Aristotle defined science as the cognition of causes. Although some modern historians prefer not to speak about laws of history, no one denies the presence of cause-and-effect relations in the historical process: denial of the causal determination of past events would have deprived history of the right to call itself a science. The famous sociologist E. Durkheim wrote that history can be viewed as a science only to the degree to which it explains the world [1, p. II].

Is modern historical science able to explain the world? In my opinion, at least partially, it does explain the world because it makes it possible to single out the main causes that determine historical events, which are called the driving forces of history or factors of the historical process. Although historians have been unable thus far to explain many details of past events, the role of one of such factors, demographic, seems to have been studied to a sufficient extent at present.

The most important stage in the development of demography, the beginning of studies on the problem of overpopulation, is associated with the name of the English scientist of the 18th–19th centuries T. Malthus. The main thesis formulated by Malthus is that “the increase of population is necessarily limited by the means of subsistence.” Population growth leads to food shortages, which provoke a rise in prices and rents and a decrease in real wages and consumption. In turn, a decrease in consumption stops population growth or reduces it down to a level determined by the means of subsistence (or below). Under these conditions, food becomes available, wages increase, and consumption grows; however, the process then repeats itself, and, as a consequence, population increases and decreases alternately [2].

Malthus’ ideas were accepted by the most prominent economists of “classical economics,” such as J.-B. Say and J. Mill, while D. Ricardo included these provisions in his theory of wages, a consequence of which was that the overarching theory was called Malthusian–Ricardian [3]. Importantly, both Malthus and Ricardo initially spoke about repeated variations in population, i.e., about demographic cycles. Note that the oscillation of population should be accompanied by the oscillation of prices, rent, profit, and real wages, which led to the conclusion that the entire economic process was oscillatory by nature (Fig. 1).

World War I, famine, and the revolutions of 1917–1922 gave new life to Malthus’ ideas. For example, the outstanding economist J.M. Keynes, having analyzed statistical data, showed that, on the eve of the war, Europe had shown signs of overpopulation, and this

Review

The current state of the theory of historical science is usually defined as critical, characterized by departure from the search for common schemes in the study of “microhistory.” However, the presence of certain economic and demographic regularities is recognized not only by historians but also by economists and politicians. The article published below considers such regularities and the theory that describes them, the topicality of which is determined by the fact that the Malthusian regularities under consideration not only manifested themselves clearly in the epoch of preindustrial society but also play a significant role in the economic life of developing countries.

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Neo-Malthusianism in the Modern Methodology of History

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ultimately caused WWI and the revolution in Russia. Keynes wrote [4, pp. 6, 99]:

European Russia increased her population in a degree even greater than Germany— from less than 100000000 in 1890 to about 150000000 at the outbreak of war; and in the year immediately preceding 1914, the excess of births over deaths in Russia as a whole was at the prodigious rate of two millions per annum.... The great events of history are often due to secular changes in the growth of population [S.N.] and other fundamental economic causes, which, escaping by their gradual character the notice of contemporary observers, are attributed to the follies of statesmen or the fanaticism of atheists. Thus, the extraordinary occurrences of the past two years in Russia, that vast upheaval of Society, which has overturned what seemed most stable ... may owe more to the deep influences of expanding numbers than to Lenin or to Nicholas [S.N.],.... Starvation, which brings to some lethargy and a helpless despair, drives other temperaments to the nervous instability of hysteria and to a mad despair. And these in their distress may overturn the remnants of organization and submerge civilization itself....

To save Europe from famine and revolutions, Keynes called on the United States to render emergency assistance to European states, and this idea was implemented in the so-called Dawes Plan.

The famous sociologist P. Sorokin expressed similar ideas on the causes of WWI. He wrote in this respect [5, p. 305],

It needs no proof that Europe as a whole was not self-sufficient with regard to food: it did not and does not produce the necessary amount of either bread or meat. The deficit was covered by imports from other parts of the world, such as America, Asia, and so on. This shows the significance of overseas colonies for a number of states, because they serve for them not only as a market but also (and primarily) as a granary without which they cannot exist. This explains why such states as Great Britain and Germany are interested in colonies and why the struggle for them was one of the main causes of the latest war.

Using statistical data, Sorokin shows that, before the war, the per capita production of grain crops across the world did not exceed 18 poods and that of potatoes, 6 poods; i.e., consumption was at the hunger limit. With account for inequality in consumption, this meant that many millions of people suffered constant undernourishment. Sorokin concludes [5, pp. 304, 305]:

The only thing that could help was a decrease in population. This ought to have happened as a result of extinction caused by hunger, epidemics, bloodshed wars, or, finally, all these taken together .... The invisible conductor, “Mr. Hunger,” did his duty and is still doing it. Even if the war was caused not exclusively by hunger, it still allows the old man Malthus to triumph: his theory, at least in its main theses, if not in all the details, has been confirmed [S.N.].

The postwar years were marked by attempts to confirm Malthus’ concept theoretically. Malthus was of the opinion that the dependence of a decline in population growth rates on a decrease in consumption was a natural law; and in the 1920s this theory was verified due to biological experiments. The American biologist and demographer R. Pearl proved that changes in populations of some animals were described by a differential equation solved through a logistic curve (Fig. 2).

The behavior of the logistic curve shows that, at first, under a high consumption, population rapidly grows. Under an excess of resources, the growth of population sometimes is not accompanied by a decrease in consumption for a while, but then food shortage comes, and consumption begins to fall. This leads to deceleration of population growth, and ultimately the population stabilizes near the asymptote corresponding the maximally possible population under minimal consumption (the so-called capacity of the ecological niche). In reality, the state of “hungry homeostasis” turns out to be unstable, and, hence, variations in natural factors may lead to a sharp reduction in population, which is followed by a restoration period in a new cycle [6]. Thus, fundamentally, “logistic cycles” in the dynamics of changes in a population of animals have the same nature as the Malthusian demographic cycles. Later, the theory of population cycles became one of the most important divisions of the new science, ecology, and was used by Malthus’ followers as an argument confirming his theory [7].

However, the absence of information about population in the preindustrial epoch made it difficult to single out demographic cycles directly. True, there were data about another oscillating parameter of the economic process—about prices. The pioneer of the statistical study of price volatility was the French researcher F. Simiand. Simiand’s work published in 1932 introduced the notion of the secular trend—a cycle consisting of the rising prices phase (phase A, or the upward trend) and the falling prices phase