less great than would have been expected on the basis of measurements of ceiling performance at particular detailed tasks.

Where the demands of the task are ambiguous, for instance where both speed and accuracy are of importance, compensation may take a different form. There may be not only a change of method but a shift of attention from one demand to another, for instance, emphasis by younger people upon speed may be replaced among older people by emphasis upon accuracy. This kind of shift is well illustrated in an experiment by Ruth A. Brown,⁵ where the subject had to trace over the figures 1, 2, 3, 4, 5, 6, 7, 8, 9, and 0 several times, with instructions for speed and also to take care “not to go over the edge.” Times taken and errors made by subjects in each decade from the twenties to the seventies are shown in Figure 1. It will be seen that passing from the twenties to the thirties time remained steady but there was a substantial increase in the number of errors. From the forties onwards speed fell but errors decreased to a level well below that of the twenties.

The presence of such changes of method may be shown objectively if a complex task is scored in such a way as to analyze the whole performance into its component parts. We have in our experiments commonly found that when this is done one or two components change much more than does the performance as a whole—a change in one component more or less balances a change in another. Thus, in a plotting experiment also conducted by Ruth A. Brown, the number of successful plots achieved in half an hour decreased by only 25 per cent from a group in their 'teens and twenties to a group over 45 (mostly in their sixties), while time taken to make their first attempt at each plot, whether this attempt was correct or incorrect, rose by 60 per cent. At the same time the number of errors made fell by 65 per cent.

These principles of compensatory change of method apply not only to the effector aspects of performance but also, perhaps even more, to the receptor processes involved in the comprehension and interpretation of incoming data. Thus, it was found by J. Szafran in three

⁵ Names with initials indicate members of the Unit to which the authors belong. An account of the work mentioned is contained in A. T. Welford, *Skill and Age, An Experimental Approach* (London and New York: Oxford University Press for the Nuffield Foundation, 1950).

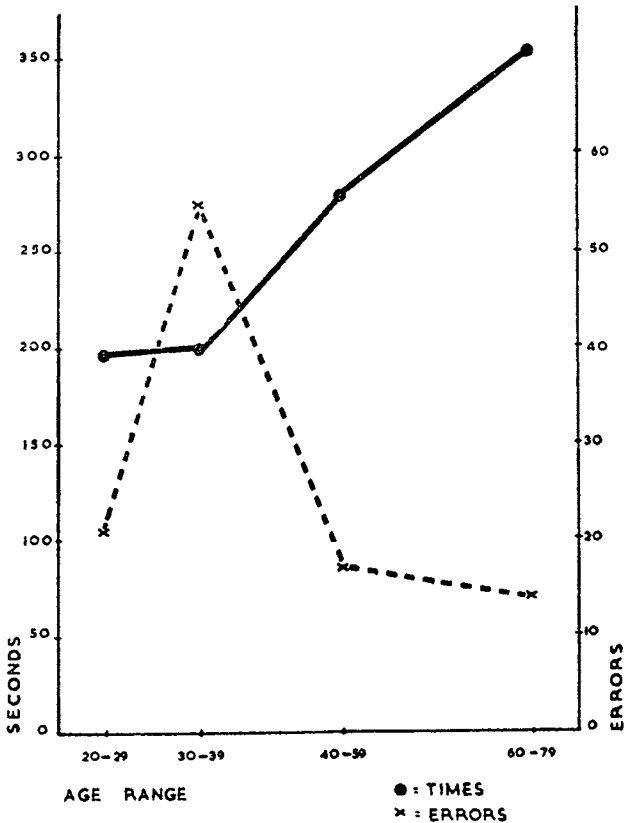


FIG. 1. Average times taken and errors made per subject in tracing 10 figures 15 times.

experiments and subsequently in a factory setting, that people over the age of 30 have a greater tendency than those under this age to look continuously at what they are doing, instead of trusting part of the time to tactile cues. Again, in an experiment by C. G. A. Allen in which the subjects were given a problem involving logical deductions from a set of statements, there was evidence that older people produced answers to the problems as readily as did the younger, but more on the basis of past experience and reminiscence than by organizing and "manipulating" the data in the manner required by the instructions.

The interpretation of data and the shaping of actions in circumstances which required them to be organized in a manner which was

in some way new, appeared to be one of the chief causes of difficulty to the older subjects in almost all our experiments. It seems that so long as data can be interpreted by the direct application of some previous experience and action carried out according to patterns already familiar, performance seldom deteriorates until a relatively late age. Difficulty comes when something new has to be done or some old comprehension or pattern of action has to be substantially modified. It seems that the ability to "manipulate" data or part acts in a larger whole is impaired and that past experience and patterns of action are left free to intrude. This they may do in spite of the fact that they are recognized as inappropriate. It is probably this difficulty of "manipulating" data that more than anything else accounts for the fall of intelligence test scores with age which has been noted by many workers.

While difficulty both in dealing with incoming data and in organizing action is demonstrated more clearly in highly complex tasks, it seems probable that it also accounts for the fall of performance with age at some tasks which are relatively simple and that it is this which lies behind most of the slowing which comes with age. It has been noted by Craik⁶ and Vince⁷ that when in following a target the subject is required to make a series of rapid movements, the maximum rate at which these can be made accurately as discrete movements, is in the neighborhood of 120 to 140 per minute. We found in a similar tracking task that this rate was attained by subjects under 30 (the same age as those in Craik's and Vince's experiments) while for those over this age, mostly in their sixties, the maximum rate appeared to have fallen to between 90 and 100 per minute. Interestingly enough, these rates obtained in an experiment in which the movements of the target "paced" the subjects' performances, were also obtained for the number of discrete movements made in the figure tracing task previously mentioned in which the subject was free to work at his own speed. It seems probable that there is a fairly definite maximum rate at which a stimulus can be received, passed through the central mechanism of the brain, and translated into action, which in a complex task is little over 120 per minute for young people and tends to fall as age increases. It would seem that

⁶ K. J. W. Craik, "Theory of the Human Operator in Control Systems," *British Journal of Psychology*, Vol. 38 (1947-8), pp. 56 and 142.

⁷ M. A. Vince, "Rapid Response Sequences and the Psychological Refractory Period," *British Journal of Psychology*, Vol. 50 (1949), p. 23.

actions can take place only at a higher rate than this when they are in some way grouped, so that two or more can be regarded as a single unit of performance. It would seem possible that in tasks where rapid actions are required, older people might be helped to maintain speed by instruction designed to assist them in grouping the individual actions into such larger units.

One other point may be noted at this stage about the findings of our experiments and those of others on complex tasks; namely, that while older people may, on the average, show a fall of performance, the variability between the performances of different individuals is usually very much greater in the higher age ranges than in the lower. While the average performance may show a striking deterioration, many individuals in their sixties and seventies put up performances similar to those of people in their twenties and thirties. To quote again Ruth A. Brown's experiment on tracing figures, the quickest two subjects in the group of 65 tested were in their twenties. The next quickest was aged 74, and only slightly slower were a number of subjects of all ages ranging from the twenties to the sixties. We do not yet know how far this variability is due to the fact that some people age constitutionally less rapidly than others and how far it is the result of a particular individual's acquiring special facility for particular tasks in the course of experience. It is probably due in part to both.

The relevance of these experiments to the problem of employment of older people in industry is greater than that of simpler measures because their greater realism enables deeper insight to be obtained into the nature of complex performance and its change with age. They do not, however, overcome the valid criticism of all laboratory experiments; namely, that it is hazardous to make inferences about work done day in and day out from relatively short spells at experimental tasks. There are two reasons for this criticism: First, that performances can often be maintained for short periods at a level which would be impossible over a longer working spell. For instance, Smith⁸ found in an experiment in which the subjects were required to assemble nuts and bolts, that the difference in performance between men in their thirties and fifties was somewhat greater for an eight-hour spell of work than it was over a period of one-half an hour. Second, it is probable that some of the difficulties experienced by

⁸ K. R. Smith, "Age and Performance on a Repetitive Manual Task," *Journal of Applied Psychology*, Vol. 22 (1938), p. 295.

older people would disappear with long continued practice. When they first meet the experimental task, the newness is likely to result in difficulty which would be removed when the necessary comprehension or organization of action has been built up. An example of this on a very rapid scale is given in an experiment by A. B. Cherns, in which the subjects were required to judge the accuracy of a series of aluminum blocks and to reject those which were "not up to standard." The times taken by groups of subjects of different ages to judge 60 blocks are shown in Figure 2, from which it will be seen that the older subjects were very much slower than the younger over the first few blocks but came much nearer equality as the task proceeded.

Such experiments as these do, however, show (1) that older subjects tend to have at least an initial difficulty with many tasks especially those which are difficult to comprehend or which have to

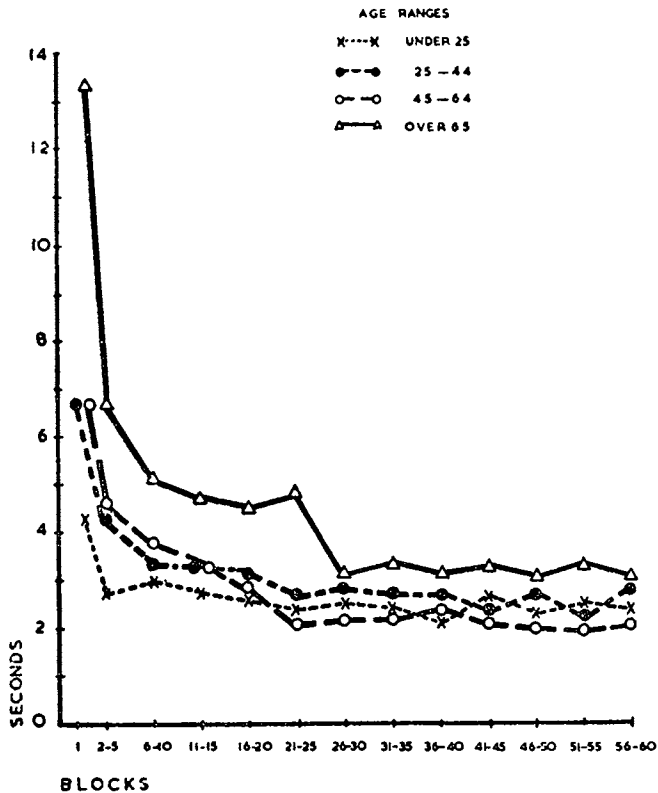


FIG. 2. Mean judgment times per block taken by subjects of different ages during a "run" of 60 blocks. (Cherns' data).

be done in a rigidly defined way and (2) that there are nevertheless wide variations between the performances of individuals in the higher age ranges. It would therefore seem likely that older people should be expected to find difficulty over starting a new job, especially one where the pattern of action has been rigidly standardized. Some older people are likely, however, to be fairly competent so that generalizations about age, such as are implied in rigid recruitment and retirement policies, are likely, if they are fixed for the average man and women, to underrate very substantially the capacities of many individuals.

This is, however, a conclusion with which few applied psychologists are likely to rest content. An adequate employment policy for older people requires that work should be specified which can be done with reasonable competence by the majority. As far as these experiments go, they indicate such work to be that which sets little premium upon speed and which, if it makes high demands, does so in respect of care and accuracy, but they are clearly insufficient by themselves to recommend such a policy with confidence.

Experimental Researches upon Learning by Older People

More direct evidence of the difficulty that older people have in dealing with a new task is contained in studies of learning in middle and old age. The work previous to 1933 on learning in adults was collated and reviewed by Ruch,⁹ who concluded from his survey that learning ability decreases after 20 years of age, motor learning and the learning of nonsense material being more affected than the learning of meaningful verbal material. Of subsequent studies, four may be mentioned.

1. A study was undertaken by Ruch¹⁰ to test the hypothesis that older people showed a greater deficit of learning ability when the material was such as to require extensive reorganization of pre-existing habits than of learning that makes use of previously formed habits. Three groups, 12 to 17 years, 34 to 59 years, and 60 to 82 years, were given five learning tasks designed to differ widely from each other in what was required of the subjects. Ruch held that the results obtained supported the hypothesis he intended to test and that this, in turn, supported the concept of senescence as a condition

⁹ F. L. Ruch, "Adult Learning," *Psychological Bulletin*, Vol. 30 (1933), p. 387.

¹⁰ F. L. Ruch, "The Differentiative Effects of Age upon Human Learning," *Journal of General Psychology*, Vol. 11 (1934), p. 261.

of lowered "plasticity." Whether or not the theory of lowered "plasticity" with its neurological implications is correct, Ruch's hypothesis provides a striking parallel to those we have developed on the basis of *performance* at skilled tasks.

2. An interesting point has been made by Sorenson (1930)¹¹ on the basis of comparisons between older students at a summer school who had and who had not kept up regular studies since their formal education had ceased, that continued practice at learning may itself maintain learning ability.

3. An amplification of the view put forward by Ruch and a link with the results obtained by Thorndike (1928)¹² who found that older men tended to be more hindered than younger by interference from material previously learned, is contained in an experiment by H. Kay upon learning a rote performance task. His subjects had to learn to press a series of morse keys in a particular order, evidence of each correct pressing being given by a change in a display of lights. Very marked increases were found in both time and errors and in the number of trials required before error-free performance was attained. A detailed study of the errors suggested that the older subjects were inclined to approach the task with preconceptions about the order in which they would have to press the keys. They were also inclined to get a wrong idea of what the order was during the first trial or so and to find difficulty in modifying this during subsequent trials. Their learning performance seemed to be concerned to a very great extent in unlearning these preconceptions and early erroneous ideas than with learning the correct order. It may be noted that this experiment links also with our studies of skilled performance in that the same compensatory tendencies appeared. Thus, the subjects in their thirties made about the same number of errors as those in their twenties but took longer time and fewer trials—in other words, they showed a more careful and deliberate performance. The subjects in their forties, on the other hand, took on the average very little longer than those in their thirties but made substantially more errors—they were sacrificing accuracy to speed. Among the subjects in their fifties and sixties all three scores rose strikingly, so that the sixties on the average required more than twice as many trials, made about three and one-half times as many errors, and took about four times

¹¹ H. Sorenson, "Adult Ages as a Factor in Learning," *Journal of Educational Psychology*, Vol. 21 (1930), p. 451.

¹² E. L. Thorndike, E. O. Bregman, J. Tilton, and E. Woodyard, *Adult Learning* (New York: Macmillan, 1928).

as long as the subjects in their twenties. Again, however, the variability between individuals increased very greatly in the higher age ranges, so that some of the subjects in the fifties and sixties were learning as readily as the majority in the younger age ranges.

4. More strictly relevant to the problem of training as opposed to learning, is the suggestion contained in a study by B. M. Bernardelli of the effects of different types of instructions on the ability to solve electrical problems by those with little or no previous electrical knowledge. There was a tendency for a group of subjects over 30 to learn better by written instructions and less well by demonstration than a group under 30. The results suggested that some of the difficulty of older subjects in receiving training by demonstration may have been due to slowness of comprehension. Written instructions can be reviewed several times and if any detail is forgotten the subject can go back and recover it easily. When training is by demonstration any detail not grasped or forgotten will be lost unless the subject asks to have the point gone over again. People tend to be diffident about asking for this to be done frequently so that an older subject trained by demonstration is likely to have a number of gaps in his grasp of the methods of solving the problem when he enters the test situation.

Studies of Industrial Performance

The objection that laboratory experiments fail to deal with performance which is continued over long periods does not apply to studies of work within industry. It must, however, be remarked at once that such studies are by no means easy to make in a rigorous manner. It is easy enough to gather facts but to gather the relevant facts and to give them meaning is normally very difficult because industrial conditions result from a very large number of interacting variables with which age is almost inextricably mixed. The complication of factors affecting industrial work makes any study within industry difficult but would seem to make studies of aging even more difficult than most.

It seems probable, however, that while these difficulties exist in theory, their influence for the purposes of practical investigation is liable to be exaggerated, and if a fairly large sample of industrial work is taken many of them can be allowed to appear as "error" in the findings. Such errors may reduce the clarity of the results, but in many cases are unlikely to invalidate them in the sense of pro-

ducing spurious positive effects. This is not true of all sources of such error, however, and the possibility of certain systematic errors make interpretation with our present knowledge somewhat tentative. We shall mention some of what seemed to us in our own studies to be the most important of these during the course of this discussion.

As we indicated at the beginning, there exist in industry many opinions, empirical observations, and *ad hoc* practices relating to the performances of older people. It is probable that a systematic collection of these would reveal a number of very interesting agreements and some equally interesting disagreements. Such a survey would provide data relevant not only to the performance and the training of older people but to a number of ancillary qualities, which enhance or diminish their worth as employees, for instance loyalty and conscientiousness. It was observed, for instance, by one manufacturer recruiting local labor in a new factory that women over about the age of 30 were unable to work his automatic machines as fast as those in their early twenties. On the other hand, they were better than the younger women at keeping the flow of materials steady and avoiding hold-ups in production. This appeared to be due to a more conscientious and careful attitude to the work.

However, such a survey would have to be regarded as a source of suggestions for future research and not as providing findings conclusive in themselves. It would seem that sometimes with the best will in the world, certain well-known inaccuracies and observations go to the forming of opinions, and that often consciously formulated reasons for events or practices are not the ones which are really operative.

For definite results we must turn to some form of objective measurement. Once this has been made, however, opinions etc. can often give a guide to interpretation and indicate any further "control" studies which may be necessary. It would seem therefore that a research worker cannot afford in his quest for scientific rigor to neglect such "subjective" evidence, although he will be wise not to trust it without objective checks.

Production Statistics

At first sight, the most refined measure of change of performance with age in industry would seem to be given by production figures for operations on which records of individual output are kept. Studies using such figures as, for instance, the very thorough study

by Wackwitz,¹³ of persons employed by a large electrical manufacturing firm in Holland, show that in most cases production rises until the late twenties or early thirties and thereafter changes very little. The low production at the young end of the scale is presumably due partly to the presence of more trainees in the twenties than at higher ages, but is also reported to be due partly to the younger workers putting forth less care and effort than the older. The steady maintenance of performance during middle and old age is surprising in view of the results of experimental studies, where although the fall of performance is often less than we might expect, it is usually appreciable. It suggests that once a skill has been learned it can be maintained up to a late age relatively unimpaired, and the fall of performance with age observed in experiments is due mainly to the newness of the task. It seems clear that this is true to some extent, but it also appears that the apparent equality of output by workpeople from the thirties onwards is largely an artifact. If we look at the age distribution of people on a production operation we find that in most cases the numbers fall off sharply after the thirties or forties so that those employed on this type of work in the fifties and sixties constitute a smaller proportion of the total population of these ages than do those in younger age ranges. In other words, the older workpeople are in some ways *selected*. This selection may, of course, be upward or downward by promotion of the best workers to positions of responsibility and the leaving or dismissal of those who cannot maintain adequate performance. How far each of these influences is operative as a general trend it is impossible to say but it is probable that promotion is less important than leaving and dismissal. It is in this connection interesting to note that Super¹⁴ in a study of the degree of satisfaction taken in their work by people of different ages, found greater dissatisfaction among people in their forties and early fifties than among those either younger or older. Further evidence that selection has taken place is contained in figures given by Wackwitz¹⁵ which showed a tendency for the variability of performance to *lessen* with increasing age—the reverse tendency to that found in almost all laboratory experiments.

This selection among higher age ranges means that for an assessment of average ability at different ages, production figures are in-

¹³ J. D. Wackwitz, *Het Verband Tusschen Arberdsprestatie en Leftijd* (Delft: Waltman, 1946).

¹⁴ D. E. Super, "Occupational Level and Job Satisfaction," *Journal of Applied Psychology*, Vol. 23 (1939), p. 556.

¹⁵ *Op. cit.*

adequate because the groups employed are not comparable. Production figures have two further disadvantages from the research point of view. First, they give only a measure of total achievement and do not tell us by what method and with what margin this achievement was attained; and second, to use them satisfactorily we require large groups of people doing *exactly* the same work. Such groups are seldom obtainable. Even where a moderately large group is found doing what is nominally the same task, slight differences between the machines used by different individuals or between the articles being made on them may render valid comparisons impossible.

Much the same objections can be made to other measurements, such as accident rates or labor turnover rates, for research purposes. For instance, it is difficult to know how far the commonly observed tendency for older people to have fewer accidents but a longer sickness absence due to any one accident, is the result of the selection of people with a particular kind of attitude to minor injuries. Again, lower labor turnover of older people could be due to a comparatively small number of people who shift from job to job in industry during their twenties, having left industry altogether.

It is possible that some of these difficulties may be overcome by detailed measurement and analysis of performances at industrial operations—by the study of differences of method among groups of different ages showing equal achievement. This approach has not, so far as we know, been tried, and is clearly not entirely free from objection in that the selection process during middle age may discriminate against certain methods as well as against low attainment. It is likely, however, to give a much fairer estimate of capacity at different ages than crude production figures. In a similar way, accident records and records of timekeeping, labor turnover, etc., are likely to become much more valuable evidence if due regard is paid to the reasons for the observed trends and the nature of differences, e.g., the type and cause of accidents sustained at different ages, and the reasons for bad timekeeping and for changes of work.

One area in which production figures could be of the greatest value, however, is in studying progress at learning new tasks. As is to be expected from laboratory experiments on learning, there appear to be many jobs which are very difficult for people to learn except when they are young. The upper age is held in many cases to be in the early thirties, but in some it is as low as the late 'teens. This does not mean to say that older people can in no circumstances train for such jobs, but that their progress is likely to be very slow

so that they may take months or years to attain a standard which a younger person could attain in a matter of weeks. Other work appears to be learned without undue difficulty at almost any age. Research is needed to specify the nature of jobs on which learning difficulty occurs and to indicate the nature of this difficulty. It seems possible from some of the experiments on learning that older people are hampered in learning a new skill because they attempt to deal with it in terms derived from former skills which are inappropriate—negative transfer as it is termed occurs—but at present no systematic information is available on this point.

Age Distributions

The difficulties of production statistics as measures of performance by older people do not attach to age distribution of workpeople on various operations and classes of operation. These give a factual statement of what workpeople of different ages are doing which can be regarded as a measure of ability to the extent that older people tend to avoid or not be recruited for work which they find difficult to learn, and will move or be moved from work which they find difficult to maintain. They have the important advantages that figures for a number of operations (each with a small working group) can be combined in a way that production statistics for such operations cannot be, without artificiality, and that craft and other operations can be included for which production figures are not available. They are, however, liable to be altered by a number of other factors such as the age range of labor available both in the present and in the past, and by recruitment and retirement policies. Recruitment policies which fix an upper age at which men or women are taken into a job are especially likely to affect age distributions by making them lower than they would otherwise be for operations which are new or have recently expanded. It must be borne in mind, however, that recruitment policies are likely themselves to be in part dependent upon experience by those who avail themselves of the abilities of older people, and that many sources of "error" are likely to be reduced if a large sample is taken from several different factories, and if the age distributions are not used absolutely but as a means of comparing one operation or class of operation with another. Nevertheless, the fact that age distributions do not in themselves indicate the reasons for any trends with age makes it necessary to be cautious about drawing inferences from them unless they are supported by supplementary information, and unless due regard has been paid to

the length of time the operations concerned have been in existence and to any expansion or construction which they have undergone since they started. That last information is, unfortunately, not always easy to obtain in a satisfactory form.

An example of a study on these lines is one by R. M. Belbin and Antonia M. N. Sewell which was conducted on more than 100 production operations in 24 factories. Each operation was studied in detail and the age distributions for various classes of operation were compared. Four classifications were made as follows:

1. According to certain types of work commonly recognized in industry:
 - (a) Machine Feeding—the feeding of automatic machines and analogous repetitive machine work where skill lies in the handling of materials rather than in knowledge of the operation of the machine.
 - (b) Machine Operating—operations in which the principal skill lies in the operation of the machine.
 - (c) Light Assembly and Other Hand Operations—light jobs designated “assembly” in the factories concerned and certain analogous work involving the fitting or attaching of parts by hand.
 - (d) Inspection Work—the testing, grading, and examination of materials and products.
 - (e) Heavy Work—including operations involving considerable muscular effort in the handling of heavy materials, etc., and those involving a degree of activity which made them regarded as heavy in the factories concerned.
2. According to system of payment: (a) individual piece rates, (b) group piece rates, (c) time rates.
3. According to the amount of *time stress* imposed by the operation:
 - (a) Operations in which considerable time stress was present:
 - (i) Where the work was rigidly paced, in the sense that operatives were compelled to keep up with a machine or conveyor line and to complete each cycle of the operation within a rigidly fixed time. This class consisted essentially of operations where failure to maintain pace led to serious errors of omission and there was no opportunity for pauses in the work.

- (ii) Where there was speed pressure in the sense that the nature of the operation or the working group placed a greater stress upon speed than upon accuracy. This class included all operations paid at individual or group piece rates, except those where there was some mitigating circumstances listed below.
- (b) Operations in which speed was secondary to accuracy or where time stress was in some way mitigated. This class consisted of operations paid at time rates, i.e., operations where the speed and pace of work were essentially under the operatives' own control, and of operations which, although paid at individual or group piece rates, possessed one or both of the following characteristics tending to reduce time stress:
 - (i) The machinery or the working group set a pace which was such as to permit or enforce frequent pauses in the work.
 - (ii) The operation was such that it had to be carried out deliberately and with more stress upon accuracy than speed, e.g., certain highly skilled tradesmen's or craft operations.

4. According to size of working group.

Of these four classifications, the one which gave the most striking contrast was that made on the basis of time stress. The age distributions for men are shown in Figure 3 from which it will be seen that over 60 per cent of the men in their thirties were on operations classed as involving time stress. The proportion dropped sharply during the forties and early fifties until after the age of fifty-five hardly anyone was found on this type of work. The relationship between the two classes as shown in the age distributions for women were essentially similar, except that a greater number of women were employed on time stressed work during the late 'teens and twenties. It appeared indeed that the large numbers of young women in industry were mostly employed upon this type of work, and that the age distributions for men and women employed on work not involving time stress were fairly similar.

Compared with this classification the others showed results of little significance. A higher proportion of older people tended to be on work paid at time rates, but a substantial proportion of older people were found on operations paid at individual or group piece

rates, so that it appeared that as a means of distinguishing between operations having a high proportion and a low proportion of older people, system of payment without regard for the demands of the operation was an inadequate measure.

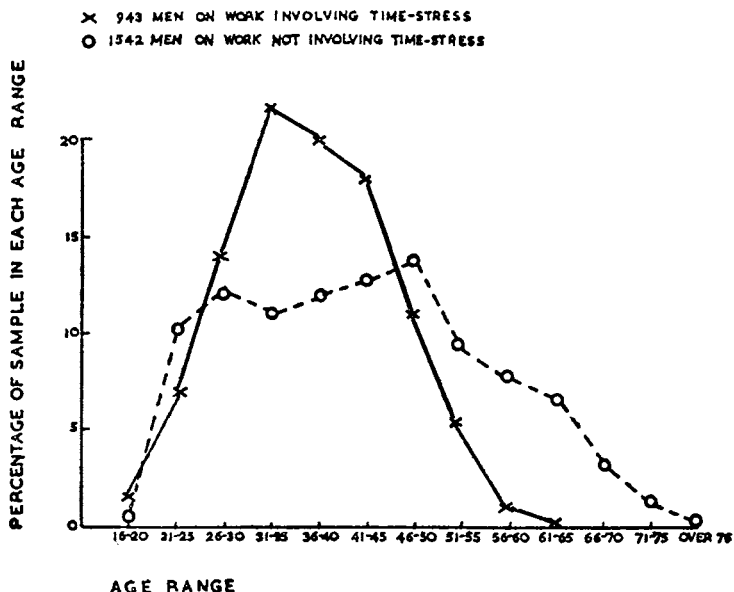


FIG. 3. Age distributions of men on production operations with and without time-stress. (Belbin and Sewell's data).

Operations without time-stress tended to have a substantially higher proportion of older workpeople than those with time-stress. The proportion would have been substantially higher still if non-production operations had been included and classed as operations not involving time-stress.

There was some tendency for a higher proportion of older people to be found working on operations where the numbers were small. The actual figures are set out in Table 1, from which it will be seen that 42 per cent of the men and 23 per cent of the women on operations with less than 10 members, were over 50 years of age as opposed to 19 per cent of the men and 9 per cent of the women on operations with more than 10 members. We do not wish to lay much stress upon this finding because the tendency may have been due to some error of sampling. For instance, the investigators may have had their attention drawn to an undue proportion of small groups of older workpeople. If, however, it is not an artifact it is probably a secondary effect of time stress, in that the speed of work can be

more easily adjusted to suit individuals in a small group than it can be in a large one where conditions tend to become rigidly standardized. This is not to say that older people will show a higher productivity in a small group than in a large, but rather that they will work more happily. We have, however, some slight evidence which would seem worth while following up, that older people may in some circumstances work not only more happily but also more efficiently in a small group consisting entirely of older people. A small group with a narrow age range and absence of "competition" from younger people often has a "human" atmosphere which appears to be especially favorable to older people, enabling them to work without strain. A good example of this was found in one factory

TABLE 1

Numbers of Persons Over and Under 50 Years of Age Divided According to Size of Working Group (Belbin and Sewell's data)

	Over 50	Under 50
Men		
1-10.....	23	32
Over 10.....	467	1961
Women		
1-10.....	27	89
Over 10.....	53	567
Men and Women together		
1-10.....	50	121
Over 10.....	520	2528

Groups with 10 or less members contained a substantially higher proportion of men and women over 50.

where a number of old men had been put to work together on old-fashioned machines to which they were accustomed in a side workshop. Here they were very happily employed making special articles not included in the normal production program of the factory. It is only fair to mention in connection with this arrangement that others have criticized it on the ground that the older people may feel themselves "put on the shelf."

Between types of work listed in the first classification, no marked differences of age distribution were found when time stress and sex were taken into consideration. This was a surprising finding, especially in the case of heavy work. The age distributions for men on heavy and lighter work (there were very few women on heavy

work) were closely similar and it seemed clear that a substantial number of men were able to sustain heavy work without undue difficulty. Detailed study of the operations suggested that the most strenuous work was unsuitable for older people, but there was a wide range of moderately heavy operations in which heaviness as such was of minor importance especially if the effort required was not continuous.

It is interesting from many points of view to turn the data on the incidence of older people around the other way so to speak, and to assign to each operation some age index (Belbin and Sewell used the mean age of the upper half of the workpeople), based on its individual age distribution, and to study the age distribution of these indices for the different classes of work. This kind of measure gives more weight than the summed age distribution of individuals, to operations where the numbers are small. This treatment, of course, sets out to "answer a different question." Whereas the summed age distributions give a factual statement of the type of work on which older people in industry are employed, the second measure attempts a picture of what is essentially *older people's work*. The results of applying these two types of treatment to the data of Belbin and Sewell were, however, essentially similar.

These age distributions would appear to indicate two things fairly clearly. First, that in studying the performance of older people in industry and assessing the suitability of work for them, it is necessary to consider in detail the demands of particular operations. Comparisons between conventionally recognized types of work or between shops, factories, or industries, may show a higher proportion of older people in one than in another because there is a preponderance of operations in one which make certain types of demand. In general, however, it would appear that indications derived from these broader classifications, are likely to be less clear-cut than when the classification is made following a detailed assessment of particular operations.

Second, it seems fairly certain that what we have termed time stress is unfavorable to older people, and that, if older people are put on time-stressed operations, they are not likely to succeed well. We cannot, unfortunately, be certain how far differences between the time-stressed and non-time-stressed operations are due directly to changes of capacity with age, and how far they have been altered by recruitment policies, because although operations recently studied were excluded from the survey, the time-stressed operations tended to be newer than the non-time-stressed. This does not appear, how-

ever, to be a sufficient explanation of the difference between the two distributions, because the same difference was observed in a number of comparisons between operations known to have been in existence for about the same length of time. Neither do the age distributions alone tell us how far the absence of older people from time-stressed operations is due to difficulty in maintaining the necessary skill and how far to difficulty in training. Such ancillary information as could be obtained, indicated that the difference between the age distributions was due in part to both, but further studies are desirable. For a start, these studies might be concerned with the ages at which people begin and leave particular classes of operation, together with data about progress in training at different ages.

The Present Research Position

The somewhat depressing survey we have given and the many difficulties we have pointed out, should not be taken to imply that no clear findings are possible about the employability of older people. It does mean, however, that anyone who enters upon such studies, must be prepared for long, careful, difficult, and laborious work, and that at the present state suggestions based upon research must be regarded as tentative. Various indications of past and present research have been mentioned during our discussion and we may now summarize them thus :

1. In making laboratory experiments it is important, if changes with age are to be fully understood, to measure not only over-all achievement but also the method whereby this has been attained. The method may change and bring about compensation for difficulties and deficiencies which keeps achievement steady. There may even be over-compensation leading to an improvement of attainment. When such changes of method occur, it will be impossible to make any adequate assessment of the changes that go with age unless the whole performance is analyzed into its components.

2. The measurement of simple sensory and motor functions gives little indication of changes in more complex performances such as those demanded in industry because in most cases, especially where the complex performance is not constrained to a rigid pattern but can be carried out in several slightly different ways, any simple functions involved are not usually stretched to their limits.

3. Experimental results indicate that when meeting a new task or performing one which is continually changing, older people tend to be slower at organizing the incoming data and the action taken in re-

sponse. Where the task is such as to emphasize speed, accuracy may suffer instead, but there seems to be a fairly general tendency for older people to lay more stress on accuracy rather than upon speed.

4. Differences between individual performances appear to increase with age so that while there may be a substantial change of performance at a task when a group of older people is compared with a group of younger, some older people are likely to be found whose performances at many tasks are similar to those of people very much younger.

5. It would seem necessary that studies made within industry should be concerned with *operations* rather than with the more conventional units such as shops, factories, or industries, and that an attempt should be made to classify operations according to the demands they make upon older people. This means that studies of aging within industry need to be made in very considerable detail.

6. Production figures can be valuable for studying progress in training which tends to be slow among older people—but are of little use for assessing the average capacity of people in middle and old age because a progressive selection with age renders older groups not comparable with younger.

7. The age distributions of those engaged on various classes of operations indicate fairly clearly that older people tend to be found on operations where speed is under their own control, or the main stress is upon accuracy and speed is of secondary importance. In Belbin and Sewell's study hardly anyone over 55 was found on operations which involved time-stress in the sense of either speed-pressure or rigid pacing.

8. It seems fairly clear that many industrial skills can be maintained to an age far beyond that at which they can be learned at a reasonable speed, at least by the methods of training at present employed.

9. More work is needed on the relationship between the ability to maintain skill and the ability to learn it. One possible approach to such work is to study the age at which people start and at which they leave particular operations and classes of operations.

10. There is some suggestion that older people work better, or at least more happily, in small groups than in large ones.

It is clear that research on the employability of older people is in its infancy, and a great deal more needs to be done. What little experience we have had suggests that, so far as industrial studies are concerned, it could be profitably conducted by cooperation between

persons with psychological training and members of managements, trade unions, etc., with intimate experience of industry. Such work would seem worth while along three lines:

(a) Much valuable information is contained in existing industrial records, although it is not always in a form in which it is directly useful. A detailed scrutiny of such records is likely in many cases to provide a mass of valuable information.

(b) Detailed measurements and observations of performance at industrial tasks could provide quasi-experimental data which would furnish valuable checks on the results of laboratory experiments, especially in the matter of training.

(c) All laboratory experiments, surveys, and observations of existing performances can, however, provide only hypotheses. Sooner or later the validity of these hypotheses must be checked by direct experiments within industry. If the problem of the employment of older people to the fullest advantage is to be solved, it is of the greatest importance that when any scheme which affects older people is introduced or any change to an existing operation is made, it should be done in a manner which enables a scientific study of the outcome to be conducted.

THE MENTAL HEALTH OF OLDER WORKERS

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THE AGING OF THE WORK FORCE constitutes a challenge to the skill and resourcefulness of industrial personnel and medical departments. These departments usually are given responsibility for the maintenance of employee efficiency and for the proper assignment of workers; in the years ahead much of their activity will relate to older men and women. Union contracts, social pressure, economic necessity, and possibly even the law will compel industry to utilize the surviving abilities of older persons. If these senior workers can be guided to their appropriate places in the factory, if their physical and mental health can be protected, all will gain.

The industrial future of the nation to a large extent depends upon the wise use of all our human resources. Slichter¹ states that the practice of retiring all men at the age of 65 produces a greater waste of labor than all the feather-bedding rules of all the unions in the country. Raising the usual retirement age to 70 years would add about a million men to the labor force and about four billion dollars a year to the national product. As the average age of the work force rises, the mental health problems of later life will grow in importance. Only persons who are at peace with themselves, their associates, and their social environment can be maximally efficient.

As indicated in previous chapters, the preservation of mental health has many aspects. Decent housing, good family relationships, and adequate recreation may be as important for psychological fitness as a sound body or a good diet. We lack much fundamental information about the mental disorders of later life and stand only at the threshold of our understanding of these conditions. If we are honest, we will acknowledge that much of the advice dispensed in regard to them lacks research backing. On the other hand, we confront a major problem that demands some action on our part, and we must live as seems most reasonable in the light of what we already know. Let us not forget, however, that many of our present hypotheses and practices may need revision as our experience develops.

¹ S. H. Slichter, "We Can Win the Economic 'Cold War,' Too," *New York Times Magazine*, August 13, 1950.

Mental Disorders of Later Life

Older persons are subject to almost every form of mental illness occurring in the young as well as to disorders peculiar to the later years of life. Many of the aberrations encountered in the elderly are not primarily determined by the aging process, although there has been an unfortunate tendency on the part of some psychiatrists to lump together all mentally ill persons over age 60 under the heading of "senile psychosis." This practice has been sufficiently widespread in the past to bring into question many of the statistical studies in this field.

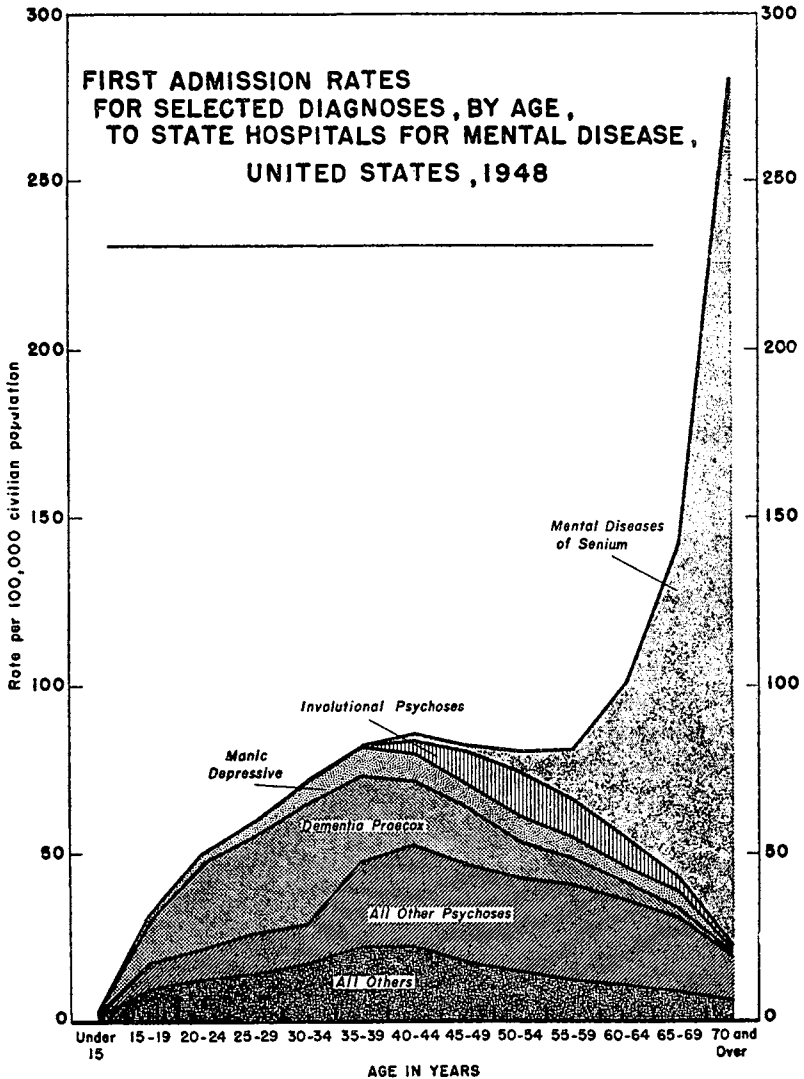
Some of the senile psychoses appear to be the outcome of vascular disease, of malnutrition, or of other disturbances in the normal functioning of the body. The two principal psychoses of later life are senile dementia and cerebral arteriosclerosis with psychosis. These and other conditions have been systematically described in a book edited by Kaplan.²

Arteriosclerotic psychosis has been characterized as a disease of the cerebral blood vessels and it is possible that current research on the hardening of the arteries may provide an answer to this problem. The etiology of senile dementia is less clear. The differentiation of senile dementia from arteriosclerotic psychosis is not always easily accomplished. Our knowledge of the somatic factors associated with these psychoses is fragmentary and inconclusive, and there is no assurance at the present time that any regime faithfully followed by an older person will protect him against these maladies.

Schizophrenia is somewhat less likely to appear for the first time after age 40; in manic-depressive psychosis occurring in later life, the episodes are more likely to take the form of depression. Paresis, drug, and alcoholic psychoses may appear for the first time in persons of advanced age. Difficulties of the neurotic type are very widespread.

Accurate information on the occurrence of mental illness in older persons is lacking at the present time. Approximately one-third of all first admissions to American mental hospitals are 60 years of age or over, and the median age of psychotic first admissions is now over 50. Very large numbers of seniles are to be found in their own homes, county hospitals and farms, and in privately-operated facilities of various kinds. The following graph illustrates the vulner-

²O. J. Kaplan, ed., *Mental Disorders in Later Life* (Palo Alto: Stanford University Press, 1945).



Graph from *Mental Health Statistics: Current Reports*. Bethesda, Maryland: National Institute of Mental Health, June, 1950, p. 9.

ability of persons over age 50 to serious mental illness, particularly to the psychoses of the senium.

Unless we develop new knowledge about the etiology and prevention of senile mental disorders, we face a marked increase in the number of older psychiatric patients for the following reasons: (1)

The population of the United States is increasing and older persons are increasing more rapidly than other elements in the adult population. Accordingly, even if present per capita rates remain unchanged, we can expect an increase in the number of afflicted persons. (2) Many senile patients die of causes unrelated to their mental illness, and it is likely that we will discover new ways of reducing deaths due to these causes. (3) The trend toward urbanization has not yet run its course. With each decade, the percentage of the total population residing on farms grows smaller. Since it is easier to care for seniles on farms, the need for institutional care of seniles will increase as our metropolitan centers become larger.

Only sound planning and effective action now can save us from catastrophe in the seventies and eighties of this century when we will find ourselves heavily involved in this problem. In hundreds of thousands of American homes the problem of dependent parents and grandparents already is present and acute; the number of cases will increase with each passing year.

Preservation of Intelligence

The preservation of intelligence is one of the most important objectives in any program relating to the mental health of older persons. It is significant that few studies have been undertaken on this subject and that with several exceptions they have been superficial and inconclusive.

We have no way of assessing mental capacities directly, measuring them indirectly in our mental ability tests. A person may possess capacity and lack the corresponding ability. A person may have a capacity, transform it into ability, lose the ability, and still possess the original capacity. A person may lose in capacity and still have abilities acquired when the related capacities were at a maximum. For example, if capacity to acquire mathematical ability diminishes with age, it is still possible that mathematical ability acquired earlier in life is as good as ever, particularly if it has been subject to considerable exercise. These possibilities must be taken into account by all who administer tests to older persons.

Our mental ability tests assume that the persons being rated have had equal or nearly equal opportunities to acquire and maintain knowledge, and are comparable in terms of test experience. It should be noted that the 60-year-old day laborer and the 60-year-old lawyer could not be expected to do equally well on a verbal test, even if they started adult life with identical scores on such a test. Where loss in

performance occurs, the significance of the loss can only be understood in terms of what one had to begin with and in terms of what one now does. A drop of ten percentile points may be more disastrous for a professor than for an unskilled laborer.

Motivation is one of the most important factors in psychological test performance. How can the motivation of subjects accurately be assessed? If there are differences in motivation with age or with repeated test experience, could not these differences alone account for much of the decrement with age reported by Jones and Conrad, Miles, and Wechsler? The pursuit of longitudinal studies does not escape this problem, and may even make it more acute. Subject interest in a project may increase or decrease with the passage of time. The significance of tests certainly is likely to vary for the same subject with time.

A man's blood can be bought without prejudicing the accuracy of a physiological investigation, but maximum cooperation of older persons in psychological studies is not easily elicited. As a matter of fact, we cannot always tell when a man has done his best for us, and usually we cannot settle for less than peak performance. We employ mercenaries as subjects at much greater risk than do the workers in the biological sciences. Much of our literature is suspect because it is based on captive populations in institutions, prisons, and the armed forces, and it suffers from the limitations which attach to the use of subjects who participate in the test situation on an involuntary basis. There have been a few investigations where subjects served by choice but usually for money incentives, and even here factors of selection were not always fully controlled or adequately assessed.

It has not yet been demonstrated that the functions sampled by existing mental ability tests are meaningful in the lives of older persons, nor have they been validated against acceptable later maturity criteria. It is quite possible that the continued use of available instruments may teach us more about the properties of these tests than about the mental functioning of aged individuals. Intelligence is variously defined in the different tests. At the present time, we have no basis for deciding whether it shall be the Terman or the Wechsler or the Thurstone or some other brand of intelligence that we should strive to preserve. Although dealing with much the same problem, these tests emphasize and measure somewhat different functions.

The standardization of a test (such as the Wechsler-Bellevue) on persons up to 70 years of age does not guarantee that the test is a

valid one, that it does the job for which it was constructed. This is true even if it is established that the test accomplishes the purpose for which it was constructed in reference to the pre-adult or early adult periods. A test may be valid for one group and invalid for another; for example, the ACE Psychological Examination for College Freshmen may be fairly efficient in forecasting college performance, but its use with first graders or illiterates would be indefensible.

Clinicians working with tests results obtained with older subjects should recognize that the diagnostic significance of a given test item often varies at different ages. In interpretation of results, consideration also should be given to the fact that physical ill health may diminish the vigor with which a subject applies himself in the test situation. This probably explains in part why some older persons improve their scores after treatment with vitamins or subsequent to the application of other corrective health measures. Many older persons have never taken a psychological test; they should be given some test experience before they are evaluated.

Even if we accept the prevailing view that performance on mental ability tests declines with age, the question still remains: Is the observed loss due to biological aging or to environmental factors? It is possible that most of the losses occurring in early and middle maturity are largely ascribable to environmental factors and that in late maturity the biological factors become important. It is possible that the situation varies markedly from person to person. The point is that we do not yet know for certain the factors responsible for decline in "test intelligence" and hence we are not yet in a position to recommend measures designed to preserve it. Since we do not understand the functional significance of "test intelligence" in the life of older persons, we are not even certain that all the abilities measured by our tests are worth preserving in all people.

There are many research possibilities in this field. We need to explore further the nature of the speed factor in mental ability tests, since speed seems to drop markedly with age. Does this phenomenon derive from intracellular changes in nerve cells? Is it associated with the non-practice of abilities which our tests feature? This is a subject that deserves systematic study.

We can only conjecture about the fate of "test intelligence" in older Negroes and other non-Caucasian groups. The Stanford-Binet and Wechsler-Bellevue were standardized on whites only, as have

most of the other widely used instruments. We must prepare to serve the needs of the non-white segment of the labor force.

Important questions may be answered by following the fate of peoples whose diets and ways of life are different than our own. Do peoples who subsist mainly on rice retain their mental abilities longer than people like ourselves whose eating habits are so different? Are grandmothers and grandfathers in a patriarchal society less likely to succumb to senile dementia than their counterparts in this country? Here the psychologist, sociologist, and anthropologist must join forces with the psychiatrist in seeking the facts.

In studying the biological basis of learning and intelligent behavior in old age, let us not overlook the experience and the methodology of animal psychology. There are opportunities here which human subjects do not afford, opportunities for the use of drugs and experimental surgery.

Mental Hygiene Principles

The principles of good hygiene are substantially the same at all ages; much that has been written about the guidance of children and young adults applies fully to the oldsters in our population. Forty or fifty years of adult living does not change basic biological and psychological needs. The older person is not an individual apart from the rest of the human race; with minor differences, he shares the joys and fears and emotional requirements of all his fellow men. Those who are called upon to counsel with the elderly are well advised to acquaint themselves with the vast literature on mental hygiene, clinical psychology, and psychiatry.

If there is anything that work with older persons has established, it is that habits and interests and ways of living are rooted deep in the past life of the individual. The person who has developed healthy and effective mechanisms for getting along with people and for dealing with the exigencies of daily existence will find few challenges that they cannot cope with in the later years. The person who has been well-adjusted all his life and then succumbs to the ordinary trials of later maturity is exceptional. Many of the problems of old age can be traced back to the unresolved conflicts of childhood, adolescence, and early maturity.

The secret of successful aging lies in building up habit patterns and ways of living of a desirable kind over a long period of years. It is contrary to all psychological experience to expect that such habits can be brought into existence suddenly on the day after retirement or

on one's sixtieth birthday. They must be nurtured and developed all through the adult years. Unless we prepare now those who in several decades will be elderly, we cannot hope to contribute maximally to their adjustment. One of the chief characteristics of a well-adjusted person is flexibility, and one of the major sources of difficulty in old age is an unwillingness on the part of the individual to acquiesce to a change in role. This characteristic of adaptability can, to some extent, be cultivated, particularly in the young. The reader is referred to an excellent summary of the literature on the relationship between age and personality by Kuhlen.³

Individual differences cannot be ignored by those who seek to promote the mental health of older persons. Procedures that may be extremely successful with some may be contraindicated for others. Old people, like young ones, differ markedly in intelligence, interests, occupational history, physical condition, and in other ways. Although there are general principles which may hold for the vast majority, the salvation of individuals lies in planning in terms of unique habit systems and unique interest and ability patterns. Heavy physical exercise may be borne easily by one person and may endanger the life of another; some should be urged to continue in their occupations and others should be discouraged; a late marriage may be a blessing for one person and a living hell for another; some oldsters thrive in the harshest climates, others need to escape to less oppressive temperatures. The point is that the guidance of each person must be individual and not by rule-of-thumb. Those who have a stock set of rules for the elderly are a menace.

Good adjustment does not imply an absence of problems; it reflects simply an ability to cope with them without surrendering to mental illness in any of its forms. Successful mental hygiene requires that we prepare older persons for the physical, psychological, and sociological changes that await them, and many of which are inevitable. Until we diminish the gap between our knowledge and certain of our problems, we must teach older men and women to bear some of their difficulties with Spartan fortitude.

Personnel Procedures and Mental Health

A quarter of a century of experience has taught us that attention to the needs of workers leads to speeded production, reduced costs, and higher morale. It is reasonable to suppose that a greater concern

³ R. G. Kuhlen, "Age Differences in Personality During Adult Years," *Psychological Bulletin* (1945) Vol. 42, pp. 333-58.

with the special problems of older employees would yield many benefits.

Among the major adjustments which most older persons face are the following: (1) adjustment to loss of employment or lowered income; (2) adjustment to loss of a spouse; (3) adjustment to loss of friends and relatives; (4) adjustment to physical infirmities; (5) adjustment to changed living arrangements. Death and biological change remain beyond our control, but there is much that can be done to soften the impact of the aging process upon the older worker.

Management can promote the mental health of older workers by helping them achieve economic security in the closing decades of their lives, by providing for the protection of their physical health, by utilizing sound personnel procedures, and, above all, by demonstrating that older employees are valued and respected.

Industry can aid in the development of systems of compulsory mass saving which permit persons to retire on sums adequate to maintain a decent standard of living. Perhaps this can be accomplished within the framework of existing pension schemes. Anything that can be done to stabilize the employment of older workers will prove beneficial. Blum and Russ,⁴ studying attitudes toward work incentives, found the desire for security to be more important to older persons than the wish for occupational advancement. This helps explain the lower quit rates for advanced age groups. Personnel departments should judge older applicants for employment without prejudice and solely in terms of individual competence. Those who are able and willing should be permitted to continue on the job indefinitely, with their tenure limited only by their efficiency and usefulness. Frank⁵ reports the case of a man approximately 80 years of age who is brought to work in the company car every morning and returned to his home in the evening. It seems that one of his chief functions is to keep up the morale of the people above 50 who have the skill which the factory requires.

Periodic medical examination of older employees is essential to the operation of a sound personnel program for older workers and vital to the protection of mental health. Physical health favors mental well-being. Many of the physical changes associated with the aging

⁴ M. L. Blum and J. J. Russ, "A Study of Employee Attitudes Toward Various Incentives," *Personnel* (1942) Vol. 19, pp. 438-44.

⁵ L. K. Frank, "The Older Person in the Changing Social Scene," in *New Goals for Old Age*, edited by G. Lawton (New York: Columbia University Press, 1943).

process carry vocational implications. For example, older persons cannot easily tolerate extremes of temperature, due to reduced ability to dilate the cutaneous blood vessels and to atrophy of the sweat glands. Cold adaptation is interfered with by lowered metabolism and blood vessel rigidity. Many of the physical changes that occur with age can be foreseen long before they appear and they should be planned for. If a man is doing a job that he will be unable to perform in his later years, he should be encouraged to prepare himself for a new position within the organization or outside of it. This preparation may be undertaken on the recommendation of the personnel and medical departments and may require additional schooling or special training. Competency is a relationship between the individual and his task or life situation. Although we may not be able to arrest the physical and psychological changes associated with age, we often can alter the environment in such a way as to permit the fullest expression of a man's capabilities.

The older person must be led to an understanding and acceptance of the biological changes occurring within his body, changes in sexual vigor and physical strength and sensory acuity. He must be taught to live within these new limitations and must come to recognize that a happy, useful life is still possible for him.

Sound personnel practices can contribute to the preservation of the mental health of older workers. As the writer⁶ has pointed out, excessive promotion or improper placement of older employees often produces anxiety states in these persons. Bad personnel work is reflected in lowered morale. Those responsible for the assignment of older workers should take into account such factors as personality, intelligence, education, experience, and health as well as seniority. Sometimes activities designed in the interest of older employees misfire and do more harm than good. For example, Stieglitz⁷ points out that anniversaries encourage stock-taking and may precipitate profound depressions. Many companies hold testimonial dinners in honor of employees who have given long service. Such affairs should be carefully planned if they are not to defeat the purpose for which they are held.

Psychiatric hazards in industry vary even for persons employed in the same factory, depending upon the division of responsibilities. For

⁶ O. J. Kaplan, *Encyclopedia of Vocational Guidance* (New York: Philosophical Library, 1945), pp. 938-43.

⁷ E. J. Stieglitz, "Factors Contributing to Mental Disease in the Aged," *Journal of Gerontology* (1947) Vol. 2, pp. 283-95.

example, Dershimer⁸ indicates that the accident rate in some explosives plants is lower than for many industries which are not considered hazardous. As a result, the chief risk is not found among the plant operators. It is the plant superintendents who are under stress because of the emphasis on accident prevention. It is well known that most positions of responsibility in industry are held by older men, and it seems likely that they are more subject to this type of stress than younger persons. Physically, these older men may pay a higher price for such anxiety in terms of psychosomatic disorders.

Older employees can become an important resource of the industrial psychiatrist if their help is solicited and if they are well informed. On the positive side, these older men can help to give direction to the personal lives of their younger fellows and they can do much to orient them within the shop. On the negative side, as Dershimer has shown, older workers in hazardous fields often initiate new employees by telling them exaggerated tales of accidents which leave some in a state of chronic terror.

The company program for the older worker should be integrated into personnel and medical department activities rather than established as an independent function. Since the preservation of mental health is a life-long task, it cannot be fully accomplished in a program covering a short span of years. Moreover, the regular medical and personnel departments have the information and the skills needed to do the job, and no program can succeed without their full cooperation.

Preparation for Retirement

It is significant that many of our largest corporations are accepting preparation for retirement as one of their responsibilities. A general acceptance of this duty on the part of industrial organizations will aid in the protection of the mental health of older persons.

Zipser⁹ recently has described a group pre-retirement counseling program established by the Standard Oil Company of New Jersey. Employees are interviewed on their fifty-ninth birthday, five years before retirement. Subsequently, aid is given on planning for retirement, health problems, and provisions for financial security, and information is provided on activities that may be pursued after leaving the company. The counseling is done on an individual basis. It

⁸ F. W. Dershimer, "Psychiatry in Industry," *American Journal of Psychiatry* (1946) Vol. 103, pp. 145-48.

⁹ A. R. Zipser, Jr., "Elderly Workers 'Taught' to Retire," *New York Times*, September 17, 1950.

is stated that the company's interest stems from its acknowledgment of its social responsibility to prevent its employees from experiencing a useless old age despite financial security. The need for this service was emphasized some years ago when a retired board chairman complained that his first half year of retirement was one of the most miserable periods in his life. He was encouraged to become a partner in an investment banking business and is now said to be well adjusted at an advanced age. The Standard Oil Company of New Jersey program seeks to enable the employee to continue to obtain satisfactions in retirement that he formerly gained in his work. This is accomplished by finding an appropriate post-retirement career. Among the satisfactions taken into consideration are feelings of usefulness, importance, activity, companionship, and creativity.

Other large corporations which have active pre-retirement counseling programs include the Socony-Vacuum Oil Company, Shell Oil Company, and General Motors. General Motors long has recognized that employee counseling prior to retirement is an important personnel function. At the present time, however, there is no one single program in effect in all divisions of the corporation. One of its divisions holds an annual dinner for retired employees. This is an informal fellowship gathering at which the general manager of the division reports on the activities of the past year and forecasts future developments. The affair provides an opportunity for people to talk over their daily activities as retired individuals. The Ford Motor Company tentatively is planning an indoctrination and pre-retirement orientation program which will be made available to workers approximately five years in advance of normal retirement age.

Courses on aging have been made available to General Motors employees in both Canada and the United States. A summary of the experience of the Walkerville, Ontario, Canada plant has been published recently by Robson.¹⁰ A complete physical examination of all employees at this plant who were 55 years of age or over was undertaken several years ago. In addition to the medical findings, data were collected on life history, family situation, avocations, attitudes toward retirement, work record, and other personal matters. This study suggested the need for a course of instruction in the art of growing old, and a series of lectures was arranged on such topics as

¹⁰ R. B. Robson, "Experiment in Education of the Older Workers," *Industrial Medicine and Surgery* (1949) Vol. 18, pp. 365-67.

financial security, physical and mental health, psychological changes, living arrangements, leisure time activities, and wills and estates. Every working man who attended the classes was interviewed and it was found that the lecture series was well received. Many of the respondents indicated that they had discussed the lecture material with their wives and friends and expressed interest in additional instruction. It was suggested that in the future the attendance age limit be lowered to 45 or entirely eliminated. The project was supported by both union and management.

An adequate program of education on the subject of later maturity should involve and be directed toward workers of all ages, for the following reasons: (1) As has already been indicated, preparation for old age is a life-long undertaking; (2) It would enable young workers to better understand their older associates. The young need to be taught the circumstances of age for both of these reasons. The writer's young students in a course on psychological adjustment in later years of life reported greater interest in and sympathy for older persons as a result of their class work. Lack of information and misinformation are important causes of mental unrest in older persons and in those responsible for their care. A course or series of lectures on aging can do much to promote mental health.

It has been claimed that the more a man is involved in his job and the more satisfying it is, the more difficult it is for him to be happy in retirement. It has been suggested that persons in the lower socio-economic groups adjust more easily to retirement than individuals of higher status, presumably on the basis of differences in job satisfaction. Although this generalization no doubt has some validity, it is probable that there are many exceptions to it. The executive who has an avocation which he can turn into a full-time job may weather retirement far better than the mill-hand who loves his work and is forcibly separated from it.

Retirement bring special problems of adjustment to unmarried older men and women, many of whom have found gratification of their social and emotional needs on the job. Some of these persons truly are wedded to their work, sublimating more basic urges in vocational accomplishment. It is particularly important that such persons be encouraged to seek friendships and activities which can be pursued subsequent to retirement. In some cases the answer to the problem lies in the establishment of small groups in their own apartments where they may care for each other in time of illness and

provide for their common entertainment. Such a scheme liberates the participants from the routine of institutional existence, is not much more expensive, and its voluntary character guarantees the compatibility which is not easily achieved in a home for the aged. We need to develop new schemes for facilitating the association of unattached older men and women, giving attention to congeniality of interests and similarity in cultural background. We must take cognizance of the individuality of older adults and give them as much choice as possible in working out their living arrangements.

Faris and Dunham,¹¹ in a Chicago study of mental disorders, found the highest rates for the senile psychoses in the rooming house and Negro districts, in areas of extreme poverty and marked family disorganization. This ecological investigation lends support to the view that persons living in social isolation are more subject to mental illness, although it is not always easy to distinguish between cause and effect. Persons whose ideas are reviewed and tempered by contact with others are somewhat less likely to exhibit delusions. It would be interesting to investigate the hypothesis that continued employment beyond age 65 aids in the preservation of mental health; employment enables the older worker to exercise his abilities and permits him to satisfy his companionship requirements, at least in part.

It is in the national interest to keep our retired older workers fit and able, and subject to call in time of emergency. I am suggesting the equivalent of a National Guard in the field of industry, possibly with periodic tours of duty designed to preserve and keep up to date the skills which have been acquired at such great expense and effort. Not only would these older men and women stand ready to serve in time of crisis, but they might be called in at periods of peak demand in time of peace. If the program were to be successful, organizations would need to institute activities designed to maintain the physical and mental health of retired employees. Much basic medical and psychological research is needed if such a program is to proceed on a sound basis.

Summary

An adequate mental health program for the older worker should provide for the following :

¹¹ R. E. L. Faris and H. W. Dunham, *Mental Disorders in Urban Areas* (Chicago: University of Chicago Press, 1939).

(1) Adequate health examinations should be administered at regular intervals and complete records of the examinations should be maintained. Everything possible should be done to protect the health of the worker.

(2) Information on the social and occupational history of a worker should be systematically collected from the time that the employee joins the organization. This material, along with the medical record, test results, and other data, make possible more effective counseling.

(3) All interested workers should be given assistance in obtaining information on the aging process and on retirement and its implications.

(4) The personnel and medical departments should periodically review the performance of the older worker and should reassign him if it serves the interest of the worker or of the organization.

(5) The fact that mental health in later maturity can be achieved only by life-long effort should be recognized in the development of a program that will influence the worker all through his adult career.

(6) Management can do much to reduce the burdens which the superannuated worker must carry. It can take the lead in developing new ideas in housing, recreation, and medical care appropriate to the needs of an aging population. Management can help the older worker provide for himself greater financial security, so that retirement will not mean a lowered standard of living.

(7) No program in this field is complete that does not provide for its own evaluation. We are only at the threshold of our understanding of the problem and research is an integral part of the program. Much basic information on the aging process is lacking and it is the duty of industry to aid in building up the knowledge needed for a successful attack upon the mental disorders of later life. The industrial physician and personnel man have a unique opportunity to contribute to the advancement of gerontology. They have the privilege of reexamining large numbers of men over long periods of time, enabling them to undertake the longitudinal studies so greatly needed in this field. They have access to the wide range of social, occupational, psychological, and medical information which must be pooled if the aging process is to be accurately characterized.

MEDICAL-SOCIAL ASPECTS OF THE AGING PROCESS

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THE HUMAN RACE, and particularly that part of it which belongs to Western civilization, is in the face of forces and changes which recall the famous hexameter of the Roman poet Lucretius, "*Naturam furca expellas, tamen usque recurrit*" (even though you cast out nature with a pitchfork, yet she will still come back). For over a century medical science has been busily successful in protecting the human race from the operation of various natural forces—one direct result of which has been an increase in the individual expectation of life; and we are now beginning to realize that Nature is coming back to demand a price that may yet be equal to what she had hitherto exacted in other ways from our species. Insofar as the increased expectation of life is brought about by a reduction in infant mortality there results an increase in the total human population of the earth, and the consequent problem of providing sufficient food for the numbers likely to be present in the future is already causing anxiety. If we are not successful, starvation may merely replace disease as a mode of population control. Insofar as the increased expectation of life is brought about by control over the diseases of adult life, the inevitable consequence is a change in the age structure of the population with an increase in the proportion of the older age-groups—a process accelerated in those communities which make use of the further control over Nature provided by the technique of birth-control. The presence in the community of a greater proportion of old people subjects it to internal strains which can already be felt and which, if not circumvented, bid fair to render it so unstable that ultimate collapse becomes possible. In Western Europe and North America the situation has already reached a stage where these strains are apparent, and the forecasts of population changes in the next quarter of a century are so alarming that the whole problem of old age is very much in the public mind.

The precise incidence of the problem varies from country to country, but the picture so far as Great Britain is concerned has been fully set out in the Report of The Royal Commission on Population, 1949.¹ At the present time there are approximately 5 million

¹ *Royal Commission on Population Report*, H. M. Stationery Office, 1949.

people in Great Britain over the age of 65 to 31 million of working age (15-65)—or a proportion of roughly one to six. In 25 years' time there may well be something like $8\frac{1}{2}$ million old people to some 29 millions of working age, or a proportion of roughly one to a little less than four. Since the population of working age has not only to undertake the physical care of both the coming and the going generations but has also to earn the wherewithal to pay for their upkeep, it is clear that their burden is already heavy. The river, in fact, is steadily rising and since all forecasts agree that it will reach dangerous levels, it is only prudent to examine the banks before the flood comes.

That is really the essence of the present situation—we have now the duty of making careful studies of the coming problem in all its aspects, before decisions on policy may have to be taken at a high level. In making such studies it is essential to remember one danger point which is often forgotten because it is largely silent. Old age is fundamentally a domestic problem, for all old people dread the thought of being moved to an institution to die, and desire to remain in their accustomed surroundings at home, and in fact in Great Britain it is probable that nearly 97 per cent of the whole old-age population are living at home. Very severe social stresses are set up in consequence, which will be described later, but it is necessary to emphasize at the outset that the domestic strains caused by old age are far greater in extent than the facilities available for their relief, and unless old age changes its attachment to the fireside it has known in adult life, these stresses are certain to grow as the relative proportion of old people increases. They are made worse by two concurrent changes in social structure—the virtual disappearance of domestic service as an occupation for women, and the smaller size of the family—both resulting in a decline in the number of those potentially able to help to carry the burden.

The object of the present paper is to discuss some of the medical and social results of the aging process in the light of these general considerations, and as a basis the facts elicited in the Wolverhampton survey will be used.² Wolverhampton is an industrial town in the Midlands of Great Britain with a population of approximately 150,000, and from 1945 to 1947 a survey, under the auspices of the Nuffield Foundation, was made on a random sample of 1 in 30 of the old-age population, regardless of income and social position. The sample was obtained by selecting every 30th card from the food

² J. H. Sheldon, *The Social Medicine of Old Age* (London, 1948).

ration register and comprised 583 individuals. The starting ages were 60 for women and 65 for men. A preliminary social survey was made by a team of social workers and the results were published in the Rowntree report on "Old People."³ A medical survey was then made on the same sample, though owing to deaths in the sample during the interval and other causes, the final number was reduced to 477 individuals, and the results from both surveys were combined in a single study.⁴

Medical Aspects of the Aging Process

Only the more general conclusions and findings can be dealt with here, and it must be emphasized that they are based on a random sample of the population, and since this inevitably contains numerous individuals who have never sought medical attention, the resulting picture differs somewhat from one based on individuals who have already sought advice from the medical profession.

1. Taking all ages together it was found that 66 per cent of the old people were able to move about as much as they liked and 34 per cent suffered from limitation of movement. The incidence of limited powers of movement inevitably increases with age, and this is clearly shown in Fig. 1. This is an important point, for any increase in the expectation of life at advanced ages is likely to lead to a great increase in the proportion of people with limited powers of movement. Only 2.5 per cent of the sample were bedridden, and this bore little relation to age. A larger proportion (8.5 per cent) had reached such a stage of decrepitude that they were unable to leave the house, and this group becomes increasingly important after the age of 75. Of the whole sample, 11 per cent were therefore confined to the house, and it is probable that a figure of this order may be taken as true of the whole old-age population of the country. These cases require constant attendance by someone else, and often impose very severe strains on the younger generation who are looking after them, and the mere fact that they comprise one-tenth of the old-age population indicates the sheer size of the domestic problems they cause.

Even more important, however, is the large group of old people with a limited capacity for outside movement. They comprised 22.5 per cent of the whole sample—there are therefore approximately one million such individuals in Great Britain—and have a maximum

³ *Old People*, Nuffield Foundation, Survey Committee on the Problems of Aging and the Care of Old People (London: Oxford University Press, 1947).

⁴ Sheldon, *op. cit.*

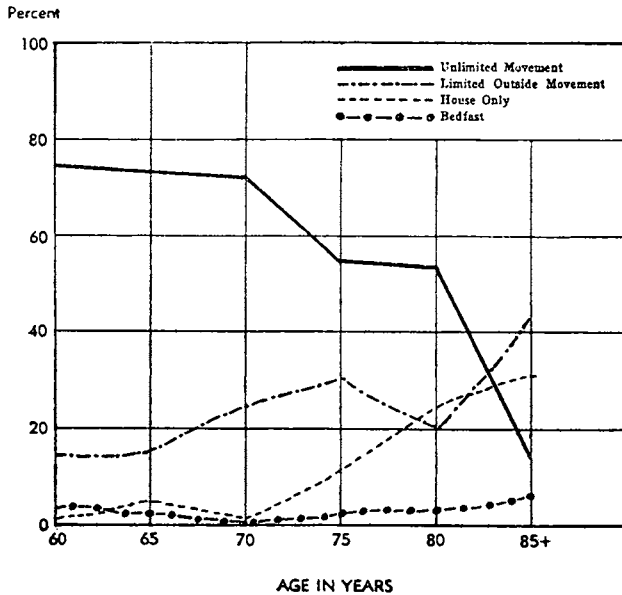


FIG. 1. Powers of movement of old people.

incidence between the ages of 70 and 80. They form a group of the greatest practical importance in that they have already entered the downward path leading to loss of outside movement; the longer they can be kept going, the longer is the time before they become a burden on someone else. It was found in the survey that for the most part they were leading independent lives, but without any margin of physical strength. A common type was the household consisting of an old man and woman who were just able to manage the housework by the combined efforts of both, but in the face of extra strain such as illness they were quickly reduced to a state of dependence on others. It is clearly of the greatest social importance that everything should be done by the community to keep this group going for as long as possible—and in this the interests of the community are in accord with the wishes of the old people.

The causes of their limited powers of movement were numerous, but the more important were dyspnea, arthritis, weakness and lack of confidence, painful feet, and vertigo. The only one of these offering immediate scope for treatment is pain in the feet, for while the others are inevitable concomitants of the aging process, deformities of the feet are not inevitable and usually bear no relation to the

general health of the individual. One of the more depressing features elicited by contact with a large number of old people in their homes was the number of otherwise able-bodied old women whose activity and usefulness was limited by this condition. Men exhibit a steadily rising incidence of aching in the feet with increasing age, which is probably caused by a simple senile stretching of the ligaments. Women tend to suffer from a more severe grade of pain caused by actual deformities of the feet arising earlier in life, and the incidence therefore shows less relation to age (see Fig. 2). Doubtless, a great

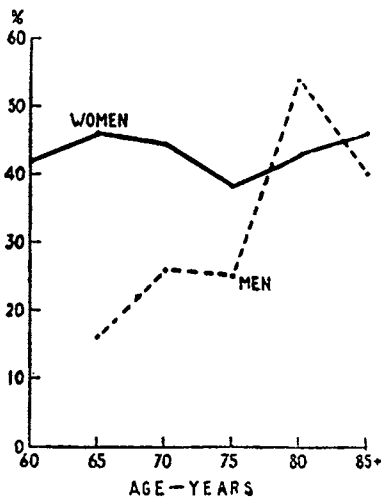


FIG. 2. Percentage of old people with pain in feet.
 (Reproduced with the permission of the *British Medical Journal*.)

easement would be obtained by more facilities for chiropody, but the whole matter deserves more fundamental study in an effort to eliminate the causes which lead to such frequent deformity of the female foot.

As the numbers of the old increase, so will the question of their general mobility become of greater importance, and every effort will have to be made to keep to a minimum the number of those so incapacitated that they cannot leave their homes. One practical aspect of this is that old people suffering from physical defect often need an easement of their domestic burden even more than they do medical treatment, and an extension of home help for the aged may more than pay for itself by helping to keep on their feet old people who would otherwise become entirely dependent on the community. This re-

quires accurate factual studies in different modes of life, for the problems may well be different in agricultural and industrial communities.

2. The sex incidence of the aging process poses some questions of considerable interest. It is well-known that as age advances women become more numerous than men, and it might be expected that this gain in mortality would be accompanied by a lessened morbidity—or a better standard of general health. This is not the case.

In making the Wolverhampton survey the individuals were classified into three grades of general physical state: (1) normal, or average for their age; (2) normal-plus, or outstanding physical specimens; and (3) subnormal. When the results were analyzed it was a great surprise to find a distinct difference between the sexes. With women each advance in years brought an increase in the percentage of those with subnormal physique, which rose steadily from 20 per cent at age 65 to no less than 60 per cent at age 85, at which age only 5 per cent were classified as normal-plus. With men the same process took place up to 75, after which a curious change occurred. In place of a further deterioration the men then became equally divided into those who were either subnormal or normal-plus, with fewer who were just average. In other words men of extreme old age appear to be physically either very good or very bad, whereas women tend to suffer from increasing degrees of decrepitude, though they possess a power of sheer survival which is denied to the male.

This was confirmed by the findings for frequency of medical attention (see Fig. 3) which shows the percentage of old people at each age who were actually receiving medical attention at the time of the survey. Men and women behave similarly up to the age of 70, after which the difference increases, as men need relatively less and women relatively more treatment. Women therefore not only outlive men, but they do so in spite of a greater incidence of ill health, the importance of which lies in the fact that in plans for the physical care of the really aged, women will be concerned more than men.

3. A further physical aspect of aging of great importance is the gap that exists between what one may term the official and the natural onset of old age. In Great Britain contributory pensions become payable at age 60 for women and 65 for men, and in administrative, business, and professional occupations 65 is the usual retiring age for men, though it may be earlier. It is impossible to define accurately the time of onset of natural old age, but for practical purposes

it may be taken as the age at which natural infirmity begins to compromise an individual's independence. Though it obviously varies greatly from one individual to another, several different modes of inquiry gave similar results: (1) For old people living a natural life at home, it was found in the Wolverhampton survey that the proportion of those who were fully ambulant declined sharply after 70. (2) The proportion confined to the house rose steadily after 70. (3) The longer old people live the greater is the chance that the accidents of life may affect their children or other relatives in such

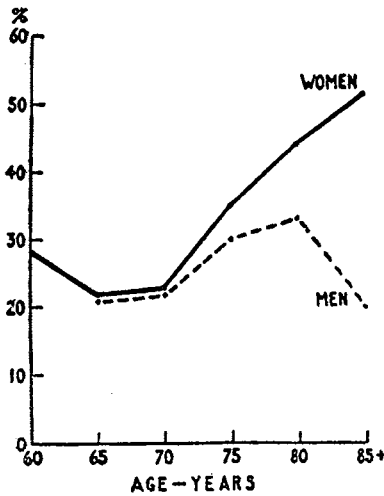


FIG. 3. Percentage of old age population receiving medical treatment. (Reproduced with the permission of the British Medical Journal.)

a way as to impose a severe domestic burden on the old person—as when an old woman may have to rear her grandchildren owing to the death of a daughter. It was found that the proportion of old people carrying severe domestic strains did in fact rise slowly but steadily up to the age of 70, after which there was a sudden drop. This was due entirely to the weakness of old age and its inability to carry the load, for the potential incidence of such strain was still increasing. (4) At the time of the survey, queuing for some kinds of food was still necessary. This could impose a severe physical strain, and it was found that queues were regularly used by women up to the age of 75, but only exceptionally thereafter. (5) At the age of 60, 50 per cent of women were engaged in the sole domestic care of their household, and the proportion remained unchanged at 70. By 75, the propor-

tion had only fallen to 40 per cent, but the infirmities of old age then made themselves increasingly felt, so that at 80 only 18 per cent and at 85 only 4 per cent of women were so engaged (see Fig. 4). There

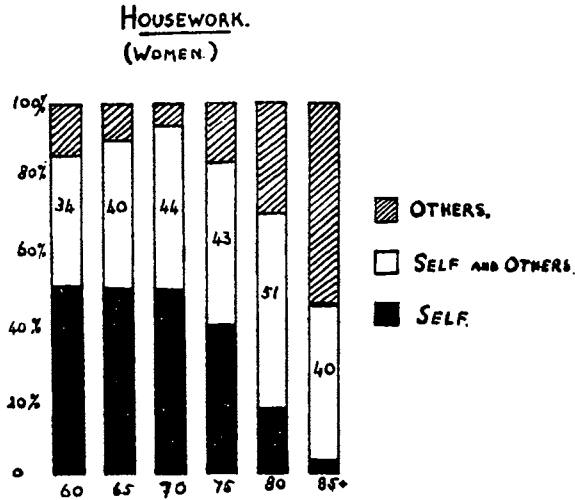


FIG. 4.

is therefore a considerable body of evidence to show that, under natural conditions, old age first begins to make itself felt at about 70, and by 75 the process has reached a stage which only the exceptional individual escapes. There is therefore a gap of from five to ten years between the official and the natural onset of old age. Under future conditions it will almost certainly be of the greatest importance for the community to find means of making use of this period instead of allowing it to run to waste, as it does at present with men.

4. This raises the question of whether it is fair to ask old people to continue to contribute to the total national effort. Seen from this point of view the greater longevity of women raises an interesting problem. Ultimately no doubt their greater power of survival in spite of a lesser standard of general health may well be bound up with the more complete chromosomal outfit possessed by each of their cells, but this is probably not the whole story. There can be little doubt that in some mysterious way the continuance of life in old people is bound up with their desire for life, and this mental aspect of old age is of fundamental importance.

The figures already given for housework suggest that the average woman keeps going as long as she can. That this is actually the

case is shown by the further fact—shown in Fig. 4—that although there is a steady fall after 75 in the percentage of those engaged in the entire care of their household, there is in these years a coincident rise in the percentage of those partly engaged in this task. At age 60, 34.6 per cent of women share the household work with others, while at 80 the figure has risen to 50 per cent. Such women, though no longer capable of the sole care of their households, yet still continue to give a hand in the house and do what they can. Housework may well be a boring and never-ending occupation, but it does nevertheless provide the woman with the deep inner satisfaction of knowing not merely that she is still playing a part in the world, but that she is still necessary to others. One cannot escape the suspicion that the satisfaction of this inner drive has something to do with the woman's greater hold on physical life.

Men on the whole are not so fortunately placed. It is true that there are certain male occupations, such as gardening and agricultural work, where it is usual for the man to continue working till physical infirmity makes it impossible, but these are the exceptions in modern life. Nevertheless, these are occupations traditionally associated with longevity. In an industrial civilization, however, most men follow occupations which have fixed ages for retirement, and it is an irony of fate that the more a man has identified himself with his occupation the less fitted is he to fill the vacuum of his retirement. It is a common observation for such men, healthy at the time of retirement, to die in a few years, and one cannot avoid the suspicion that whatever the physical mechanism, the ultimate cause of death is boredom. Ignorant though we are of the mechanisms concerned, all those who have much to do with old people are agreed on the importance of their maintaining an interest in life. There can be little doubt that the happiest old men are the craftsmen still able to practice their skill, such as gardeners and carpenters, whether this be as an occupation or a hobby. One can therefore say with some confidence that if it can be made possible for old people to follow an occupation which is within their physical powers, both they and the community will derive benefit. It is, of course, essential that they should be willing to do so, for the forced pursuit of a distasteful activity would be as bad for the old person as it would be ungenerous of the community to impose it.

Two of the most difficult problems of the present time are to provide suitable incentives for old people to work and to make this

practicable without at the same time blocking the ladder of promotion to youth. It is noteworthy how in stable cultures, such as that of the peasant, the old person always has his place in society with something to do—even if it be only gathering sticks for the fire. The present customs of Western civilization in this respect are not only inimical to the old man, but detrimental to society.

The effect of the state of mind on the physical health of the old person is so important that another aspect must be raised here—that of loneliness. In carrying out the Wolverhampton survey, special attention was paid to this point. On the whole the results were better than I had expected—since 78 per cent of the old people made no complaint in this respect, while 14 per cent complained of intermittent loneliness, and only 8 per cent were very lonely. Such loneliness in most cases was unpreventable, being usually due to the death of the partner in life, or affecting single women. The single men encountered in the sample were, by contrast, free from loneliness. When the relation between loneliness and other aspects of life were investigated, it was found that loneliness was related to the mental state. It was estimated that 81.8 per cent of the whole sample were in full possession of their mental faculties, and that of the remainder, 11.2 per cent formed a group best described as having faculties slightly impaired. In those subjects who complained of loneliness the proportion in the latter category was double that of the whole sample, so that there is a clear relation between loneliness and some degree of mental impairment. It was not possible to determine further the mutual relationship between the two, but the stories told by many of these old people left little doubt in my mind that it was the loneliness which had precipitated the mental failure. Loneliness is but one aspect of the general feature of having something to live for. In itself it can be heart-rending in severity, and there is clearly ample scope for religious and voluntary activities in bringing human company into such lives. Emphasis has been laid on the subject here, since in the attempts being made to solve the problems of old age, not enough attention seems to be given to the fundamental fact that it is impossible to separate mental and physical health in old people, and that to enable them to have something to live for is as advantageous to them as it is to the rest of society.

5. The purely clinical features of aging are of the greatest interest, but since they may affect all the system of the body it would be quite impossible to give a description of them here. It seems advisable,

however, to draw attention to one group of symptoms which have not received the attention they deserve, i.e., those due to senile defects of the inner ear and its central connections. It is a matter of such common observation that old people are apt to be hard of hearing that the matter excites little comment; but the fact that parallel changes of equal frequency appear to affect the labyrinthine apparatus has passed almost unnoticed. Nevertheless, contact with a random sample of old people in their homes showed that the symptoms so produced may play a very important part in their lives. The most obvious effect is the liability to vertigo. In men the maximal incidence occurred in the age-group 75-79, with a frequency of 60 per cent, while in women the incidence rose slowly through the years from 50 per cent at 65 to 70 per cent at 85. Such vertigo varied from transient attacks of mild giddiness to severe labyrinthine vertigo, with all its usual features.

Old people commonly suffer from two further disabilities, which are probably connected with defect of labyrinthine function. The first is difficulty in the dark. This is so common a result of old age that it may almost be regarded as a normal feature of that epoch. The incidence is shown in Fig. 5. The dark imposes a special strain on labyrinthine and kinaesthetic function in that it reduces to a minimum the information as to the position of the body in space normally derived from the eyes. It will be seen that at ages of over 80 no less

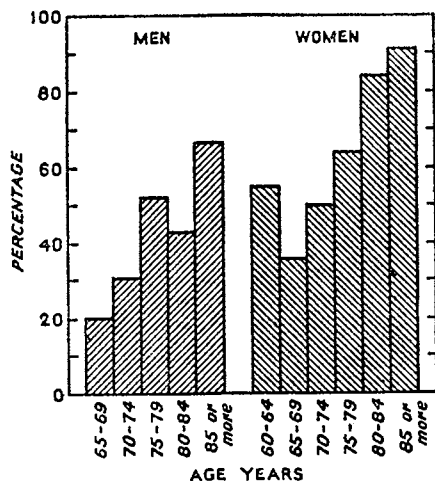


Fig. 5. Difficulty in the dark experienced by old people.
 (Reproduced with the permission of the LANCET.)

than 80 per cent of women suffer this difficulty, and it may cause the old person considerable distress as well as difficulty. Thus an old man living in a two-roomed cottage, going at night from one room to the other inadvertently turned out the light in one room before he had turned it on in the next. He had lived in the cottage for many years, and knew its details intimately, yet being cast suddenly into darkness made him lose all sense of direction and he stumbled about. When finally rescued by his wife he was extremely frightened and confused.

The second result of a decline in labyrinthine function is the well-known liability of old people to tumble. The incidence of this in Wolverhampton is shown in Fig. 6. Once again it will be seen how

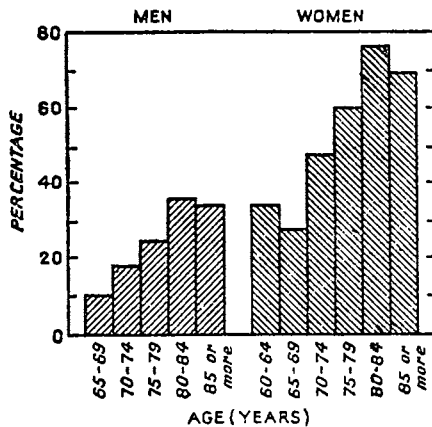


FIG. 6. Liability of old people to falls.

(Reproduced with the permission of the LANCET.)

much more frequently women are affected than men. Falling is important, not only because of the actual mechanical injuries that may be produced, but also because it may precipitate a general breakdown. It was found that the falls themselves could be divided into three types. Thirty-five per cent of falls were directly due to attacks of vertigo, and these need no further description. Thirty-one per cent of falls, however, were not associated with vertigo, but occurred in the course of movement, and appeared to be associated with a greater liability of the old person to trip. Indeed, these old people almost invariably ascribed their falls to the fact that they did not lift their feet as high as they used to. Such a cause should be susceptible to experimental investigation, but even if true it does not entirely ac-

count for the falling, which is also associated with the fact that old people have much greater difficulty in regaining their balance, presumably owing to a slowing up of coordination, due perhaps to deterioration in the central control of posture. A departure from the normal balance may proceed so far in an old person before the automatic recovery of posture operates that it is already out of control—thus, many old people will say that “once you are going, you have got to go.” This type of fall is of practical importance because it accounts for most of the major physical injuries in old people, and underlies the common type of accident in which an old person trips coming downstairs or on some simple domestic article such as a hearthrug.

Not only do old people need all the information they can get from their eyes, but to maintain their balance they need more points of support than the adult—thus one old man told me that he could no longer stand upright on a pair of steps as he used to be able to do, but needed to have one knee forward touching a step higher up. For this reason it is very important to ensure that old people living at home have ample opportunity for using their hands to support their balance, as by the provision of adequate rails on the stairs, and handles for the bath.

A further type of fall, which accounts for about 25 per cent, is the most difficult to understand, and is of great clinical interest. This is the type in which the old person suddenly collapses to the floor, usually because one or both legs have given way. In such a fall the old person may either be standing still or may be moving about, and the fall is not associated with loss of consciousness, but usually occurs without warning, and after such a fall there is considerable difficulty in getting up again; and indeed relatives may find them extremely hard to lift owing to their tonelessness. These falls are, from a clinical point of view, very similar to the cataplexy of earlier life, and the clinical features suggest the possibility that they may be due to a sudden cutting off of the stream of impulses to maintain posture. Some emphasis has been given to this aspect of old age, since it is of practical importance, and merits much closer clinical study than it has yet received.

Social Aspects of the Aging Process

1. Although the medical side of geriatric literature comes largely from hospital sources, the fact remains that the vast bulk of old people live and die at home. At the time of the Wolverhampton survey 98

per cent were living at home, and only 2 per cent were in institutions. Since then numerous homes for old people have been opened in Great Britain, but it is doubtful whether the percentage of old people living at home is even now less than 97 per cent. This figure may well vary from place to place, but the broad statement undoubtedly remains true that old age is fundamentally a domestic problem, and if old age remains true to type it will always endeavor to remain such a problem since all old people desire to finish their days in their own beds.

2. If this be the case it becomes very necessary to inquire into the way in which old people actually live in society. Statistics of old people often tend to depict them as individual units but in actual fact old people almost invariably live as part of a human group, composed of relations and friends. It is true that there are exceptions—there are some old people who live entirely isolated and self-sufficient lives—but these are the minority. They are, nevertheless, of great practical importance. In the Wolverhampton survey, they amounted to 5 per cent of the whole. A knowledge of their frequency is an essential component of any general plans made by the community for the care of old age, since though independent while in health, they inevitably become totally dependent in illness. If admitted to a hospital their discharge may afterwards be impossible, since they have no human contacts outside.

Investigations made into the old people under constant care in public institutions has shown that in many cases their retention in the hospital is not necessitated by their clinical condition but is determined by the fact that there is no one to look after them if they do go home. The social state of this group of old people may in consequence impose a definite penalty on other old people, by blocking the hospital accommodation these may need for genuine medical reasons. It is probable that the proportion of these solitary existences varies from place to place, and there is no means of determining its size except by an actual survey. Figures for "old people living alone" give no real clue, for in many cases these may be in intimate contact with their children in other houses though preferring to retain independence by living alone. The extent to which this can occur, however, depends largely on housing facilities, which vary greatly in nature and in extent from place to place. These solitary old people form, in fact, the hard core of the old age problem, and as this increases they will stretch to the full the caretaker facilities which the community can afford. It is therefore of fundamental im-

portance that their numbers should be kept to an irreducible minimum, and this in turn means that we must encourage and assist in every way the relatives and friends to care for their own old people.

3. That old people usually form part of a human group can be seen from the following facts: In the Wolverhampton survey an inquiry was made into the nursing of old people who were suffering from bed-illness at home. The nursing of old men was carried on by wives 44.7 per cent, daughters 25 per cent, daughters-in-law and other relations 10 per cent, and neighbors 18.8 per cent. When old women were ill their nursing was provided by husbands 9.7 per cent, daughters 39 per cent, daughters-in-law and other relations 22 per cent, and neighbors 28 per cent. Neighbors therefore contributed 18 per cent of the nursing of old men and 28 per cent of that of old women in Wolverhampton, and this contribution is so important that the community would be hard put to it to find a substitute; and acquaintance with the actual details only emphasizes the extent of the contribution made by the neighbors. Thus in one case an old lady in the eighties suffering from deformity of the spine and extreme weakness was attended in the morning by one neighbor who got her up and gave her her breakfast; and in the evening the neighbor on the other side prepared her supper and put her to bed. This has been going on without hope of reward for some years; the neighbors merely saying that "if it had been the other way round she would have done it for us."

Neighbors contribute therefore approximately one-quarter of the total nursing of old people, but the remainder is done within the family, and clearly the family is the most important part of the human group. The importance of this statement can be seen from the fact that in many cases children either live very close to their old people or make regular contact with them. The findings were remarkable in this respect. Four per cent of the old people had children living next door, 6 per cent had children living not more than three houses away, and 10 per cent had relations living in the same street. Forty per cent had relations living within half a mile, and 40 per cent of the old people had regular daily contact with their children wherever the latter might live. This contiguity is, of course, a voluntary affair, and is only possible when family affection is sincere and deep, and the fact that it is so frequent indicates that, in spite of many cynical statements to the contrary, family spirit is still a powerful factor. This is confirmed too, by the findings of Professor

A. P. Thompson in his Birmingham survey,⁵ that it is not until four years have elapsed that the percentage of old people in institutions receiving regular weekly visits from their relations falls below 50 per cent.

It follows from this that no social investigation which is limited to the household of the old person will uncover the true facts of the case, as may be seen from the following case report. An old man of 75 lived alone in his own house, and might ostensibly appear a self-supporting, even if lonely, subject. In nearby houses in the same street, however, were two married daughters and their families. The old man prepared his own breakfast, but one or other daughter came in to cook his main midday meal, and he went out for a drink every evening with one or both of his sons-in-law. The shopping for the three households was communal—he and the daughters sharing the effort involved. If he were ill one of the daughters came to look after him, the other caring for her sister's house and her own. When one of the daughters was ill, he assisted by doing all the shopping and helping with the grandchildren. Although he lived alone, he was in fact part of a human group spread over three houses, which functioned loosely in times of peace but became tightly knit in times of stress. Such a mode of life, which enables the old person to retain independence and freedom of movement while still preserving family unity, is a frequent mode of existence, and is clearly of great advantage to all concerned. Its possibility, however, depends on the right type of housing and the general pressure on available accommodation. There is room for experimental architectural work in the design not only of individual houses but also in the layout and management of housing estates so that this sense of family responsibility, which is clearly of such great value to the community, may be given the fullest opportunity to flourish.

4. Old people therefore form an integral part of the community, but they cannot do this without themselves causing strains in many cases. It was found that 7.7 per cent of the old people were causing severe strains on the younger generation who looked after them, to such an extent that it deprived life of all its normal meaning for the unfortunates. A typical example is the daughter who looks after an aged parent, and is tied so that she can get out only for shopping; and indeed tragic cases were encountered as where the daughter had

⁵ *British Medical Journal*, Vol. 2 (1949), p. 243.

been to the cinema only eight times in fifteen years, and in many cases had gone twenty years without a holiday. Even if the percentage of strain does not increase, as the numbers of the old increase and those of working age diminish, so the incidence of these strains will increase, and there may well be a breakdown in the future unless attention is paid to this aspect of old age.

The community must realize that in the more severe cases a stress is laid on a few unfortunate individuals which it is altogether unfair to ask them to carry. Too often in caring for the aged, thought and sympathy are expended on the old persons with no one to look after them, while no thought is given to those of the younger generation who are already carrying a crushing burden. Thus I recently saw a woman with three children and a husband to look after in a small house they had recently acquired. Of the three bedrooms, two were occupied by aged relatives—one by her father, with heart failure, one by her mother-in-law who was bedridden and incontinent causing great domestic difficulties. In addition to the care of her own family she was entirely responsible for the care and nursing of the two old people, and saw no prospect of relief till they died. Such cases deserve, on their own merits, help from the community, and one of the tasks of the future will be to derive means whereby such help can be given without at the same time destroying the general sense of family responsibility. There is clearly room for experiments whereby care can be given to such old people for regular occasions while the younger generation can get a holiday. There is also scope for experiment into the extent to which the community can assist the relatives by providing suitable domestic assistance without at the same time destroying the need for the younger generation still to take an interest in the welfare of their old people.

5. It is clear that there is need for a deeper study of neighborliness and the family spirit than has yet been undertaken. Schemes for the amelioration of the aged should be primarily in aid of the family spirit rather than in replacement of it; but if this is to be successful much further information is required.

(a) It would be extremely valuable to know what are the psychological factors involved in good neighboring. Precise measurement is impossible, but there is a general impression that neighboring is not so good in the modern type of new housing estate with semi-detached houses as it is in the older type with long rows of continuous houses. This might be due to the physical difficulty imposed by

the type of housing, but it may also be due to the relatively short time that people have lived in the new districts, and one does not know how long good neighboring takes to develop. It would be of interest to see whether there is any difference in this respect between the newly developed and the older townships in North America.

(b) One needs to know too a lot more about the factors involved in the sense of family responsibility towards the older generation. In some families this is shared equally by all the sons and daughters while in others the burden appears to be cast on the shoulders of one daughter even though others appear equally able to make their contribution. A study of the psychological and other factors involved would be very interesting.

(c) A further study that would be illuminating is that of the external factors which may hinder or assist the operation of the family spirit, and of these probably housing is the most important. A remarkable finding in Great Britain is the variation between large towns in the numbers of old people ostensibly living alone, found by the Rowntree Survey.⁶ In the Mid-Rhondda district of South Wales only 4 per cent of old people are living alone, whereas in the two London boroughs that were investigated the figure was as high as 26 per cent. It is inconceivable that differences of this degree are due to geographical variations in the strength of family affection. In the case of Wolverhampton 10 per cent of old people are living alone in the technical sense of being the householder with no one else living in the house, but a study of the family relationships of old people showed that half of these people had children living close to them and in fact only 5 per cent of old people were really living isolated lives. The same factors would operate in those other places, but to an unknown extent. The small number of old people living alone in the Rhondda may be due to large numbers of households with three generations living in one house, whereas in London it would probably be more likely that a larger number of old people are living alone in flats and single rooms; and in their case the difficulty may well be that the family are unable to live sufficiently close to them. A study of the type of housing actually considered desirable by the two generations is extremely desirable, and where children desire to live near their aged parents, it is in the interests of the community that they should be enabled to do so.

⁶ Sheldon, *op. cit.*

It is quite certain that the community in the future cannot possibly hope to carry the burden that will be imposed on it by the increasing number of old people unless families play their full part. And if this is to be done not only must we know more about the springs of family affection, but it is of the utmost importance that we know more about the external factors in life which affect its operation. Of these housing appears to be the most important. Widespread inquiry needs to be undertaken into this aspect of old age in different types of communities, from the agricultural, through the small township, to the large city; for the problems and their incidence appear to vary considerably from one to the other. It is essential that any future study of the social biology of old age should not be limited to the old person, but must take full account of the intangible but none the less fundamental threads that bind him or her to the rest of the human family. It is only when these threads are absent or fragile that the community should undertake the care of the old person, otherwise its object should be to strengthen and assist these threads.

It will be clear from what has been said that the medical-social problems imposed by the steadily increasing number of old people raise very important issues. Efforts at solution must be directed at three main targets:

1. An endeavor to care for the physical defects of aging so that the old person is enabled to retain independence for as long as possible, and so stave off the day when he or she becomes a burden on someone else.
2. An endeavor to prolong to the utmost the usefulness of old people to the community—in the mutual interest of both.
3. An endeavor to provide assistance for the aged in such a way that the human values of the sense of family responsibility and neighborliness are enhanced and aided and not rendered unnecessary.

I.R.R.A.

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