

THE PROBLEM OF MALTHUS STATED.

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Darwin (page 52, *Origin of Species*) has observed "that in a state of nature almost every full-grown plant annually produces seed, and amongst animals there are few which do not annually pair. Hence we may confidently assert that all plants and animals are tending to increase at a geometrical ratio—that all would rapidly stock every station in which they could anyhow exist. And this geometrical tendency to increase must be checked by destruction at some period of life," and, as an inevitable consequence, he goes on to add "that each individual lives by a struggle at some period of its life, that heavy destruction falls either on the young or old during each generation, or at recurrent intervals. Lighten any check, mitigate the destruction ever so little, and the number of the species will almost instantaneously increase to any amount."

These considerations when fully appreciated form the foundation of the problem of Malthus.*

That Mr. Henry George altogether failed to grasp the various elements of this problem is at once apparent by the manner in which in his otherwise very able work, "*Progress and Poverty*," he has attempted to refute the conclusions of Malthus.

As he has fallen into the most simple errors in his adverse comments upon Malthus, it may be as well to state with greater precision the factors of the problem, thus:

P.—Actual population.

I.—Natural tendency to increase.

(a) At its maximum in an ideal state of perfect health, virtue, peace, and prosperity.

(b) At its minimum when the opposite of this state obtains.

T.—Natural limit of life; death at extreme old age.

C.—Checks, cutting off life before the healthy limit of life has been reached, among which are prominent:—

(a) Competition of other forms of animal life—zymotic diseases, parasites, attacks by beasts of prey, etc.

* *An Essay on the Principle of Population*. Malthus. (2 vols. London, 1826.)

- (b) Insufficiency of food or famine, whether from seasonal influence, poor soil, climate, ignorance, wilful waste, or improvidence.
- (c) Violence, wars, murders, accidents, physical causes, such as earthquakes or volcanic outbursts, cannibalism, infant and senile murder, massacre.
- (d) Diseases, whether due to ignorance, vice, human neglect of hygiene, climate, cosmical influences, etc.
- (e) Diseases due to the tendency of civilised communities to aggregate in dense numbers, as in cities and towns.
- (f) Misery the close attendant of these evils.

M.—Moral restraint operating upon I.

E.—Means of subsistence, varying with season, but increased absolutely by numbers and increasing knowledge of natural resource; the ratio per individual, however, gradually lessening as the poorer lands and waters are invaded by swelling numbers.

F.—The absolute limit when a greater density for each square mile of the earth's surface is reached by removal or the minimising of all checks.

G.—The final stage, the world peopled to its full limit, and the struggle for existence only permitting a perpetuation of the maximum population at F by the effects of T, and the failure of either in any degree, again re-introducing of necessity checks C, *a, b, c, d, e*, and so producing a decline in population, although the natural tendency (I) to multiply may still be conceived to be as vigorous and prolific as at the first.

When Malthus affirmed that the ratio of increase of population advanced faster than the ratio of increase of means of subsistence, he never stated or conceived that population could actually outstrip the means of subsistence as interpreted and discussed by Mr. Henry George (p. 17, book ii.), and hence the whole of Mr. George's citations and reasonings are either fallacious, or they never touch upon the real causes at the root of Malthus' problem. That there is a thorough misconception on the part of Mr. George is clearly proved by the following quotation from Malthus (p. 243, vol. ii. *Malthus on Population*): "According to the principles of population the human race has a tendency to increase faster than food. It has, therefore, a constant tendency to people a country fully

up to the limits of subsistence (F or G), but by the laws of nature it can never go beyond them, meaning, of course, by these limits the lowest quantity of food which will maintain a stationary population. Population, therefore, can never, strictly speaking, precede food." This clear expression on the part of Malthus casts aside the whole of Mr. George's ratiocinations as worthless. His inability to grasp the most important elements of the problem is still further made manifest by his query, p. 17, "How is it, then, that this globe of ours, after all the thousands, and it is thought millions, of years, that man has been upon the earth, is yet so thinly populated?"

I can hardly conceive that a man of Mr. George's intelligence could put forward such a plea in proof of his contention that the natural tendency of population (I) is not towards an increase in the direction of the limits of subsistence.

His query indicates unmistakably that he confounds the product with the ever-varying factors *plus* and *minus* I, T, and C, which make the product (P). There is no argument necessary to show the absurdity of ignoring the value and tendency of I, because the product P does not disclose a similar value and tendency.

For example, the query entirely ignores the whole burden of Malthus' problem by the effects of the checks T and C. The mere fact, notwithstanding the powerful influence checks T and C, which have always been in operation—the human race is now, after a million years, still vigorous, and numbers over 1,480 million souls, is in itself the strongest proof that the natural tendency to increase has been the powerful influence counteracting the terrible effects of C, which we too well know have always exerted a most powerful and dire influence in preventing a large increase of population.

The fallacy of Mr. George's arguments is more clearly appreciated by stating the problem thus:

Let. I.—Natural tendency to increase (birth rate).

D.—Actual rate of increase or decrease of population (a) surplus of births over deaths; (b) stationary state, etc.; (c) surplus of deaths over births.

T.—Death as the full termination of a natural healthy life
C.—Death from preventible causes } Death Rate.

M.—Moral influence lowering the value of I.

S.—Prosperity heightening the effect of I.

P.—The result upon the population (a) increase; (b) stationariness; (c) decline.

D.—The actual surplus (*a*); stationariness (*b*); decline (*c*) per year.

1. When $I + S - M$ exceeds $T + C$, the result will be $P a$ or $D a$, or an increase of population.
2. When $I + S - M$, only equals $T + C$, the result will be $P b$ or $D b$, or a stationary state of population.
3. When $I + S - M$ falls below $T + C$, the result will be $P c$ or $D c$, or a decline in population, caused by the checks being greater than the birth rate.

What folly, therefore, to conceive a stationary state of population as being due to the lowered absolute influence of I alone, when the same result, according to our experience, based upon the vital statistics of all countries, is due rather to the increased value of C , the root evil, which Malthus wished to see eliminated.

That a high death rate has a greater influence than a low birth rate in diminishing the surplus of births over deaths is easily proved by reference to vital statistics—our only guide in such matters. For example, take the case of Norway and Spain and Hungary for the year 1885.

	$I + S - M$	$C + T$	Da
	Birth rate per 1000 persons.	Death rate per 1000 persons,	Surplus of births over deaths per 1000 persons.
Norway ...	30.9	17.1	13.8
Spain ...	36.6	30.6	6.0
Hungary ...	45.3	32.6	12.7

No better example from actual facts could be obtained to show that the increase of disease and misery, as shown by the death rate $C + T$ has more influence in lowering the value of $B a$, or surplus of births over deaths, than the lowering of the rate of births; for Norway's actual rate of increase is higher than that of Spain and Hungary respectively by 7.8 and 1.1 per 1,000 persons; although its birth rate is actually lower than in these countries by 5.7 and 14.4 per 1,000 respectively. In a healthy, happy, prosperous, and peaceful country, the actual rate of increase is invariably high, due to a high birth rate and a low death rate.

In an unhealthy, miserable and savage society, the tendency, while these conditions last, is invariably shown in a higher death than birth rate, resulting in a positive decline in population.

It is clear, therefore, that when population is declining it is rather because misery, disease, and vice have abnormally

raised the death rate higher than the birth rate, and not because of any material tendency to a decline in the birth rate.

While there are different stages of civilisation in existence, over-population is a relative term applicable to the particular country, and not an absolute quantity to be determined by an absolute number of persons to a given area as most erroneously indicated by Mr. George. This is clear to any one who studies the civilisation and the sanitary state of different countries.

When peoples who have attained to the same state of civilisation are so situated that the struggle for existence is made lighter for a given community by local causes, such as may be seen in the comparison between the Australian colonies and the older countries of Europe—then, the increased prosperity, the diminution of competition for labour, the increased health due to the smaller density of population, and other advantages—climate not being too unequal—would show such an improvement in the actual rate of increase from natural causes alone that their effect is significant and instructive. Thus, although the actual rate of increase in the colonies, during many years, is equal to about 20·05 per 1,000 (not including the effects of immigration) or about 10 per 1,000 above the rate of Europe, nevertheless, its average birth rate is only about 1·5 per 1,000 higher. This again, forcibly proves that the higher rate of actual increase to population is due mainly to favourable circumstances lowering checks C, or deaths from preventible causes. These illustrations by explicit reference to actual facts entirely overthrow the arguments of Mr. George, which solely confine attention to one of the two great factors in the problem relating to the causes of the increase, stationariness, or decline in the population of different countries. Malthus was not so visionary as to expect the entire elimination of any of the factors. He only hoped to regulate population in relation to means of subsistence, by the substitution of an increased power of check M., in place of the terrible check C. He conceived that as man grew in knowledge and dignity, he might be able by degrees to lower the terrible influence of C, thus favouring the state P a; the latter being prevented from again re-introducing the evil effects of C by the substitution of influences increasing the power of the superior central check M. If the check C now ruthlessly in operation be removed altogether or reduced to a minimum—a most desirable thing for its own sake—it is certain that the geometrical increase of I would produce a maximum effect as D a, and this would sooner or later, if unchecked, over-populate the whole earth. No matter in what degree the final stage

was delayed by increased knowledge and productiveness, fairer modes of wealth distribution, and the gradual spread over all habitable areas; or hastened by exhaustion of existing sources of wealth, or a state of anarchy; the stage would in effect be often reached in particular isolated districts, although not in all, by reason of human ignorances, jealousies, prejudices, not to mention lower types of human beings unfitted for the reception of a higher civilisation.

Had it not been for the fortunate discovery of the steam-engine, the perfecting of means of transport, and the discovery of new fertile continents (Australia and America) thinly populated, opening out vast additional sources of production and affording relief to the pressure of crowded European centres, it is certain the state of Europe would be very different at the present hour; and the check C would long ere this have reduced existing crowded centres to half their present numbers. What would England do with her present population (37 millions) if America and Australia were no longer open to her emigrants and no longer furnished food and other products. England is now a striking example of a country whose population has rapidly outstripped the means of subsistence so far as local supply of food is concerned.

You will readily conceive, therefore, that the complicated problem of Malthus is, — the elimination of C altogether, or, as far as it lies within man's control, with the substitution of an increased power of M, only when deemed to be absolutely necessary to banish the dire influence of C. Both Malthus and Mr. Henry George agree in desiring the elimination of check C, but Malthus showed that this constant effect, due to vice, ignorance, disease, and misery, could only be finally grappled with effectually, by never allowing P, or density of population, to press too strongly on the means necessary to preserve a population in a healthy and happy state, and this could not be practically effected without some such controlling influences as M. The nobleness of Malthus' aims, and the problems which he endeavoured to grapple with, are altogether misconceived by Mr. George and other opponents. Some (might I not add the popular view) even maliciously or carelessly identify the Malthusian problem with the revolting physical check of Condorcet and others; and also of the view which rests in considering vice and misery as necessary evils. This proves that such people have not honestly studied the views of this much-wronged philanthropist. This is indisputably proved by the following quotation from his writings, pp. 478, 479: "Vice and misery, and these alone, are the evils which it has been my great object to contend against. I have expressly proposed moral

restraint (M) as their rational and proper remedy; and whether the remedy be good or bad, adequate or inadequate, the proposal itself and the stress which I have laid upon it is an incontrovertible proof that I never can have considered vice and misery as themselves remedies." In connection with these unfair charges urged by a Mr. Graham, he, in a dignified rejoinder, maintains "It is therefore quite inconceivable that any writer with the slightest pretension to respectability should venture to bring forward such imputations, and it must be allowed to show either such a degree of ignorance, or such a total want of candour, as utterly to disqualify him for the discussion of such subjects." And with respect to charges identifying his view with the restraints prescribed by Condorcet, he distinctly affirms, "I have never adverted to the check suggested by Condorcet without the most marked disapprobation. Indeed, I should always particularly reprobate any artificial and unnatural modes of checking population on account of their immorality and their tendency to remove a necessary stimulus to industry . . . the restraints which I have recommended are quite of a different character. They are not only pointed out by reason and sanctioned by religion, but tend in the most marked manner to stimulate industry. It is not easy to conceive a more powerful encouragement to exertion and good conduct than the looking forward to marriage as a state peculiarly desirable, but only to be enjoyed in comfort by the acquisition of habits of industry, economy, and prudence, and it is in this light I have always wished to place it." How clearly and nobly Malthus explains his check of moral restraint is a matter which ought to leave no doubt of the purity and nobleness of his views, whatever doubts may remain as regards the efficacy of the moral check in itself. The possibility of the check, too, pre-supposes the general possession of moral strength sufficiently adequate, not merely during large intervals of time, but at all times; for the effects of opposing passion might wreck its efficacy at any moment if we do not contemplate the superior strength and continuous exertion of the higher moral virtue.

I think I have in these observations fairly vindicated the nobility of Malthus' ideal, however we may demur to it as regards adequacy. It has also been clearly shown that the problem is a serious one; and individuals, and the poorer classes often reach the limit of the means of subsistence long before society as a whole feels its pressure. How are we to eliminate the elements of disease, vice, and misery which at present form the only check (C) against over-population in crowded centres without substituting some adequate check of a superior kind. This is the problem of Malthus. Can you answer it?