

IX

SUMMARY AND CONCLUSIONS

This study has shown that there are very marked differences between the ratios of children to women in various parts of the country and in different nativity groups.

In cities of over 100,000 these differences range from 234 children per 1,000 native white women in Los Angeles to 1,051 children per 1,000 foreign-born white women in Youngstown, Ohio; in cities of 25,000 to 100,000 the range is from 257 children per 1,000 native white women in Brookline, Mass., to 1,277 children per 1,000 foreign-born white women in Hamtramck, Mich.; and in the rural districts the range is from 436 children per 1,000 native white women in Rhode Island to 1,393 children per 1,000 foreign-born white women in West Virginia. Of course the majority of communities are found well within these extremes, the averages being as follows: In all cities of over 100,000 the ratio is 341 for native white women and 679 for foreign-born white women; in all cities of 25,000 to 100,000, the ratios are 390 and 766, respectively; and in the rural districts 721 and 998.

In these three comparisons we find the two chief differences in ratios to the study of which the larger part of this monograph has been devoted. They are, first, the differences in ratios of children between the native and the foreign-born women, and second, the differences between the cities and the country districts.

STATIONARY POPULATION

One meaning of these differences in ratios has been strikingly set forth by calculations of the stationary populations¹ that would arise at death rates of 1920 on the supposition that the ratios in rural groups prevailed in urban groups. (See Chap. VI.) On the supposition that the 8,032,720 native white women 20 to 44 years of age living in cities (places of over 2,500 inhabitants) and having a ratio of 388, had the same ratio of children, that is 721, as the native white women in the rural districts, the city women would have had 2,674,645 more children than they did have and this number of

¹ As already explained, by "stationary population" is meant a population which remains at a given number under certain conditions. These conditions are that a certain death rate remains fixed and that a definite number of births occur annually. Thus if the death rates for each age prevailing in 1920 are used we find that out of 100,000 white males born at a given time, 91,567 will be alive one year later, 89,957 will be alive at the end of the second year, and so on until all are dead. The sum of those surviving at each year of age from 100,000 births annually constitutes the stationary population arising under these conditions. By hypothesis, the deaths equal the births in this population and there is neither increase nor decrease. With any given number of births annually, the number of people that would ultimately be alive, when births just equalled deaths, at any given death rate, 1920, for example, can be calculated, and that is what we have done here.

children would maintain a stationary population of 32,964,000.² This is an enormous population and it shows the extent to which the decline of the birth rate in the cities has preceded its decline in the rural districts. Attention should again be called to the fact, mentioned in Chapter I, that the ratio of children to women is a resultant of three variables, the birth rate, the death rate, and the age constitution of the women, hence the difference in the birth rates of the two groups is not precisely measured by their ratios of children to women. In the native white population, however, the variation in death rates in different groups is not great enough to affect the statement that the differences in ratios arise primarily from differences in birth rates and age constitution. Hence, in the comparison just given, this great deficiency of children in the native white urban population as compared with the rural, is unquestionably due in large measure to the greater reproductive vitality of the rural population.

Turning to the ratios of children to foreign-born white women, we find that they are higher in every size of community than those of native white women in the same communities. In the three groups of cities of over 10,000 population the ratio of children to foreign-born white women is practically double the ratio to native white women in the same sized communities; in the smallest cities (2,500 to 10,000) it is 83 per cent greater. In the rural districts it is but 38.4 per cent greater. It is worthy of mention, however, that the ratio of children to native white women in the rural districts is 6.2 per cent greater than the ratio of children to foreign-born white women in the cities of over 100,000 where the foreign born are most numerous (General Table I), and where the so-called "new" immigrants constitute a large proportion of all the foreign born. Indeed the ratio of children to *all* urban foreign-born white women 20 to 44 is only slightly higher—727—than the ratio of children to *all* rural native white women 20 to 44—721. It is worth noting in this connection that only 19.1 per cent of the foreign-born women 20 to 44 are found in the rural districts while 45.2 per cent of the native white women 20 to 44 are in the rural districts. Furthermore, the foreign-born women in the rural districts are largely of German, Scandinavian, and British stock; hence there is no question of fundamental racial differences between most of the rural foreign born and the rural natives. There are, of course, a number of rural communities that are not of Germanic stock but they contain an inconsiderable part of

² All women 20 to 44 rather than only married, widowed, or divorced women are used in the calculations of stationary populations, because, from the standpoint of population growth, the failure of a woman to marry amounts to much the same thing as her failure to bear children after marriage because illegitimacy is not very great in this country. See Chap. VI for a more complete definition of "stationary population." "Married" should be understood as including also "widowed or divorced" and if the word *married* is not used, all women in the given age and nativity group are referred to. This is an important matter of usage in this study and should be borne in mind by the reader.

the rural population. It is well to remember the facts just cited when discussing the significance of the higher ratios of children among the foreign born. These facts also show that there is nothing abnormally high in the birth rate of our foreign born. It only appears rather unusually high when the natives and foreign born in the cities are compared; when our own rural women are compared with immigrant women who are also chiefly rural in their bringing-up the differences are not large and are not always in favor of the foreign born as we have just seen.

It is of further interest to note that there are marked differences between foreign-born white women living in communities of different size, although they are not as great as among natives. Thus all foreign-born white women living in cities of over 100,000 had a ratio of 679 while those in rural communities had one of 998, a difference of 47 per cent. If all the foreign-born white women living in cities had the same ratio of children as those living in the rural districts, they would have 698,855 more children. This number is sufficient to maintain a stationary population of 8,613,000, or slightly less than the entire population of Canada in 1921. It is clear from these figures that the depressing effects of city life on the birth rate are not confined to the native women. The effects of city life on foreign-born white women are indeed more marked than one might expect in view of the habits and customs of family life which the foreign born bring with them.

TABLE 62.—CHILDREN UNDER 5 PER 1,000 WOMEN 20 TO 44 YEARS OF AGE, BY NATIVITY AND MARITAL CONDITION, FOR COMMUNITIES OF DIFFERENT SIZES IN THE UNITED STATES: 1920

NATIVITY AND MARITAL CONDITION	CHILDREN UNDER 5 PER 1,000 WOMEN 20 TO 44 YEARS OF AGE				
	Cities				Rural districts
	100,000 inhabitants and over	25,000 to 100,000 inhabitants	10,000 to 25,000 inhabitants	2,500 to 10,000 inhabitants	
Native white women:					
All women.....	341	390	434	477	721
Married, widowed, and divorced women.....	512	554	608	646	899
Foreign-born white women:					
All women.....	679	766	861	873	998
Married, widowed, and divorced women.....	819	901	988	995	1,092
	25,000 inhabitants and over		2,500 to 25,000 inhabitants		Rural districts
Native white women:					
All women.....		355		459	721
Married, widowed, and divorced women.....		525		630	899
Foreign-born white women:					
All women.....		697		867	998
Married, widowed, and divorced women.....		836		991	1,092

The further comparison of the ratios of children to women in communities of different sizes shows that for both nativity groups, for all women and for married, widowed, or divorced women, there is a steady decline in ratio of children as the size of the community increases. These data are summarized in Table 62.

Here we see, too, that if cities of less than 25,000 are compared with those of over 25,000 there is a marked difference between them. This is true for the foreign-born white women as well as the native white women. The ratio of children to native white women in cities of under 25,000 is 29.3 per cent higher than the ratio for the larger cities for all women and 20 per cent higher for married, widowed, or divorced women; for foreign-born white women the per cents are 24.4 and 18.5, respectively. These are very significant differences and the two nativity groups are much alike. Life in the larger cities seems to affect the native and the foreign-born women in much the same degree although the ratio of children is, absolutely, much higher for the foreign born in all sizes of cities. As between the smaller cities (under 25,000) and the rural districts the native and foreign-born women show decided differences. Whereas among native white women there is a very large increase in ratio of children in the rural districts, amounting to 57 per cent for all native white women and 42.7 per cent for native white married women the foreign-born white women show only small increases, namely, 15.1 per cent and 10.2 per cent for all foreign-born white women and foreign-born white married women, respectively. This rather slight difference between the ratios of children among foreign-born white women in small cities and the rural districts is exactly what we should expect if it is urban life that lies at the basis of the rapid decline in the birth rate of the foreign born as well as the native whites. The habits of thought and the attitudes of mind regarding family life which foreign-born women have when they arrive here can not be sloughed off at once. But a difference of 43.2 per cent in the ratio of children to all foreign-born white women in the cities of over 25,000 as compared with the rural districts may be taken as evidence that the process of breaking up Old World habits of thought and action as they affect family life gets well under way in the larger cities, even in the first generation. In the smaller cities (under 25,000) and in the rural districts where the obstacles to customary family life are less pronounced, there is comparatively little departure from the birth rate of the old country.

"OLD" AND "NEW" IMMIGRATION

It should be further noted that the foreign-born population of the cities of over 25,000 is more largely made up of new immigrants than the foreign-born population of the smaller cities and the rural districts. The domicile of the foreign born thus appears to be more

important than the distinction between old and new immigration in determining the number of children born. This, too, in spite of the fact that the practices of birth control have made far more headway in those countries from which the old immigrants come than in those from which new immigrants come. Of course, our immigrants, both old and new, have come to a large extent from rural communities abroad, hence there has probably been less difference in the extent to which they knew about methods of birth control before coming than the general birth rates of their respective countries would indicate.

The general belief that the new immigrants have excessively high birth rates is without any basis in fact if we compare them with the old immigrants who came to us in the latter half of the last century from the rural communities, as the new immigrants do to-day, or with our own rural population a generation or two ago. Even to-day in the rural districts of the Southern States, the ratio of children to all native white women (about 840) is higher than the ratio for foreign-born white women in the entire United States, 779; and it is only about 16 per cent less than that for foreign-born white women in the rural districts. For married women only, the differences are even less. There is, therefore, nothing abnormally high about the birth rate of the new immigrants. They have about the birth rate that would be expected from a rural peasant people who have not yet felt the full pressure of modern city life.

This is not to say, however, that the new immigrants do not have higher birth rates than old immigrants in the same localities or in places of similar size. Table 25 shows that the new immigrants do have higher ratios than the old under quite similar conditions. What is said above is meant to point out that the birth rates of the new immigrants are not abnormally high according to an absolute standard.

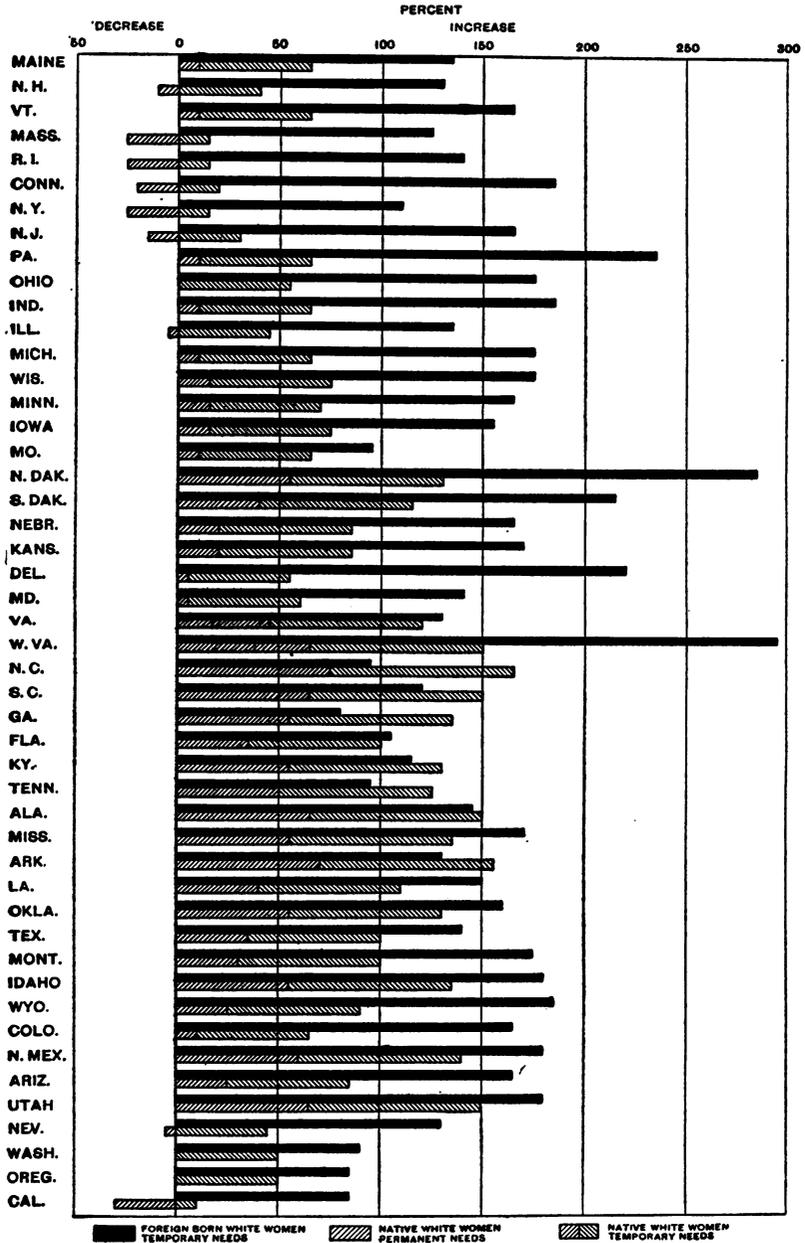
TEMPORARY AND PERMANENT INCREASES

In Chapter VIII an attempt was made to estimate the excess of children in different localities available for, (a) increase temporarily, that is, as long as the age and sex constitution and the death rates remain as they were in 1920, and (b) permanent increase, that is, when the age and sex constitution become those of a stationary population having the specific death rates of 1920 (Table 60).³ On

³ These terms *temporary* and *permanent* may need some further explanation here. If a population has many young people so that its death rate is low, it is obvious that fewer children are needed to keep up its numbers than would be needed by a population having a larger proportion of old people and, therefore, having a higher death rate. Now if the former of these populations also has a larger proportion of its women in the age group 20 to 44 than the latter, it may have a considerably lower ratio of children under 5 to its childbearing women than the second population and still keep up its numbers. It is the ratio of children to women needed in 1920 to maintain the numbers of a population that we call its temporary needs. With a declining birth rate, all populations are more or less rapidly approaching the age grouping that will prevail in a stationary population (see p. 159). When they arrive at this stage they will need quite a different ratio of children to women to maintain their numbers from that they now need. This we have called the permanent needs of a population. If these permanent needs are not met by a group having the age constitution of a stationary population, there will be a decline in numbers. This supposes, of course, that there is no immigration or emigration into or out of the group.

RATIO OF CHILDREN TO WOMEN

FIGURE 12.—PER CENT THE RATIO OF CHILDREN UNDER 5 TO ALL NATIVE WHITE WOMEN 20 TO 44 YEARS OF AGE IS IN EXCESS OF TEMPORARY AND PERMANENT REPLACEMENT NEEDS, AND PER CENT THE RATIO OF CHILDREN UNDER 5 TO ALL FOREIGN-BORN WHITE WOMEN 20 TO 44 YEARS OF AGE IS IN EXCESS OF TEMPORARY REPLACEMENT NEEDS, FOR EACH STATE: 1920. (SEE DETAILED TABLE NO. III)



this basis it was found that in the United States as a whole the native population had a 70 per cent excess of children available for temporary increase, as compared with a 150 per cent excess available among the foreign-born population. The per cent available for permanent increase among the natives was only 15 per cent, however. Not a very large excess.⁴

These excesses over both temporary and permanent needs in the country as a whole are of interest but they are far less important than the differences in different localities within the country. The amount of variation here is rather surprising. In the New England and Pacific divisions the excess over temporary needs in the native population is only 25 per cent, while in the South Atlantic and East South Central divisions, the excesses are 130 per cent and 135 per cent, respectively. These are certainly marked differences and call attention to one of the important results of this study, namely, the fact that the rate of reproduction is much greater in the rural South than in the industrialized North. When the figures for excess over temporary needs among the native born and foreign born are compared we find that it is far greater among the foreign born, save in the South. Even there the foreign born have a somewhat larger excess than the natives except in the East South Central division where the natives have the larger excess.

If we compare communities of different sizes in respect to their ratios of children as related to temporary and permanent maintenance needs, we find that in the native population the larger cities show comparatively small excess even over temporary needs and that very few of them show any excess over permanent needs. Indeed, for their permanent needs practically all cities except the smaller ones of the Southern and Mountain States, show a deficiency of children to native white women. That is to say, in practically the entire city population of the United States, the native born do not have enough children to maintain their numbers when their age and sex composition come to approximate that of a stationary population.

In comparison with the natives in the cities the foreign-born white women in the same communities show much larger excesses over temporary needs. Only in the larger cities in the Pacific States do the foreign-born white women show an excess of less than 100 per cent.

In the rural population the native white women in all parts of the country have children considerably in excess of both temporary and permanent maintenance needs. They are least in New England (65 per cent above temporary needs and 10 per cent above permanent needs), the Middle Atlantic States (85 per cent and 25 per cent),

⁴ There is no need of calculating the excess available for permanent increase among the foreign born because practically all of their children automatically take their place among the natives in the course of time. Thus there is no permanent foreign-born group in the sense given to that term here.

and the Pacific States (75 per cent and 20 per cent), and greatest in the Southern States (165 per cent and 80 per cent and 155 per cent and 75 per cent). The excesses of children over maintenance needs among the rural foreign-born white women are larger in all communities than those of the natives. In the entire United States the rural foreign-born women have an excess over temporary maintenance of 210 per cent and in no division do they fall below 145 per cent which is the excess in the Pacific States. It is well to note here again that if the excess over temporary replacement needs of the *rural* natives is compared with that of *all* the foreign born (125 per cent and 150 per cent, respectively), the differences are not very large though they are in favor of the foreign born.

In view of this situation and considering the large proportion of all foreign-born women found in the larger cities—66.5 per cent of the total number live in cities of over 25,000—it would not be surprising if the native *rural* women of the United States should have a higher ratio of children than *all* foreign-born women in the near future. The restriction of immigration, the changes in its source, and the passing of a considerable number of our new immigrant women out of the childbearing age are almost certain to result in a rapid decline in the ratio of children to foreign-born women by 1930; while there is no reason to anticipate especially rapid changes in the birth rate of the rural native population during this decade.

As one reflects upon what is happening in the cities one wonders why it is that so many of the people who are most anxious to see immigration greatly restricted are also apparently anxious to move the immigrant from the city to the country. One is inclined to think that no more effective device for curtailing the increase of our new immigrants could possibly have been devised than their settling in the larger cities. It seems unlikely that if the Nordics had planned, with diabolical cunning, to hasten the sterilization of the new immigrants they could have hit upon anything one-half as effective as making them settle in the larger cities.

RATIOS AMONG NEGROES

The ratios of children to Negro women show nothing essentially different from those of native white women. The contrast between urban and rural ratios is the same as for the whites but is even more marked. The urban Negro women were scarcely producing enough children to keep up the urban population of Negroes in 1920: a clear case of race suicide. The ratio of children to all Negro women necessary to maintain temporarily the urban Negro population is 328 but the actual ratio to all Negro women is only 293. Even when allowance is made for considerable omissions in the enumeration of Negro children we see that the urban Negroes as a whole are

barely maintaining their numbers. Under present conditions then, it appears that with the increasing urbanization of the Negro his rate of increase is quite likely to decline rather rapidly in the near future. There is, indeed, a possibility that the ratio of children to Negro women in the cities in 1920 was a little lower than it would normally be, due to the quite recent movement of Negroes into our northern cities. It is difficult to believe, however, that the deficit thus resulting would make the difference between maintenance and race suicide. It is also worth noting that there is a steady decline in ratio of children to Negro women as the size of community increases.

The situation among the Negroes leads one to wonder whether birth control may not lead to the practical sterilization of that part of our population, both white and Negro, which has only a small stake in the development and control of our civilization, as well as in that part of our population which has the largest economic stake. The most drastic practice of birth control might thus become the characteristic of the social classes at the two extremes of the social scale—the most favored and the least favored. If this tendency should appear in all groups having very low incomes, after they have learned of birth control, the eugenicist who is alarmed over the increase of the ne'er-dowells could cease to worry, placing full faith in the crusade of birth control to solve the problems of quality in our population.

The "Other colored" in our population show the same general tendencies as the foreign-born whites. As far as the Japanese can be distinguished from the others they do not appear to have excessively high birth rates, not as high as the Chinese and Indians. This seems quite in keeping with the birth rates in Japan. There is considerable likelihood, however, that our ratios of children among the Japanese are too low because of the fact that in 1920 a large number of the Japanese women 20 to 44 had not been in this country long enough to have as many children under 5 as they would ultimately have. But even if this is the case there is no reason to believe that the orientals are naturally more prolific than the Europeans. The environmental conditions under which they live determine their birth rate just as among Europeans. The proof of this is that the ratios of children to "Other colored" women are higher in the rural districts than in the cities and also that in Japan the birth rate declines as the size of the community increases.

RATIOS AMONG MINERS

Everywhere miners have higher ratios of children than other groups by whom they are surrounded. This is true for miners not only in this country but elsewhere. Mining seems to attract age groups favorable to large ratios of children, and it also seems to couple with this

the rural environment favorable to large families. No doubt the fact that miners' wives work at home as a rule is also an important element in the situation. That in this country many miners are foreign born is also a factor of importance. For obvious reasons we can not compare urban and rural miners.

RELIGION AND SIZE OF FAMILY

We have been able to find but one clear case of the influence of religion on the size of the family. This is in Utah. There seems to be no doubt that Mormonism encourages the raising of large families. But even here we find very marked differences between the cities and the rural districts. Religion seems to have but little influence in preventing the decrease of the size of the family when it comes into competition with urban influences making for the limitation of the family. There is reason to think that this is true among the Catholics as well as among Protestants. In Catholic communities the ratios of children are often quite high but how much of this ratio can be attributed to the influence of religion, how much to foreign birth, how much to low economic status, and how much to essential rural-mindedness no one can decide. Our study, then, contributes little to the determination of the influence of religion on the size of the family. But it does seem to indicate that even in closely-knit religious groups the birth rate is on the decline.

ECONOMIC AND SOCIAL GROUPS

It appears from the above that what has ordinarily been called "race suicide" is a misnomer. There is no race suicide except, possibly, among urban Negroes. The groups that are failing to reproduce are not racial groups, they are economic and social classes. If we want any generic term to express this tendency we should rather speak of "urban suicide." It is in the urban population that the birth rate seems likely to fall below the maintenance level in the near future. But even the term "urban suicide" is, to a certain extent, misleading. The present situation is perhaps best described by the term "white-collar suicide"; for it is in the clean-handed jobs that there appears to be real group suicide in the sense that a group is failing to reproduce itself. How long it will be before the hand workers follow the example of the "white-collar" class and refuse to raise enough children to reproduce themselves can not be told, but it seems quite likely that the term "urban suicide" will, before long, be a true description of the situation.

DECLINE IN NATURAL INCREASE

One very general conclusion arising from the consideration of all these different ratios of children to women in their relation to a stationary population (Chap. VIII) is that our present rates of natural

increase as given by subtracting the death rate from the birth rate are misleading. We are rapidly approaching the time when our natural increase will be scarcely more than half of what it now is. We are living to-day on our capital, so to speak, that is, we have the low death rates and *relatively* high birth rates largely because we have had a rapidly increasing population in the recent past. When a population is increasing rapidly it always has a large proportion of its numbers in the younger age groups where deaths are few and where childbearing women are numerous. If the birth rate has been declining for some time, however, even though there should be no further actual decline in the average number of children born to each woman, the crude birth rate will continue to decline for the next 40 years because of the changing age constitution of the population. For the same reason the death rate will begin to rise as the proportion of the population over forty increases with the net result that the rate of natural increase, being cut into from both ends, will decline rather rapidly. This tendency should be noticeable in this country by 1940, and should be quite marked by 1950. By 1960 our rate of natural increase certainly will not be more (probably less) than half of what it was in 1920 (about 10 per thousand) unless some very powerful agent arises to stimulate the birth rate in a way we can not now foresee.

RACIAL DIFFERENCES

Before passing on to the more philosophical reflections aroused by this study one other rather general conclusion should be stated. It is that the ratio of children to women in particular groups is not primarily or even in any significant degree the result of racial differences between groups or even of nationality differences, if by *nationality* anything more than a particular environment is meant. These differential rates arise out of the different social situations—urban life and rural life, hand-working and head-working, mining and clerical work, etc.—in which different groups find themselves. This point should be insisted on quite strongly in view of the very common belief that biological differences between groups often lie at the basis of differences in birth rates. That there are biological differences resulting in differential birth rates would not be denied. What would be denied is that they are group differences, unless it can be shown by a strong array of evidence that different kinds of selective processes have been at work in different groups and that one effect of these different processes has been to select in one group those people for survival who had a biological tendency toward a high birth rate, while in another group those selected for survival were those having an hereditary bent toward a lower birth rate. Attention has been called to the possibility of selection being a factor in

the differential birth rate but there is no evidence that it is of appreciable importance at the present time. The only biological differences between people of which we can be certain are the *individual* differences between people; not differences between groups. That there are any inherent or hereditary differences in the fecundity of the Scotch and Italians, the New England Yankees and the Poles seems exceedingly doubtful. All the difference we actually find between these groups in the matter of birth rates can be accounted for on the basis of differences in their environing conditions, and to bring in other factors, heredity, for example, is, as the theologians say, a work of supererogation.

REFLECTIONS UPON POPULATION GROWTH

A study such as this shows beyond doubt that the growth of population, particularly in our cities, is being controlled more or less consciously. That population growth has always been more or less controlled by the community is recognized by students of the subject but it is not generally recognized by the rank and file of intelligent people. It is a very common belief that modern birth control gives man his first real control of his growth in numbers. This is by no means the case. Scores of practices calculated to control man's growth in numbers, among peoples of all stages of culture, might be cited to show that the community has seldom been indifferent to the practical problems of population growth. It is only relatively recently in human history, and chiefly in the history of what we may call the Western World, that a policy of *laissez faire* with regard to population growth has developed. This has come about partly through the teachings of various institutions (notably the church) but is chiefly due to the abundance of land open to settlement and exploitation by Europeans during the last 400 or 500 years.

To-day the control of population growth is becoming common in many of our communities and this new effort at control raises many important problems. As yet most people are only dimly aware that a momentous change is taking place because of this effort to control population growth. The time has not yet come when any considerable part of our people can be brought to consider seriously the meaning of the facts of population growth set forth in this and other studies. The fact that there is a differential birth rate by which the actual and potential rates of population increase in different groups, classes, and nations are greatly affected, is one of the most significant facts of our times, yet only a few people know of it and of these few only a very small proportion see any significance in it. Furthermore, practically all those who consider this differential birth rate worthy of study do so on the assumption or belief that the bearing and rearing of children is a matter of individual choice or nationality differences (often

wrongly called racial differences in referring to our foreign born). They believe that the less desirable people, biologically, are the ones who are raising the most children, with the result that the better biological types are being swamped by the worse. Seldom do they concern themselves with the attempt to evaluate the movement for the control of population from the social as well as the biological standpoint. Consequently the methods of control proposed generally look to influencing directly the choice of individuals, either in the direction of raising larger or smaller families as is deemed desirable, or toward the exclusion from the country of those nationalities having high birth rates, because they tend to swamp the older stock with its low birth rate. The exclusion method is effective because the exclusion of the foreign born, of course, prevents their contributing to the next generation, but the other method has little or no influence as long as the constant, indirect, and insidious influences of the general conditions of life are in opposition to the supposedly intelligent direct influence of ideas of duty and right. It does no good to preach at certain classes that they should have more children or fewer children as long as the conditions under which they live emphasize the personal advantages to be derived from small families, or large families, as the case may be.

The newer movement of population control, like all previous systems of control, represents an effort on the part of man to adapt himself to the conditions under which he finds himself living. Unlike older systems, it represents the conscious effort of individuals to make a personal adaptation rather than a settled community policy supposed to be for the good of the group. It is thus individualistic and represents a more or less personal reaction to environment, based primarily upon the individual's valuation, at a particular time, of the *goods* to be gained from life. Naturally such control in general results in an adaptation to immediate pressures of a purely personal sort rather than to more fundamental human and racial considerations. The very nature of individual, personal control of population growth is to make it depend upon the individual's notion of what is good for him personally at a given moment. Thus it comes about that what appears an excellent adaptation to the individual at one time may appear foolish and shortsighted to him at another time. It may also seem even more shortsighted from the point of view of one who is trying to find some larger and relatively permanent meaning in life. Individual or personal control of population growth in modern society is almost certain to lead to such strenuous efforts for individual adaptation, that is to say, such strenuous efforts to attain conventional success, that most people will overlook some of the most fundamental aspects of life. Engrossed by efforts to attain personal success few stop to ask whether the environment, that is, the social organization

within which we live, should not be adapted to our needs as human beings rather than that we should attempt to adjust ourselves individually to its demands on our time, our energy, and our thought.

If it should happen that one people or nation developed an environment or social organization better adapted to essential human needs than the social organizations of other nations, it would probably in time outnumber the other nations and gradually crowd them and their civilizations from the earth. It is for this reason that it is important to take stock of the present processes of population growth in our civilization. If we neglect doing so much longer it may be too late to change, if the need of change is indicated.

If we hope and believe that our own particular civilization can make some lasting contribution to future ages we cannot fail to be concerned at weaknesses in it which may cut short the period during which it might add to these contributions or even prevent its youthful promise from developing into the achievements of maturity. It may be that the rise and fall of peoples is beyond human control, but to-day we are loath to admit such a possibility. We believe, as never before, in our power to control our destiny. But of course, we can only exercise this power if we understand the social processes in which we move.

Changes in the reproductive life of a people are certainly among the most fundamental of all changes and failure to understand the processes bringing them about can not but result in disaster. It is not true, as so many think, that natural tendencies or instincts are sufficient guides to conduct. There is no natural equilibrium of hereditary tendencies in man. Men are what they are because of the stability and direction given to natural or hereditary tendencies by their surroundings.

As applied to the processes of population growth this means that when the reproductive vitality of a people undergoes rapid changes, some equilibrium achieved in the past has been upset and we must search out the causes if we are to be in position to control these changes. This study has shown that the most important cause of the present decline in reproduction in this country is urban living. Modern cities seem to sap a part of the essential vigor of their populations. They do not provide the conditions of life in which people easily and naturally strike a healthy balance between the impulses to self-development and self-achievement and those leading to racial continuance. The large cities show unmistakable signs of lack of effective reproductive vigor. Preoccupation with the work of modern industry and commerce and living in places where there is little "elbow room" apparently are leading to the limitation of births to such an extent that whole communities will soon be having fewer births than deaths.

Reproduction is essential to any racial achievement. Whether it is essential to individual achievement under our present ideals of value is less obvious. Indeed the conduct of great numbers of people not only inferentially denies that reproduction is essential to individual achievement, but even affirms that it stands in the way of it. It is here that the crux of the whole matter is to be found. It seems exceedingly doubtful whether any civilization that regularly sterilizes a large part of its upper classes (and perhaps, soon, its lower classes) can be called vigorous. Furthermore, it is surely a matter for debate whether any civilization that issues so rapidly in sterile, or semisterile, upper classes has much of value to pass on to future generations. The very fact that the people in the upper classes are almost wholly preoccupied with the attainment of conventional economic and social successes means that they have given little energy and thought to finding out what is good for human nature as a whole. They live a life in which some of the fundamental needs of the human animal are almost totally neglected. They implicitly deny by their conduct that man has large spiritual needs which can not be satisfied except by healthy relations with his fellowmen in intimate groups.

Surely the life of our time can serve a better purpose than warning future generations how *not to live*. This last may be our chief contribution to the future unless we study more carefully the needs of the whole man and use our great resources to experiment in satisfying these needs. If we do this we may make a large, positive contribution to the development of a more satisfying social order than has yet been evolved. But we can never achieve much in this direction until we are willing to place fundamental human needs above the attainment of wealth and social position.

This is not the place to undertake the statement of what seems to be fundamental traits or needs of human nature. But the belief may be expressed that the need of man for children, and for sharing in the future through devoting a considerable part of his energy and time to them, is just as fundamental as his need for food, although the lack is not as quickly felt. Without close contact with children, men and women lose touch with many of the finer aspects of life and tend to develop harsh and unlovely traits of character. They tend to become preoccupied with their own feelings and concerns and lose the capacity to understand and sympathize with the feelings and aspirations of young life. In a word, there are many windows opening upon life, which are closed to the people who live apart from child-life. Any social organization which makes it impossible to satisfy these racial needs not only can not long endure but is not worth trying to preserve. In the very nature of things it is self-destructive

and can endure only as long as the host (other areas of greater reproductive vitality) on which it is parasitic consents to remain a host.

Beyond the fact that the life of a parasite is contingent upon the endurance of the host, human parasites suffer a most disastrous weakening of their moral fiber. It is generally recognized that individuals who are parasitic become degenerate in a short while. It is not so generally recognized that communities which are parasitic are likely to develop a degenerate strain, a mode of living and habits of thought which are less than human. It may not be too much to say that any settled community or any class that does not reproduce itself is in certain respects parasitic and that little in the way of useful contributions to larger human progress can be expected from such groups. The people who are in these parasitic groups are not living fully, completely, healthily.

The problem then is that of getting childlife properly distributed among all the healthy people of our national community, that all may share in the direct and personal responsibilities of their child rearing and thus share also in the continuous process of reeducation and wider participation in life to which children subject their elders. If our present urban-industrial organization has unbalanced the reproductive life of large groups of people as has been contended, then it behooves us to take thought how we may again achieve an equilibrium in this respect which will be beneficial to all, severally, and collectively. This can scarcely be done without very extensive changes in our present social organization.

The changes which seem to be most needed in order to achieve this new equilibrium have to do with the relieving of crowding and congestion in our cities and the altering of the pace at which we live. We must undertake the development of an environment, or conditions of life, in which practically all people can live what seems to them the *good* life, while they are raising families of the proper size. We must recognize that children are a normal adjunct of human life; that without intimate contact with them we are less than human; and that we must organize so that the work of all of us can be done in the best and most satisfying way, at the same time that we are contributing to the next generation in such numbers as may be good for the enlargement of our own spiritual outlook, good for the health and mental development of the children, and good for the community both spiritually and economically. We must have "elbow room," especially for the children, and we must have time to achieve a reasonable amount of personal success, while living a wholesome family life. We must consider adjusting our economic and social organization to *our* needs rather than attempt to make man adjust himself to an organization in which the production of economic goods and the making of money are the chief aims.

The advocacy of population policies which do not recognize the close relation between the environmental pressures to which people are subjected and the birth rate can have no issue under present conditions. It is like trying to change the course of a river while ignoring the law of gravity. People react to the constant and subtle pressures of environment, even though they are largely unconscious of the existence of such pressures, much more surely than they do to the preachments of those who attack their alleged shortcomings directly. The way to effectuate a population policy is not merely through pointing out individual duty in the matter of raising families, but also and chiefly, through making such alterations in environment, that the natural inclination to reproduction will not be thwarted because its exercise means the curtailing of opportunities on which greater value is placed. If it is urged that the scale of values by which the desirability of opportunity is judged must be altered before reproduction will be allotted a definite place in modern life, the answer would be that our scale of values itself is largely a product of the conditions under which we live and that changes in the general environment about us will alter, almost insensibly, the scale of values by which we judge of the desirability of different kinds of conduct.

Again it may be urged that all other phases of the problem of population growth are of small concern to us in this country as compared with that of adjusting the conditions of everyday living to meet the full needs of human beings. The very fact that only a few people realize how our modern urban industrialism has uprooted man from the small-locality group in which his evolution took place, makes this problem all the more serious. Also, few people appreciate the dislocation in human relations involved in moving from small groups to large, and still fewer appreciate the deep-lying disturbance in the mental equilibrium of the race which is accompanying our modern industrial development. The processes of population growth are being profoundly affected by this substitution of urban life for village life, and we are not likely to exercise a wise control over these processes until we see the close relation they bear to the everyday conditions of living by which we are surrounded.

Since there is this very intimate relation between human reproduction and environment (the conditions of our everyday living) and since this study shows beyond doubt that at present the general set of conditions which we call urban is quite likely to lead in the not distant future not only to a stationary state of population (barring migration) in the larger cities, but even to a state of decreasing numbers, it behooves us to study the environmental conditions underlying reproduction more carefully than we have done hitherto. If the most significant difference between an environment leading to group suicide

and one leading to group increase is the difference between urban and rural as has been contended, then this difference needs more careful analysis than it has received up to this time.

That the urban environment of to-day is leading to urban suicide does not mean that this is a necessary consequence of living in non-agricultural communities. There is no good reason to think that industry and commerce can not be carried on in communities which are not excessively urbanized as are our larger cities to-day. It is no doubt possible to develop a civilization in which commerce and industry will occupy the major portion of the population and yet one which will not issue in an excessive urbanism, although it has not yet been done in the Western World. It appears quite probable that approximately 18 to 20 per cent of our population will, in the near future, be able to supply our needs for the agricultural products which we can grow at home. This would leave 80 per cent or more to occupy themselves in industry, commerce, the arts, and other types of work now carried on in the cities or in mines. As matters now stand every increase in agricultural efficiency has contributed directly to the development of cities and particularly to the growth of the large cities. The consequence has been that the intensity of urban living has greatly increased and hosts of people have found themselves living under conditions distinctly unfavorable to the raising of families.

Now it does not appear that there is anything in the nature of nonfarm work and living that makes necessary the present crowding into large cities and denial of elbow room and breathing space to a large proportion of our people. It has only happened this way because there has been no adequate planning for the human factor in modern life. When once we become fully aware of the way in which the human factor is subordinated to the purely material factors in modern urban living we shall probably revolt against the present organization of our life in cities and demand that a new system be developed to replace the present one. It is not at all difficult to imagine an industrial organization which will make it possible for *all* workers to live under conditions far better adapted to human needs than is the case at present. Furthermore, such an organization may also be more efficient than the existing order. In other words, the industrial order of the future will aim to preserve all the real economies of the present order at the same time that it eliminates its crowding and its inhuman pressure upon people. This is no place to expand upon this theme, but one can envisage industrial and commercial *areas* replacing congested *cities*, homes taking the place of beehive apartments, a new system of retail distribution supplanting the "downtown shopping district," the use of electric power rendering possible the break-up of huge plants, and many other changes which will make it

possible for people to live more in the open, away from the congested areas where so many of the poorer paid workers now live.

We do not believe that the worst features of our present urbanism are at all essential to a highly efficient economic system. They are accidental and in time can be sloughed off to the benefit of all concerned. When this comes to pass the ratios of children will probably be much more alike in different types of communities than is now the case.