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POPULATION GROWTH AND CONTROL IN RELATION TO WORLD PEACE

WARREN S. THOMPSON†

Population Growth in the Past

The thesis of this paper is that the growth of population is a basic factor, not the basic factor, which must be taken into account if any settlement of this war is to lead to “lasting peace,” if such there can be. Therefore, it is necessary at the outset to review past population growth in the world as a basis for predictions of probable future growth, and to show by historical example how population growth is related to economic and political factors which influence the establishment of peace.

In 1798, when Malthus published his famous “Essay on Population,” very little was known about man’s growth in numbers in any country or region or in the world at large. Sweden had been keeping parish registers which were quite reliable since 1750, and Finland had almost equally good records of births, deaths and population for the same period. The United States had taken its first census in 1790, but the United Kingdom did not actually count heads until 1801. France began to count her people about the same time.

Our knowledge of population growth in the several continents of the earth since 1800 is summed up in Table 1.

We must recognize that most of the pre-1900 figures are estimates. Moreover, there are still countries and regions, some of them having huge populations, about whose numbers and whose growth we know too little to speak with any certainty. China has never had a census in the Western sense of that term, and little reliance can be placed on her so-called censuses, but our increasing knowledge of China in general and of the factors which determine population growth elsewhere should enable us to improve our “guesses.” Population in Africa, parts of the Near East, in many of the larger islands of the Pacific, and in a few parts of Central and South America is still uncounted, but the estimates for these countries are likewise becoming increasingly reliable. Furthermore, as a consequence of our accumulating knowledge of the factors and conditions affecting population growth, we are now able to speak with more assurance than was possible two or three decades ago of the probable changes going on in uncounted populations and of the probable magnitude and direction of future population growth.

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Table 1. Estimated Population of the World and Its Distribution by Continents, 1800–1939 1

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PERCENTAGE DISTRIBUTION

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Birth Rates. Prior to the middle or latter part of the nineteenth century, all peoples had high birth rates. In Sweden and Finland the birth rates in the decade 1751–60 were 35.7 and 44.9 per 1,000, respectively. A century later (1851–60) most of the European countries for which records are available had birth rates between 32.0 and 35.0 per 1,000, although there were some rather marked variations. The birth rate in France had fallen to 26.3 by that time, never having been significantly above 32.0 since 1800. On the other hand, Austria had a birth rate of 37.6 in 1851–60 and Prussia a rate of 37.7, while Romania, Serbia and Bulgaria had rates of 40.0 or more up to the end of the century. In Russia the rate was probably even higher.

Without claiming that these recorded rates are exact (recorded rates are generally below the actual rates because not all births are registered), it is clear that high birth rates were the rule in European countries until the last few decades. Moreover, such evidence as we have seems to justify the belief that high birth rates, i.e., rates varying from 35 to 45 per 1,000 and occasionally higher, have long prevailed in the greater part of the world. This is not to deny that there have been times and places when birth rates were lower, but the evidence justifies the statement that birth rates below 35 have been the exception in

1. Data for 1800 and 1850 are from Willcox, Studies in American Demography (1940) 45; those for later years are from a number of official yearbooks and Aperçu de la Démographie des Divers Pays du Monde, 1929–1936 (1939) passim, issued by L'Office Permanent de L'Institut International de Statistique.
human history and that they have been confined chiefly to small classes and groups and never have prevailed in great populations until the last few decades.

Death Rates. Throughout most history, man's death rate has been almost as high as his birth rate, but much more variable from year to year because so largely dependent on the availability of food and the severity of disease at any given time. Until quite recently man has had very little control over his death rate. Not until he had learned how to guard against want and famine and to prevent to a small extent some of the more deadly diseases was man able to control his death rate even in a mild degree. There was very little progress in the control of disease before 1750 or 1800. In many parts of the world no substantial control over the death rate has yet been attained.

Until about 1750 it was considered everywhere inevitable that a large part of the babies born should die from diarrhea and enteritis within a few weeks or months. (In Sweden in 1750–60 about 225 babies out of each thousand died before the end of their first year as compared with 35–40 today.) It was also to be expected that children who survived infancy would succumb in large numbers to the local epidemics of diphtheria, smallpox, scarlet fever, measles, malaria, etc., which recurred almost annually. In addition, there were frequently epidemics of typhus, bubonic plague, pneumonic plague, and black death, which often swept away a considerable proportion of the population of a nation, a region, or even of a continent.

Thus, while the average death rate in Sweden in the last half of the eighteenth century was about 27.0 per 1,000, it varied from a low of 21.7 in 1780 to a high of 52.5 in the famine year of 1773. In the war years 1808–10, Sweden's death rate again rose violently, reaching 40 in the year 1809. In Finland the average death rate for 1751–1800 was 28.0, the highest rate being 41.0 in 1763 and the lowest 20.2 in 1797, but in 1868, after three crop failures, it rose to 77.6 (the highest authentic rate known to the writer).

While there is no generally accepted proof of what the usual death rates were among any people prior to about 1750, and almost none for a considerable part of the world even now, it is quite safe to assume that until about 1800 death rates had nowhere fallen below those recorded for Sweden and Finland at that time, at least not for any prolonged period. It is also safe to assume that they varied greatly from year to year. These wide variations in annual death rates in most Western countries continued well into the nineteenth century and are still common in much of the remainder of the world. In the West they steadily tended to become smaller except in years of special catastrophe.

Death Rates as the Determiners of Population Growth. Since variations in death rates have, until recently been greater and more violent than those in birth rates, death rates have been the chief determiners of
population growth. They still remain the chief determiner in a large part of the world. For this reason it will be well to discuss briefly hunger and disease, the extreme forms of which are famines and epidemics, as factors in population growth.

It has been noted above that even such well-organized countries as Sweden and Finland occasionally suffered from severe famines well into the nineteenth century. This condition was almost universal before 1800, the severity and the frequency of famines varying greatly from country to country and from time to time. Of more recent occurrence are the great famines of Russia in 1920–2 and of China in 1930–1. Since 1939 hundreds of thousands of Europeans have starved, and many millions are now in precarious condition.

However, actual famine, although a frequent cause of high death rates and hence a check to population growth, has probably been of small importance even in such countries as India and China, compared with the need of more and better food at all times. Most men have always been close to the brink of starvation. Undernourishment has been a constant factor making for a high death rate among most peoples throughout their history, because it makes everyone an easier victim to disease.

This is seen in extreme form in the fact that famine is always accompanied by severe epidemics. It is only in recent times and under "normal" conditions that the "Western" peoples have not been much troubled by lack of food.

But however much need and want raise the death rate, disease deserves consideration in its own right as one of the great depressants of population growth. The "black death" is supposed to have killed one-fourth to one-half of the population of Europe in the years 1347–50. The ravages of typhus during the Russian famine of 1920–2 are known to all. Closer home, Americans consider the toll of influenza in 1918–9 to have been terrible, but it takes a careful examination of the population data of India to enable one to appreciate how appalling this epidemic was in countries where chronic undernourishment led to low vitality, where there was little or no public health service, and where there was little medical care available. India probably lost somewhere between 12 and 20 million persons from influenza in 1918, the higher figure appearing more reasonable to the writer.

But these shocking losses from great epidemics are less important in the long run than the ever-present ravages of diarrhea and enteritis, typhoid, cholera, dysentery, smallpox, and malaria. Even in northern Europe in the latter part of the eighteenth century and the first half of the nineteenth, death rates of 30 and more were not uncommon. In southern and eastern Europe there is little doubt that they were higher at that time, and in Russia in 1891–1900 the recorded rate (probably too low) was 34.3. Death rates above 30 and often above 40 are still quite
common in China, India, most of Africa, parts of South America, and the islands of the Western Pacific—countries containing one-half or more of the world’s population.

The Effects of the Industrial and Agricultural Revolutions on Population Growth

Beginning about 1750 in England and gradually extending to many other lands, the economic structure of society was radically changed by the Industrial Revolution, accompanied by an agricultural revolution which, while less spectacular, was of equal significance from the standpoint of population growth.

Economically, the Industrial Revolution led directly to a great increase in man’s power to produce all manner of nonagricultural goods, and indirectly it stimulated and made more effective the agricultural revolution which had already begun. The Industrial Revolution led to the use of power-driven factory machines and also gave us new modes of transportation which made it possible to move large amounts of goods long distances both quickly and cheaply, thus stimulating a rapid expansion of agriculture in new lands by commercializing agricultural production in many regions and by providing tools for more efficient tillage.

But we should not overlook the significance of the agricultural revolution in its own right. The breeding of better livestock, the cultivation of crops better suited to soil and climate, the more scientific tillage and fertilization of soils, the better understanding of plant and animal diseases, and many other improvements in addition to the use of the increasingly efficient implements, led to an increase in per capita productivity in agriculture hardly less than that in the nonagricultural industries. Instead of requiring three-fourths or more of all labor to produce agricultural necessities as was the case in 1750, countries such as the United States and Australia now employ but little more than one-fifth of their labor directly in agricultural production, and, moreover, export rather large amounts of agricultural produce.

The increase in man’s productive power which came with these revolutions was in a very real sense the basis of the vital revolution in population growth, which manifested itself in its earlier stages chiefly in an improvement in the level of living leading to a decline in the death rate. Not until man had a substantial excess above immediate food needs could he take time off to develop science and to apply this science to more efficient production in industry and in agriculture, and to the establishment of public health services.

The first effect on population of these revolutions in production was, then, to stimulate growth by reducing the death rate. It does not appear that the increase of the means of subsistence and the greater con-
trol of disease significantly lowered the birth rate for some decades. Hence, population growth went ahead at an unheard of speed and became far more regular than in the past.

From about 1800 to the present time, most of the Western countries have had almost continuously declining death rates. These declines were, as a rule, fairly slow at first; then they gained speed for a few decades, but after falling to about 16 or 18 per 1,000, the decline again became slow. Furthermore, as this decline proceeded, the fluctuations from year to year tended to diminish. It is of the first importance to realize that the decline in the death rate and not an increase in the birth rate accounts for the increase of "Western" population since 1800 and for the growth of the European stock from about 200 million in 1800 to about 600 million in 1910.

After some decades, declining death rates were followed by a decline in the birth rate (in England and Wales this was not apparent until 1875–80), which may be called the second phase of the vital revolution. But even after the decline in the birth rate began, the decrease in the death rate kept ahead of it in most countries for several decades, and the rate of population increase continued to rise. Since World War I, however, in a large part of Western Europe and its settlements, the birth rate has declined faster than the death rate, and the rate of population growth is now rapidly declining.

The Pattern of Modern Population Growth

The pattern of population growth in most Western countries may be described very briefly as follows. Before the Industrial Revolution most peoples grew slowly and intermittently when they grew at all. There was a severe struggle for mere subsistence. When for some reason conditions were favorable, when there was a series of good crop years or disease was less prevalent than usual, there was an increase in population. But when dearth and disease came, the death rate rose and population declined. Otherwise there would have been many times 900 million people on the earth in 1800. We can only conclude that never before about 1800 had any large number of people enjoyed a relatively long and continuous period of decline in the death rate, or even a steady death rate. After the Industrial Revolution there was a period of increasing margin of the birth rate over the death rate, which was then succeeded by a period generally shorter but varying considerably in length from country to country, in which the rate of natural increase remained fairly constant, the birth rate and the death rate falling in about equal amounts. Finally, the birth rate falls faster than the death rate, thus reducing the rate of growth and leading again to a stationary or slowly growing population. Thus the modern epoch of population growth in industrialized lands is completed.
This then is the general picture of population growth in the Western World during the last 150 to 200 years. We know that it is a true picture, in its main outlines, in spite of considerable variations in the details of growth in different countries and at different periods.

That this process of population growth in the West since 1800 indicates what we may expect in other parts of the world as they industrialize and modernize is borne out by the population development in Japan which has closely followed the general pattern since the beginning of Japanese industrial modernization. For a long time, perhaps for a century or more prior to about 1850, the population of Japan appears to have remained practically stationary at 25 to 27 millions. There was an increase to 32 or 33 millions by about 1870-5. From that time on, as Japan adopted Western practices her death rate declined and her population grew at a more rapid rate. In the decade 1920-30 her population growth attained a rate of 14 to 15 per cent and changed little until she became heavily involved in the war with China and later with the United States. This increase in growth came as a result of improvements in agriculture and the development of industry, which made possible a slowly rising level of living and provided the means for an increasing control of regularly recurring local epidemics. As sanitation improved and medical services also became modernized, the mortality rate, particularly the infant mortality rate, declined in Japan just as it had a century earlier in a number of Western countries. The net effect of these changes was that by 1937 the death rate in Japan had been brought down from 30-35 per 1,000 (or possibly even more) to 17 or 18 (approximately the level of the United States in 1920) in a much shorter time than the same reduction had been effected in Europe and America. The probable explanation of the speed with which this happened is that by the time Japan was ready to industrialize, to improve her agriculture and to undertake sanitary and medical service, there was a large body of approved knowledge and practice in all these fields which she could apply to her problems speedily and at comparatively small expense.

While there is fairly convincing evidence that Japan's death rate has been declining since about 1870, there is no satisfactory evidence of any significant change in the birth rate before the decade 1920-30. By 1925 the comparison of birth rates in cities and rural areas left no doubt of a decline of the birth rate in the cities. The Japanese who were moving to the cities as industry and commerce expanded were not maintaining their high rural birth rates. But just as in the West, this decline in the urban birth rate did not immediately reduce the rate of population growth. The development of better living conditions reduced the death rate as fast as or faster than birth control curtailed the birth rate, with the result that Japan's highest rate of population growth took place from about 1920 to 1936. Any experienced demographer studying the
Japanese situation in the early 1930's would have said, however, that Japan was probably not more than two or three decades away from the time when her birth rate would fall faster than her death rate with the result that her rate of growth would begin to slacken. But he would also have hastened to say that it would probably be at least another two or three decades before population growth in Japan would become as slow as that in most of Western Europe and North America in 1930. Though Japan was following the same general pattern of growth as Western countries, the length of the different phases of the process was reduced because many of the means for raising the level of living and for reducing death rates and birth rates were found ready at hand. For an understanding of history the important fact is that Japan's population was attaining its maximum rate of growth at the very time, following World War I, when Western peoples were rapidly ceasing to grow.

**Future Population Growth**

We are now ready to take a look at the future of population growth in the world preparatory to a discussion of the problems which this growth raises. For our purposes the peoples of the world may be divided into three classes based on the considerations affecting growth noted above.

*Class I.* Western, Northwestern and parts of Central Europe, North America (north of the Rio Grande), Australia and New Zealand have about completed their period of growth and are approaching a stationary population because of their low birth rates. Roughly one-fifth of the world's population lives in these countries. The proportion will almost certainly become smaller decade by decade. These countries control, in addition to the resources of their home lands, those of practically all the colonial areas of Africa, Asia and the islands of the Pacific.

*Class II.* Most of Southern and Eastern Europe, Japan, Soviet Asia, and parts of South and Central America are in the middle era of population growth. They still have high birth rates which are declining, but their death rates have declined more and therefore they are growing rapidly. These areas contain about one-fifth of the world's population. This proportion will grow fairly rapidly in the next few decades. For two or three decades the proportionate gain will probably be equal to, or greater than, the proportionate population losses of Class I countries.

*Class III.* Most of the rest of the world is just entering this modern process of growth. Birth rates and death rates are high and about equal or, if the death rate has begun to decline, it is still so little under control that it may fluctuate violently from year to year. These countries contain nearly three-fifths of the world's population and will certainly grow to the extent that their death rates come under control by staying the ravages of hunger and disease. Moreover, they will con-
continue to grow for several decades after the Class II countries have become stationary.

There is, of course, no hard and fast line between these three classes of populations. Other students of population may well place some countries in different classes than those to which this writer has assigned them, but the point important for world organization for peace is that the population changes going on in the world and those reasonably to be expected in the next several decades will alter the present population balance.

**Future Changes in Industrial Power**

Along with this new balance of population there will also develop a new industrial balance which, like the population balance, may change rather slowly so that only the observer who gives careful attention to the economic development of "backward" peoples will realize the size and the direction of the changes that are going on. This is what happened in the case of Japan. After World War I her industry expanded with increasing rapidity and, although Japan's steel capacity even at the height of war production never exceeded one-tenth of our own, we realize now that she was stronger industrially than we had believed and that she had better reason for confidence in her ability to conquer and to hold Southern and Eastern Asia than we had to scoff at her military strength. We also took little account of the fact that Japan had a relative abundance of young men for military use and that she could to a certain extent substitute manpower for industrial power and military equipment if she were willing to sacrifice men prodigally.

A large and growing population is also a source of a cheap labor supply for developing industry. This was one of the important factors in Japan's ability to undersell the Western peoples in the markets of the Eastern world in textiles and in many other light manufactures. Why should we suppose that the development of industry, as well as population growth, will not follow the same general course in India, China, and the colonial areas of southeast Asia as in Japan, whose development followed much the same course as that of the West? The speed with which industry develops will in large measure determine the success these "backward" peoples will have in reducing the death rate, although agricultural improvements are also of prime importance. The growth of productivity which leads to population growth combines therewith to produce increased military and political power. Surely it is not realistic to expect that this will suddenly cease to be true. In a world in which force still determines the conduct of nations, a considerable part of any increased productive power will be devoted to military purposes.
POLITICAL CONSEQUENCES OF THE DIFFERENTIAL GROWTH OF POPULATION AND THE INCREASE OF INDUSTRIAL POWER IN THE EAST

The growth in numbers and in industrial power envisaged above for southeast Asia is perfectly normal, probably inevitable, and portends grave unrest. These peoples, just beginning to modernize, will increase in numbers and in strength relative to ourselves and Europe and, accordingly, will be less submissive to Western powers. This will be the natural result of the trends in population and industrial power, and therefore in political and military life, which are now emerging in Asia. Even if it takes longer than the five or six decades I postulate for the Eastern peoples to develop a considerable increase in industrial and agricultural power, the end result will be the same.

These changes will create a situation of serious international tensions. The population of South and East Asia, not including the Soviet Union, is now about a billion, five times as great as that of Europe when her population began to grow rapidly (about 1800), and already overcrowding is felt. Only a rise in the present high death rate can prevent a population increase of half or more in the next half-century. But there are now no virtually empty Americas or Australias open to settlement by these peoples as they multiply. The relatively "empty" spaces of the world are all owned or controlled by European peoples who cannot, or at least do not, settle and develop them as they did North America, Australia, and much of South America, and who are unwilling even to discuss their settlement by the Asiatics who, except for Japan, have not yet had the political organization and industrial power to make a formidable bid for their transfer from European to Asiatic control. We must not forget that industrialization is a social as well as economic phenomenon as a result of which literacy expands and communications bring great numbers of men in touch with knowledge and ideas quite foreign to their traditional way of life. Such education promotes reformulation of national interests vis-à-vis other nations. Will the Chinese and the people of the Indo-Chinese peninsula, as their strength grows, be willing to obey the "no trespass" signs erected by the British, the Dutch and the Australians in the islands of the Pacific which are now almost empty? Will the Indians remain meek and continue to accept exclusion from the parts of colonial Africa which they will need when their present 400 millions have grown to 500 or 600 millions, and their industrial output is several times its present size? The attitude of the leaders of Japan in the face of somewhat similar conditions and their ability to organize their people for aggression is perhaps our best guide to what may be expected if we allow matters to drift. No great and powerful people has ever remained at home when it felt the need of new lands and resources and when it believed itself strong enough to make successful conquest.
Already, the effects of industrialization and economic power begin to pose new economic and political problems as regards colonial areas (e.g., India, Burma, Java) and also as regards organization of the economic and commercial life of all nations, ourselves included. When we make great loans to China for the building of railways, for the reconstruction of Manchurian industry, for the inauguration of health service, and for the establishment of factories, we hasten the growth of a strong China which will certainly be less docile than the China with which we have dealt this last hundred years. If we refuse such assistance, we strengthen animosity toward Western powers. Unfortunately, it frequently seems doubtful that our statesmen are aware that these changes in numbers and in power, now taking place in the East, require new ways of thinking and new types of international political and economic organization. Our policy seems to be to ignore changes in this area, even though such changes must continue and affect a majority of the world's population. Our national habits and patterns of economic and political life have caused us to deal with these problems in the past as though they were wholly national in scope, and seemingly leave us inadequately prepared to treat them in the present as international or world problems.

**SOME SUGGESTIONS FOR THE CONTROL OF GROWING POPULATION PRESSURES**

There is no simple method to control population growth in order to avoid increasing unrest due to the development of differential population pressures. Birth control, which is the only permanent solution for the excessive population growth likely to accompany the modernization of the East, cannot be made effective soon enough to prevent the development of very serious tensions between those peoples whose future growth will be large and those whose future growth will be small—between the Class I peoples, on the one hand, and the Classes II and III peoples on the other. To justify this statement it will be necessary to review briefly the more commonly discussed solutions of the problems created by growing populations.

*A Rising Death Rate.* Only conditions which will raise the death rates in most of these "backward" industrial areas can prevent their fairly rapid growth in numbers during the next few decades, and only conditions which will retard their industrial development can prevent their increase in military might and political power relative to that of Western peoples. What are the conditions which could quickly stop the growth of these peoples? It is not difficult to state some of the conditions which would prevent the growth both of population and industrial and political power among these backward peoples, but it will not make pleasant reading. The
withdrawal of the British from India without the establishment of a central Indian government having sufficient power and unity to prevent civil war between the Hindus and Moslems, between landlords and peasants, and between the rulers of the native states, might cause tens of millions of people to die of the famine and disease which would certainly follow prolonged civil war. The industrial development India has already achieved, which is not inconsiderable, would be undone, her lines of transport and communication would be destroyed, and her public health work, small as it is, would be discontinued. As a result India would probably lose population for some decades, and would be powerless to challenge the continued control of Africa or the Pacific islands by the colonial powers of Europe. On the other hand, it is highly probable that such chaos in India would lead to attempts from the outside to reduce her again to colonial status and might very well lead to war between the would-be colonial powers.

In China likewise civil war threatens the establishment of centralized national control. The clash between the Nanking government and the communists—perhaps it would be more accurate to say, between the landlords and the peasant farmers—may throw China into turmoil for decades. China is no stranger to prolonged civil wars and the terrific destruction of life and property that ensues. She has already been politically impotent for a century because of internal strife, and in the judgment of this writer her population has not grown like that of India largely because of this internal turmoil. This lack of an effective central government has made it impossible for China to develop industry, transport and communications, health service and education, and to expand her agriculture even to the extent that India has. There are persuasive estimates that the Taiping Rebellion in the middle of the 19th century cost China between 20 million and 50 million lives and that the Mohammedan Rebellion in the Northwest in the last quarter of the century cost another 10 million. In addition, occasional great famines raged unchecked during all this time. Finally, the prolonged impotence of the government of China has made impossible the development of irrigation on a large scale as in India, and the settlement of Manchuria has at most relieved the population pressure only temporarily in a few parts of northern China. As long as internal disorder persists in China she will become no threat to the European control of the neighboring "empty" spaces because neither her population nor her industry will grow, nor will she be able to organize such strength as she does possess for aggression.

However, internal chaos in China, as in India, will invite interference from the outside, just as in the past. If population growth and increase in industrial power do not take place in China to raise problems of need for more land and resources for the world to solve, it will be because of continued internal disorders which will keep China weak.
and make her the prey of a new scramble for "spheres of influence." The alternatives appear equally dangerous.

"Empty" Spaces. A second suggestion often made for the control of growing differential population pressures is that the resources of the still "empty" spaces be made available more in accordance with need. Though these empty spaces are large, they are not large enough to supply other than a temporary outlet for the vast overflow of emigrants China, India and Japan might send out during the next several decades. As noted above, the settlement of Manchuria did very little to relieve pressure in China. At most it reduced the death rates for a few years in a few thousand villages in northern China from which emigration was large. There is no reason to believe that the population of China proper is any smaller today than it would have been if these several million emigrants had not gone out. It is worth repeating that these peoples in South and East Asia are about five times as numerous as were Europeans in 1800 and that new and fertile lands are far less abundant.

However, it does not follow that emigration, because it cannot be a final solution of the population problems arising in Asia, should not be used to the limit. The psychological effects of not being discriminated against by the Western peoples should ease the political hostility between growing peoples and stationary peoples. Whether the rather mild easing of economic pressures arising from access to the resources of these "empty" spaces will be sufficient to prevent aggression against one another or against the nations with smaller populations and larger resources will depend largely on the political and economic organization of the future world. But this much is certain—if the peoples of Asia are settled in, and are using the resources of, Borneo and New Guinea in 2000 A.D., they will not make war to take them from the British, the Dutch, and the Australians, as they well may if the colonial system survives. Moreover, there is much bitterness among these "backward" peoples toward the Western powers. It will be extremely difficult to change this, but it would seem worthwhile trying by placing all colonial areas under international control until such time as they can govern themselves and by embarking on a definite program to make their resources available to these crowded peoples who will need them more and more. (Such measures may be effective in sufficiently reducing population pressure or in allaying the bitterness these peoples feel towards the Western powers.) The psychological effect of such a gesture of good-will would be the most effective action we could take. Moreover, it is the only action the great powers can take entirely on their own initiative.

Colonialism. It is sometimes argued that these colonial "empty" spaces should be held empty rather than allowed to fill up with Asiatics living at their present low level so that there will be some place for them to move after they have reached a better level of living. One
might ask, Why? If the answer is, to provide food and raw materials for these crowded peoples when their own lands fail, I must confess I would rather see these "backward" peoples move in and produce their own food than see a plantation system develop which would be used, to judge from past practice, chiefly to supply Europe and America with tropical goods by indenturing these same peoples as laborers and holding them in what amounts to a semi-slave condition. I believe that the definite abandonment of the colonial system, gradual and orderly to be sure, would do more to create a belief in the good intentions of the colonial powers than any promises of new "constitutions" or increase in self-government or education. Until there is clear evidence that the colonial system is being jettisoned and that the "empty" spaces are being opened to people who can settle them, we can expect constant suspicion that all that is being done is to devise a new and more subtle method of excluding Asians, and we can expect appeals to all colonial peoples by any growing power to join in a war against the West. Witness the appeals of Japan which were not without effect even in the Philippines, although the effects there were far less disturbing than in the other colonial areas.

It is one of the great ironies of colonialism that in order to exploit a colony successfully it is necessary to introduce modernization by maintaining internal order, by developing better transportation, by increasing production (particularly in plantation agriculture and in the exploitation of mineral resources), and by establishing a modicum of public health work and education, and that this modernization tends to reduce the death rate and increase the rate of population growth. On the other hand, this small degree of modernization has no effect on the birth rate for some decades, nor do these improvements essential to the successful exploitation of colonies cultivate attitudes of mind which would increase the responsibility of colonial peoples for their own welfare. The colonial peoples are neither shown the necessity of adapting population growth to resources nor how this could be done. Besides, the colonial powers ignore the fact that people can never acquire a feeling of responsibility until they are given responsibility, plus the power they need to fulfill their new obligations. The bitterness and hatred long accumulating against the Western colonial powers will make it practically impossible to work with "backward" peoples for world organization until they have tangible proof that the whole colonial system is on the way out. It is manifestly impossible to abandon colonial control entirely until the processes of self-government advance in many areas, but we could furnish proof of our fixed intention to do so in the not distant future. Perhaps a good way to convince these peoples that they are being treated fairly and need not resort to arms to secure their share of the world's resources is to be fair. Certainly no one can objectively examine the past treatment of these peoples and that which the colonial powers, with the aid of the United
States, intend to impose in the future, and honestly say that they are being given a fair deal.

Freer Trade. Another way to avoid the consequences of growing population pressure among the industrially “backward” peoples is to make commerce and trade freer than in the recent past. This is of very great importance. I have elsewhere argued at some length for the gradual freeing of trade from the many fetters we have put on it in recent decades. The freer trade is, the less likely are people to feel discrimination against them in access to natural resources. But free trade is not a cure-all for the economic pressures the growing peoples will feel in the next several decades.

Improved Agriculture and Industry. The increase in productivity in agriculture and industry which can be achieved in these “backward” regions by putting into practice methods already in use elsewhere is very considerable and will support a corresponding increase in numbers at the current level or smaller numbers at a higher level. We must face the strong probability that all that can be done to increase the productive power of these peoples will do but little to raise their level of living, that most of the increased product from better methods of industrial production—from the practice of up-to-date agriculture and from the extension of the agricultural area by irrigation or the use of new implements—will go to support an increasing population living about as these peoples now live. Furthermore, the little rise in level of living that will be achieved will encourage additional population growth until such time as the practice of birth control becomes widespread. This is a real dilemma, and it can only be resolved by the passage of time. How long a time no one can tell, but our experience in the West would lead us to expect that it will take at least five or six decades to develop the new attitudes of mind and the economic conditions which will lead to the choice of fewer children and a better level of living in the place of the traditional ways which keep birth and death rates high.

Fortunately, the conditions which contribute to increased productivity also lead people to want smaller families so that both they and their children can have a more secure life and larger opportunities for personal development. But, again, there is a lag in time between the development of those ways of producing and living favorable to a reduction in the death rate and the development of those social attitudes and modes of living which lead people to want to control the size of their families. There appears to be no reason, however, why this time lag should be as long in the future as it was in Europe and America. Japan seems to have shortened this lag as compared with the European peoples. There would seem to be no inherent reason why publicly approved efforts could not further reduce it. However, it is probable that the very best that might be accomplished in this respect

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Thompson, Population and Peace in the Pacific (1946) c. 11.
would not remove the necessity to use the "empty" spaces of the world, to remove all possible restrictions on trade, and to improve productivity in agriculture and in industry by all possible means.

*Birth Control.* Further elaboration of the need for birth control is the last point. In the end birth control is the only solution for the problems of population pressure in the world. Only by controlling population growth will the growing and crowded peoples cease to need ever larger resources in lands and minerals merely to maintain a low level of living. But while birth control is becoming sufficiently widespread to be effective, the numbers of all Class II and III peoples will grow quite rapidly unless their death rates are kept high and in some countries raised far above their present levels. This is the real dilemma the world now faces. We must use every means at our disposal to relieve growing pressures and to convince these peoples that they are not being discriminated against in the use of the world's resources while they are learning to control their birth rates. The situation is so serious that I do not see how we can safely leave the development of birth control in the East to the natural processes that operated in the West. Here we developed birth control as urban life and industry and commerce led people to develop new wants and desires and ambitions for themselves and their children which could not otherwise be satisfied. As long as most children died before they reached adulthood, it required many births merely to maintain the population, but when we learned to control the death rate and population began to grow rapidly, people in the cities soon learned that they could not care for their families and give them a decent living if births also were not controlled.

But when left entirely to chance, this process takes more time than we can afford to allow. We should not adopt a *laissez faire* policy in the East, but should actively encourage birth control through mass education, industrial aid, by improving communication and teaching the effects of health work on population growth. I would even urge that we aid the peoples of South and East Asia in the modernization of all aspects of their life contingent upon their undertaking to educate their people in the need for birth control. Only thus can they attain a decent level of living, and relieve themselves of the feeling that they have too few resources to meet their growing needs. Only thus can we avoid the danger of wars to secure new lands and larger resources.

A new world organization in which these industrially "backward" peoples are given a voice as equals can furnish the leadership needed to meet the problems discussed above, if we are willing to yield it the power to undertake the great tasks of population control which are essential to assure peace.

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