## BOOK II

### POPULATION AND SUBSISTENCE

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The Malthusian theory, its genesis and support</td>
<td>91</td>
</tr>
<tr>
<td>2</td>
<td>Inferences from facts</td>
<td>103</td>
</tr>
<tr>
<td>3</td>
<td>Inferences from analogy</td>
<td>129</td>
</tr>
<tr>
<td>4</td>
<td>Disproof of the Malthusian theory</td>
<td>140</td>
</tr>
</tbody>
</table>
Are God and Nature then at strife
That Nature lends such evil dreams?
So careful of the type she seems,
So careless of the single life.
—TENNYSON.
Behind the theory we have been considering lies a theory we have yet to consider. The current doctrine as to the derivation and law of wages finds its strongest support in a doctrine as generally accepted—the doctrine to which Malthus has given his name—that population naturally tends to increase faster than subsistence. These two doctrines, fitting in with each other, frame the answer which the current political economy gives to the great problem we are endeavoring to solve.

In what has preceded, the current doctrine that wages are determined by the ratio between capital and laborers has, I think, been shown to be so utterly baseless as to excite surprise as to how it could so generally and so long obtain. It is not to be wondered at that such a theory should have arisen in a state of society where the great body of laborers seem to depend for employment and wages upon a separate class of capitalists, nor yet that under these conditions it should have maintained itself among the masses of men, who rarely take the trouble to separate the real from the apparent. But it is surprising that a theory which on examination appears to be so groundless could have been successively accepted by so many acute thinkers as have during the present century devoted their powers to the elucidation and development of the science of political economy.

The explanation of this otherwise unaccountable fact is to be found in the general acceptance of the Malthusian theory.
It tends to support the theory that wages are limited by capital per laborer.

It is unclear which of the two theories came first.

The current theory of wages has never been fairly put upon its trial, because, backed by the Malthusian theory, it has seemed in the minds of political economists a self-evident truth. These two theories mutually blend with, strengthen, and defend each other, while they both derive additional support from a principle brought prominently forward in the discussions of the theory of rent—viz., that past a certain point the application of capital and labor to land yields a diminishing return. Together they give such an explanation of the phenomena presented in a highly organized and advancing society as seems to fit all the facts, and which has thus prevented closer investigation.

Which of these two theories is entitled to historical precedence it is hard to say. The theory of population was not formulated in such a way as to give it the standing of a scientific dogma until after that had been done for the theory of wages. But they naturally spring up and grow with each other, and were both held in a form more or less crude long prior to any attempt to construct a system of political economy. It is evident, from several passages, that though he never fully developed it, the Malthusian theory was in rudimentary form present in the mind of Adam Smith, and to this, it seems to me, must be largely due the misdirection which on the subject of wages his speculations took. But, however this may be, so closely are the two theories connected, so completely do they complement each other, that Buckle, reviewing the history of the development of political economy in his “Examination of the Scotch Intellect during the Eighteenth Century,” attributes mainly to Malthus the honor of “decisively proving” the current theory of wages by advancing the current theory of the pressure of population upon subsistence. He says in his “History of Civilization in England,” Vol. 3, Chap. 5:
The Malthusian Theory

“Scarcely had the Eighteenth Century passed away when it was decisively proved that the reward of labor depends solely on two things; namely, the magnitude of that national fund out of which all labor is paid, and the number of laborers among whom the fund is to be divided. This vast step in our knowledge is due, mainly, though not entirely, to Malthus, whose work on population, besides marking an epoch in the history of speculative thought, has already produced considerable practical results, and will probably give rise to others more considerable still. It was published in 1798; so that Adam Smith, who died in 1790, missed what to him would have been the intense pleasure of seeing how, in it, his own views were expanded rather than corrected. Indeed, it is certain that without Smith there would have been no Malthus; that is, unless Smith had laid the foundation, Malthus could not have raised the superstructure.”

The famous doctrine which ever since its enunciation has so powerfully influenced thought, not alone in the province of political economy, but in regions of even higher speculation, was formulated by Malthus in the proposition that, as shown by the growth of the North American colonies, the natural tendency of population is to double itself at least every twenty-five years, thus increasing in a geometrical ratio, while the subsistence that can be obtained from land “under circumstances the most favorable to human industry could not possibly be made to increase faster than in an arithmetical ratio, or by an addition every twenty-five years of a quantity equal to what it at present produces.” “The necessary effects of these two different rates of increase, when brought together,” Mr. Malthus naively goes on to say, “will be very striking.” And thus (Chap. I) he brings them together:

“Let us call the population of this island eleven millions; and suppose the present produce equal to the easy support of such a number. In the first twenty-five years the population would be twenty-two millions, and the food being also doubled, the means of subsistence would be equal to this increase. In the next twenty-five years the population would be forty-four millions, and the means of subsistence only equal to the

Based on the growth of Britain’s North American Colonies,
Malthus concluded that population tends to double every 25 years, as 1, 2, 4, 8, 16, ... while subsistence could at best increase only arithmetically in the same time period, as 1, 2, 3, 4, 5, 6, 7, 8, 9.

Thus the tendency of population to increase beyond subsistence would be held in check, either by restraint upon reproduction, or by increased mortality. Of course the mathematics of this theory make no sense.

But even Mill, who did not endorse the mathematics, support of thirty-three millions. In the next period the population would be equal to eighty-eight millions, and the means of subsistence just equal to the support of half that number. And at the conclusion of the first century, the population would be a hundred and seventy-six millions, and the means of subsistence only equal to the support of fifty-five millions; leaving a population of a hundred and twenty-one millions totally unprovided for.

“Taking the whole earth instead of this island, emigration would of course be excluded; and supposing the present population equal to a thousand millions, the human species would increase as the numbers 1, 2, 4, 8, 16, 32, 64, 128, 256, and subsistence as 1, 2, 3, 4, 5, 6, 7, 8, 9. In two centuries the population would be to the means of subsistence as 256 to 9; in three centuries, 4096 to 13, and in two thousand years the difference would be almost incalculable.”

Such a result is of course prevented by the physical fact that no more people can exist than can find subsistence, and hence Malthus' conclusion is, that this tendency of population to indefinite increase must be held back either by moral restraint upon the reproductive faculty, or by the various causes which increase mortality, which he resolves into vice and misery. Such causes as prevent propagation he styles the preventive check; such causes as increase mortality he styles the positive check. This is the famous Malthusian doctrine, as promulgated by Malthus himself in the “Essay on Population.”

It is not worth while to dwell upon the fallacy involved in the assumption of geometrical and arithmetical rates of increase, a play upon proportions which hardly rises to the dignity of that in the familiar puzzle of the hare and the tortoise, in which the hare is made to chase the tortoise through all eternity without coming up with him. For this assumption is not necessary to the Malthusian doctrine, or at least is expressly repudiated by some of those who fully accept that doctrine; as, for instance, John Stuart Mill, who speaks of it as “an unlucky attempt to give precision to things which do not admit of it, which every person capable
of reasoning must see is wholly superfluous to the argument.”\footnote{“Principles of Political Economy,” Book II, Chap. IX, Sec. VI — Yet notwithstanding what Mill says, it is clear that Malthus himself lays great stress upon his geometrical and arithmetical ratios, and it is also probable that it is to these ratios that Malthus is largely indebted for his fame, as they supplied one of those high-sounding formulas that with many people carry far more weight than the clearest reasoning.} The essence of the Malthusian doctrine is, that population tends to increase faster than the power of providing food, and whether this difference be stated as a geometrical ratio for population and an arithmetical ratio for subsistence, as by Malthus; or as a constant ratio for population and a diminishing ratio for subsistence, as by Mill, is only a matter of statement. The vital point, on which both agree, is, to use the words of Malthus, “that there is a natural tendency and constant effort in population to increase beyond the means of subsistence.”

The Malthusian doctrine, as at present held, may be thus stated in its strongest and least objectionable form:

That population, constantly tending to increase, must, when unrestrained, ultimately press against the limits of subsistence, not as against a fixed, but as against an elastic barrier, which makes the procurement of subsistence progressively more and more difficult. And thus, wherever reproduction has had time to assert its power, and is unchecked by prudence, there must exist that degree of want which will keep population within the bounds of subsistence.

Although in reality not more repugnant to the sense of harmonious adaptation by creative beneficence and wisdom than the complacent no-theory which throws the responsibility for poverty and its concomitants upon the inscrutable decrees of Providence, without attempting to

agreed with the essence of Malthus’ theory, that population always tends to increase to the limits of the means of subsistence, and if its growth is not restrained there must exist that degree of want which will keep population within the bounds of subsistence.
trace them, this theory, in avowedly making vice and suffering the necessary results of a natural instinct with which are linked the purest and sweetest affections, comes rudely in collision with ideas deeply rooted in the human mind, and it was, as soon as formally promulgated, fought with a bitterness in which zeal was often more manifest than logic. But it has triumphantly withstood the ordeal, and in spite of the refutations of the Godwins, the denunciations of the Cobbetts, and all the shafts that argument, sarcasm, ridicule, and sentiment could direct against it, today it stands in the world of thought as an accepted truth, which compels the recognition even of those who would fain disbelieve it.

The causes of its triumph, the sources of its strength, are not obscure. Seemingly backed by an indisputable arithmetical truth—that a continuously increasing population must eventually exceed the capacity of the earth to furnish food or even standing room, the Malthusian theory is supported by analogies in the animal and vegetable kingdoms, where life everywhere beats wastefully against the barriers that hold its different species in check—analogies to which the course of modern thought, in leveling distinctions between different forms of life, has given a greater and greater weight; and it is apparently corroborated by many obvious facts, such as the prevalence of poverty, vice, and misery amid dense populations; the general effect of material progress in increasing population without relieving pauperism; the rapid growth of numbers in newly settled countries and the evident retardation of increase in more densely settled countries by the mortality among the class condemned to want.

The Malthusian theory furnishes a general principle which accounts for these and similar facts, and accounts for them in a way which harmonizes with the doctrine that wages are drawn from capital, and with all the principles that are de-
It harmonizes with the doctrine that wages are drawn from capital, and with the principles based on that doctrine.

The Malthusian Theory

duced from it. According to the current doctrine of wages, wages fall as increase in the number of laborers necessitates a more minute division of capital; according to the Malthusian theory, poverty appears as increase in population necessitates the more minute division of subsistence. It requires but the identification of capital with subsistence, and number of laborers with population, an identification made in the current treatises on political economy, where the terms are often converted, to make the two propositions as identical formally as they are substantially.\(^2\) And thus it is, as stated by Buckle in the passage previously quoted, that the theory of population advanced by Malthus has appeared to prove decisively the theory of wages advanced by Smith.

Ricardo, who a few years subsequent to the publication of the “Essay on Population” corrected the mistake into which Smith had fallen as to the nature and cause of rent, furnished the Malthusian theory an additional support by calling attention to the fact that rent would increase as the necessities of increasing population forced cultivation to less and less productive lands, or to less and less productive points on the same lands, thus explaining the rise of rent. In this way was formed a triple combination, by which the Malthusian theory has been buttressed on both sides—the previously received doctrine of wages and the subsequently received doctrine of rent exhibiting in this view but special examples of the operation of the general principle to which the name of Malthus has been attached—the fall in wages and the rise in rents which come with increasing population.

\(^2\) The effect of the Malthusian doctrine upon the definitions of capital may, I think, be seen by comparing (see PP. 33, 34, 35) the definition of Smith, who wrote prior to Malthus, with the definitions of Ricardo, McCulloch and Mill, who wrote subsequently.
Workers, seeing competition for jobs, might accept Malthus’ theory that there are too many people.

But the most important reason for the acceptance of Malthus’ theory is that it comforts the privileged.

Thus taking its place in the very framework of political economy (for the science as currently accepted has undergone no material change or improvement since the time of Ricardo, though in some minor points it has been cleared and illustrated), the Malthusian theory, though repugnant to sentiments before alluded to, is not repugnant to other ideas which, in older countries at least, generally prevail among the working classes; but, on the contrary, like the theory of wages by which it is supported and in turn supports, it harmonizes with them. To the mechanic or operative the cause of low wages and of the inability to get employment is obviously the competition caused by the pressure of numbers, and in the squalid abodes of poverty what seems clearer than that there are too many people?

But the great cause of the triumph of this theory is, that, instead of menacing any vested right or antagonizing any powerful interest, it is eminently soothing and reassuring to the classes who, wielding the power of wealth, largely dominate thought. At a time when old supports were falling away, it came to the rescue of the special privileges by which a few monopolize so much of the good things of this world, proclaiming a natural cause for the want and misery which, if attributed to political institutions, must condemn every government under which they exist. The “Essay on Population” was avowedly a reply to William Godwin’s “Inquiry concerning Political Justice,” a work asserting the principle of human equality; and its purpose was to justify existing inequality by shifting the responsibility for it from human institutions to the laws of the Creator. There was nothing new in this, for Wallace, nearly forty years before, had brought forward the danger of excessive multiplication
as the answer to the demands of justice for an equal distribution of wealth; but the circumstances of the times were such as to make the same idea, when brought forward by Malthus, peculiarly grateful to a powerful class, in whom an intense fear of any questioning of the existing state of things had been generated by the outburst of the French Revolution.

Now, as then, the Malthusian doctrine parries the demand for reform, and shelters selfishness from question and from conscience by the interposition of an inevitable necessity. It furnishes a philosophy by which Dives as he feasts can shut out the image of Lazarus who faints with hunger at his door; by which wealth may complacently button up its pocket when poverty asks an alms, and the rich Christian bend on Sundays in a nicely upholstered pew to implore the good gifts of the All Father without any feeling of responsibility for the squalid misery that is festering but a square away. For poverty, want, and starvation are by this theory not chargeable either to individual greed or to social maladjustments; they are the inevitable results of universal laws, with which, if it were not impious, it were as hopeless to quarrel as with the law of gravitation. In this view, he who in the midst of want has accumulated wealth, has but fenced in a little oasis from the driving sand which else would have overwhelmed it. He has gained for himself, but has hurt nobody. And even if the rich were literally to obey the injunctions of Christ and divide their wealth among the poor, nothing would be gained. Population would be increased, only to press again upon the limits of subsistence or capital, and the equality that would be produced would be but the equality of common misery. And thus reforms which would interfere with the interests of any powerful class are discouraged as hopeless. As the moral law forbids any forestalling of the methods by which the natural law gets rid of surplus population and thus holds in check a tendency for it asserts that poverty is unavoidable and inevitable, and that the accumulation of wealth does not disadvantage the poor.
In recent years, Darwin’s theory of natural selection is being invoked to support Malthus’ theory of population. To increase potent enough to pack the surface of the globe with human beings as sardines are packed in a box, nothing can really be done, either by individual or by combined effort, to extirpate poverty, save to trust to the efficacy of education and preach the necessity of prudence.

A theory that, falling in with the habits of thought of the poorer classes, thus justifies the greed of the rich and the selfishness of the powerful, will spread quickly and strike its roots deep. This has been the case with the theory advanced by Malthus.

And of late years the Malthusian theory has received new support in the rapid change of ideas as to the origin of man and the genesis of species. That Buckle was right in saying that the promulgation of the Malthusian theory marked an epoch in the history of speculative thought could, it seems to me, be easily shown; yet to trace its influence in the higher domains of philosophy, of which Buckle's own work is an example, would, though extremely interesting, carry us beyond the scope of this investigation. But how much be reflex and how much original, the support which is given to the Malthusian theory by the new philosophy of development, now rapidly spreading in every direction, must be noted in any estimate of the sources from which this theory derives its present strength. As in political economy, the support received from the doctrine of wages and the doctrine of rent combined to raise the Malthusian theory to the rank of a central truth, so the extension of similar ideas to the development of life in all its forms has the effect of giving it a still higher and more impregnable position. Agassiz, who, to the day of his death, was a strenuous opponent of the new philosophy, spoke of Darwinism as “Malthus all over,” and Darwin himself says

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3 Address before Massachusetts State Board of Agriculture, 1872, “Report U. S. Department of Agriculture, 1873.”
the struggle for existence “is the doctrine of Malthus applied with manifold force to the whole animal and vegetable kingdoms.”

It does not, however, seem to me exactly correct to say that the theory of development by natural selection or survival of the fittest is extended Malthusianism, for the doctrine of Malthus did not originally and does not necessarily involve the idea of progression. But this was soon added to it. McCulloch attributes to the “principle of increase” social improvement and the progress of the arts, and declares that the poverty that it engenders acts as a powerful stimulus to the development of industry, the extension of science and the accumulation of wealth by the upper and middle classes, without which stimulus society would quickly sink into apathy and decay. What is this but the recognition in regard to human society of the developing effects of the “struggle for existence” and “survival of the fittest,” which we are now told on the authority of natural science have been the means which Nature has employed to bring forth all the infinitely diversified and wonderfully adapted forms which the teeming life of the globe assumes? What is it but the recognition of the force, which, seemingly cruel and remorseless, has yet in the course of unnumbered ages developed the higher from the lower type, differentiated the man and the monkey, and made the Nineteenth Century succeed the age of stone? Thus commended and seemingly proved, thus linked and buttressed, the Malthusian theory—the doctrine that poverty is due to the pressure of population against subsistence, or, to put it in its other form, the doctrine that the tendency to increase in the number of laborers must

4“Origin of Species,” Chap. III.

5Note IV to “Wealth of Nations.”
always tend to reduce wages to the minimum on which laborers can reproduce—is now generally accepted as an unquestionable truth, in the light of which social phenomena are to be explained, just as for ages the phenomena of the sidereal heavens were explained upon the supposition of the fixity of the earth, or the facts of geology upon that of the literal inspiration of the Mosaic record. If authority were alone to be considered, formally to deny this doctrine would require almost as much audacity as that of the colored preacher who recently started out on a crusade against the opinion that the earth moves around the sun, for in one form or another, the Malthusian doctrine has received in the intellectual world an almost universal indorsement, and in the best as in the most common literature of the day may be seen cropping out in every direction. It is indorsed by economists and by statesmen, by historians and by natural investigators; by social science congresses and by trade unions; by churchmen and by materialists; by conservatives of the strictest sect and by the most radical of radicals. It is held and habitually reasoned from by many who never heard of Malthus and who have not the slightest idea of what his theory is.

Nevertheless, as the grounds of the current theory of wages have vanished when subjected to a candid examination, so, do I believe, will vanish the grounds of this, its twin. In proving that wages are not drawn from capital we have raised this Antæus from the earth.