

TWO LECTURES  
ON  
POPULATION,  
DELIVERED BEFORE  
THE UNIVERSITY OF OXFORD,  
IN  
EASTER TERM, 1828.  
BY  
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POLITICAL ECONOMY.  
TO WHICH IS ADDED, A  
CORRESPONDENCE BETWEEN THE AUTHOR  
AND THE  
REV. T. R. MALTHUS.

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## ADVERTISEMENT.

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MR. MALTHUS has honoured me with a correspondence, which he has permitted me to append to these Lectures.

I feel the disadvantageous contrast to which I expose my own compositions by their juxta-position to those of our most eminent living philosophical writer; but I also feel that nothing could justify me in withholding from the public the instruction contained in Mr. Malthus's Letters.

## LECTURE I.

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### POPULATION.

IN the present and the following Lecture I propose to consider the subject of Population. A subject of which the details are almost endless, but the general principles few and plain. It is indebted probably to the latter circumstance for the degree in which it has attracted the public attention. The doctrines of rent, of value, and of money, are each as important as that of population, but they require the use of highly abstract terms, and depend on long chains of reasoning. They have, therefore, been avoided or neglected by many who are familiar, or suppose themselves to be familiar,

with the simple laws of population. In my introductory Lecture I sketched what appeared to me an outline of those laws in the following proposition :—“ That the population of a given district is limited only by moral or physical evil, or by deficiency in the means of obtaining those articles of wealth ; or, in other words, those necessaries, decencies, and luxuries, which the habits of the individuals of each class of the inhabitants of that district lead them to require.”

The only modification which subsequent reflection induces me to apply to this proposition is, to substitute for the word “ deficiency,” the words, “ the apprehension of a deficiency.” My reasons for this substitution are: first, that the actual deficiency of necessaries is a branch of physical evil ; and, secondly, that it is not the existence of a deficiency, but the *fear* of its existence which is the principal check to population, so far as necessaries are concerned, and the sole check as respects decencies and luxuries.

But before I take this proposition in detail,

I feel that I ought to explain, as precisely as I can, what I mean by the words, necessaries, decencies, and luxuries ; terms which have been used ever since the moral sciences first attracted attention in this country, but have never, within my knowledge, been defined.

It is scarcely necessary to remind you, that they are relative terms, and that some person must always be assigned, with reference to whom a given commodity or service is a luxury, a decency, or a necessary.

By *necessaries* then, I express those things, the use of which is requisite to keep a given individual in the health and strength essential to his going through his habitual occupations.

By *decencies*, those things which a given individual must use in order to preserve his existing rank in society.

Every thing else of which a given individual makes use ; or, in other words, all that portion of his consumption which is not essential to his health and strength, or to the preservation of his existing rank in society, I term *luxury*.

It is obvious, that when consumed by the inhabitants of different countries, or even by different individuals in the same country, the same things may be either luxuries, decencies, or necessaries.

Shoes are necessaries to all the inhabitants of England. Our habits are such, that there is not an individual whose health would not suffer from the want of them. To the lowest class of the inhabitants of Scotland they are luxuries. Custom enables them to go bare-foot without inconvenience and without degradation. When a Scotchman rises from the lowest to the middling classes of society they become to him decencies. He wears them not to preserve his feet, but his station in life. To the highest classes, who have been accustomed to them from infancy, they are as much necessaries as they are to all classes in England. To the higher classes in Asia wine is a luxury, and tobacco a decency. In Europe it is the reverse. The Asiatic drinks, and the European smokes, not in obedience but in oppo-

sition both to the rules of health, and to the forms of society. But wine in Europe and the pipe in Asia are among the refreshments to which a guest is entitled, and which it would be as indecent to refuse in the one country as to offer in the other.

It has been said that the coalheavers and lightermen, and some others among the hard working London labourers could not support their toils without the stimulus of porter. If this be true, porter is to them a necessary. To all others it is a luxury. A carriage is a decency to a woman of fashion, a necessary to a physician, and a luxury to a tradesman.

The question whether a given commodity is to be considered as a decency or a luxury, is obviously one to which no answer can be given, unless the place, the time, and the rank of the individual using it be specified. The dress which in England was only decent one hundred years ago, would be almost extravagant now; while the house and furniture, which now would afford only decent accommodation to a

gentleman, would then have been luxurious for a peer.

The causes which entitle a commodity to be called a necessary, are more permanent and more general. They depend partly on the habits in which the individual in question has been brought up, partly on the nature of his occupation, on the lightness or the severity of the labours and hardships that he has to undergo, and partly on the climate in which he lives.

Of these causes I have illustrated the two first by the familiar examples of shoes and porter. But the principal cause is climate. The fuel, shelter, and raiment which are essential to a Laplander's existence, would be worse than useless under the tropics. And as habits and occupations are very slowly changed, and climate suffers scarcely any alteration, the commodities which are *necessary* to the different classes of the inhabitants of a given district, may, and generally do, remain for centuries unchanged, while their decencies and luxuries are continually varying.

To recur, however, to my original proposition. I have stated, that the population of a given district is limited only by moral or physical evil, or by the apprehension of a deficiency of necessaries, decencies, or luxuries.

It is now generally admitted, indeed it is strange that it should ever have required to be pointed out, that every species of plant, or animal, which is capable of increase, either by generation, or by seed, must be capable of a constantly increasing increase; every addition to its numbers being capable of affording a source of still further additions, or, in other words, that wherever there is a capacity of increase, it must be a capacity of increase, not by mere addition, but by multiplication, or to use the shorter form in which the proposition is usually stated, not in an arithmetical, but in a geometrical ratio. The rate at which any species of plant, or animal, is capable of increasing, must depend on the average power of reproduction, and the average length of

existence of the individuals of which it is constituted. Wheat, we know, is an annual, and its average power of reproduction perhaps about six for one. On that supposition the produce of a single acre might cover the globe in fourteen years.

The rate at which the human race is capable of increasing, has been determined by observation. It has been ascertained, that for considerable periods, and in extensive districts under temperate climates, it has doubled every twenty-five years.

The power of reproduction in the human race, must, under similar climates, be always and every where the same. I say, under similar climates, because the acceleration of puberty which has been sometimes observed in tropical countries, unless checked, as I believe to be the case, by an earlier cessation of child-bearing, would occasion increased fecundity. And the United States of America, the districts in which the rate of increase which I have mentioned has been most clearly ascer-

tained, are not remarkable for the longevity of their inhabitants. We may infer, therefore, that such, at least, is the average power of reproduction, and average duration of life in the individuals constituting the human species, that their number may double every twenty-five years. At this rate the inhabitants of every country would, in the course of every five centuries, increase to above a million times their previous number. At this rate, the population of England, would, in five hundred years, exceed twelve millions of millions. A population which would approach the proportion of a family to every square inch of ground.

Such being the human powers of increase, the question is, by what checks is their expansion controlled? How comes it, that the population of the world, instead of being now a million times as great as it was five hundred years ago, apparently has not doubled within that time, and certainly has not quadrupled?

Mr. Malthus has divided the checks to po-

pulation into the preventive and the positive. The first are those which limit fecundity, the second, those which decrease longevity. The first diminishes the number of births, the second increases that of deaths. And as fecundity and longevity are the only elements of the calculation, it is clear that Mr. Malthus's division is exhaustive.

The positive check to population is physical evil. The preventive checks are promiscuous intercourse, and abstinence from marriage. The first is moral evil; the second is, with very few exceptions, so few that they do not affect the result, founded on an apprehended deficiency of necessaries, decencies, or luxuries, in other words, on prudence. All the preventive and positive checks, may, therefore, be distributed under prudence, moral evil, and physical evil. In the present lecture, I shall consider the positive, in the subsequent lecture the preventive, checks.

We have seen that the positive checks to population include all the causes which tend,

in any way prematurely, to shorten the duration of human existence; such as unwholesome occupations, severe labour, or exposure to the seasons, bad or insufficient food or clothing, bad nursing of children, excesses of all kinds, the corruption of the air from natural causes, or from large towns, wars, infanticide, plague, and famine. Of these, some arise from the laws of nature, and others from the crimes and follies of man; all are felt in the form of physical evil, but the latter are the result of moral evil.

The final and irresistible mode in which physical evil operates, is the want of the necessaries of existence; death produced by hardship or starvation. This is almost the only check to the increase of the irrational animals, and as man descends towards their condition, he falls more and more under its influence. In the lowest savage state it is the principal and obvious check; in a high state of civilization it is almost imperceptible. But it is unperceived only in consequence of its substitutes.

We have seen that, as a general rule, additional labour employed in the cultivation of the land within a given district, produces a less proportionate return. And we have seen that such is the power of reproduction and duration of life in mankind, that the population of a given district is capable of doubling itself at least every twenty-five years. It is clear, therefore, that the rate at which the production of food is capable of being increased, and that at which population, if unchecked, would increase, are totally different. Every addition made to the quantity of food produced, makes, in general, a further addition more difficult. Every addition to the existing population, diffuses wider the means of still further addition. If neither evil, nor the fear of evil, checked the population of England, it would amount in a century to above two hundred millions. Supposing it possible that we might be able to raise, or to import the subsistence of two hundred millions of people, is it possible that a hundred and twenty-five years hence we should be able to

support four hundred millions? or in a hundred and fifty years, eight hundred millions? It is clear, however, that long before the first century had elapsed—long before the period at which, if unchecked, we should have attained two hundred millions, no excellence in our institutions, or salubrity of climate, or unremitting industry, could have saved us from being arrested in our progress by a constantly increasing want of subsistence. If all other moral and physical checks could be got rid of, if we had neither wars, nor libertinism, if our habitations and employments and habits were all wholesome, and no fears of indigence, or loss of station prevented or retarded our marriages, famine would soon exercise her prerogative of controlling, in the last resort, the multiplication of mankind.

But though it be certain that the absence of all other checks would only give room for the irresistible influence of famine, it is equally certain that such a state of things never has existed, and never will exist.

In the first place, the absence of all the other moral and physical evils which retard population, implies a degree of civilization not only high, but higher than mankind have as yet enjoyed. Such a society cannot be supposed to want sagacity sufficient to foresee the evils of a too rapidly increasing population, and prudence sufficient to avert them, especially as that prudence might be exercised even by those who had no thought of public advantage, no idea of abstract reasoning, no care but for their private welfare. In such a state, the preventive check would be in full operation, and its force is quite sufficient to render unnecessary even the approach of any positive check.

And secondly, it is impossible that a positive check so goading and so remorseless as famine should prevail without bringing in her train all the others. Pestilence is her uniform companion, and murder and war are her followers. Whole bodies of men will not tamely lie down to die, and witness, while they are perishing, their wives and children and parents starving

around them. Where there is a diversity of fortunes, famine generally produces that worst form of civil war, the insurrection of the poor against the rich. Among uncivilized nations it produces those tremendous hostile migrations in which a whole people throws itself across a neighbouring frontier, and either perishes in the attempt to obtain a larger or a more fertile territory, or destroys the former possessors, or drives them out to be themselves aggressors in turn.

In fact, almost all the positive checks by their mutual reaction have a tendency to create and aggravate one another : and the destruction of those who perish immediately by one, may generally be found to have been remotely occasioned by one or more of the others. Among nations imperfectly civilized, the widest and most wasting of the positive checks is predatory war. A district exposed to it must suffer in their full force all the others. Mere fear of invasion must keep them pent up in crowded and consequently unwholesome towns ; it must

confine their cultivation to the fields in the immediate neighbourhood of those towns; and if it do not destroy, must so much impede their commerce, as to render it useless as a source of subsistence. And when the invasion does come, it is often followed by the complete extirpation of the invaded community. This is the check which has kept the whole of Africa, the western parts of Asia, and the southern districts of America in their comparatively unpeopled state.

In his passage from Abyssinia to Sennaar, Bruce crossed the territory of Atbara, subject to the incursions of the Daveina Arabs. The whole country seems to have been a scene of desolation. He passed a night at Garigara, a village of which the crops had been destroyed a year before. The inhabitants had all perished with hunger, and their remains were unburied and scattered over the ground where the village had stood. The travellers encamped among the bones: no space could be found free from them. His next stage was Teawa. "Its con-

sequence," he observes, "was to remain only till the Daveina Arabs should resolve to attack it; when its corn-fields being burnt and destroyed in a night by a multitude of horsemen, the bones of its inhabitants, scattered upon the earth, would be all its remains, like those of the miserable village of Garigara."

Among the positive checks to the population of uncivilized, or partially civilized nations, the next in importance to war is famine.

I have already observed, that there is so much reaction among the positive checks, that one of them alone is seldom experienced. But when a people depends principally on that subsistence which is most abundant, (and such is the case among the nations in question,) the mere variations of the seasons must, from time to time, produce destructive want. Where society is better constituted, the evil of these variations is mitigated, partly from the superfluity of the more opulent classes, partly by importation, and principally by a recurrence to a less expensive diet; but in a barbarous, and

consequently a poor and uncommercial country, they are the most frightful forms of national calamity. The histories which we possess of such countries, always particularize periods of dearth as amongst the most memorable events recorded. They seem in a constant oscillation, between the want endured by a population that has increased to the utmost limits of subsistence, and the plenty enjoyed by the survivors, after that population has been thinned by war, pestilence, or famine.

The remainder of the positive checks, such as infanticide, and unwholesomeness of climate, habits, or situation, appear rather to act as substitutes for the preventive checks, than to produce any actual diminution, or prevent any actual increase.

Infanticide has been supposed to be rather favourable to population, by opposing to the prudential check to marriage a mode of disposing of its offspring, which may appear easy in contemplation, but from which the feelings of the parents eventually recoil. The un-

wholesomeness of some districts is unquestionably such, as to keep them totally unpeopled, or inhabited by strangers, whose numbers must be constantly recruited. Such, for instance, appears to be the case in the most unhealthy parts of Italy; and such is the case with large manufacturing towns, even in the most favourable climates, unless great skill and great care are directed towards their cleanliness and ventilation. And in a newly colonized country, like the back settlements in America, where the abundance of land, and the constantly increasing means of subsistence, would render any preventive check unnecessary, any cause diminishing longevity must retard increase. But, with these exceptions, unhealthiness rather causes the successive generations of mankind to pass more rapidly away, than diminishes their actual number. In some of the healthiest districts of Switzerland, the average annual mortality does not exceed one in fifty; in many of the marshy villages of Holland it exceeds one in twenty-three. But

it would be rash to expect the population of the former to be more dense, or to increase more rapidly, than that of the latter. The case is, in fact, the reverse. In the Swiss villages of which I have been speaking, the births are as rare as the deaths: the population is thin and stationary. Among the Dutch the births somewhat exceed the deaths: the population is dense, and is increasing. It is obvious indeed, that the proportion of annual births to the whole number of people being given, the rate of increase must depend on the proportion borne by the annual deaths. And the proportion of deaths to the whole number of people being given, it must depend on the proportion borne by the births; or, to use a shorter form of expression, given the longevity, it must depend on the fecundity; and given the fecundity, it must depend on the longevity. If both are given, the rate of increase may be calculated; but from only one the conclusion must be the disjunctive. If the annual births bear a large proportion to the existing

number of people, we may conclude either that the population is rapidly increasing, or that the positive checks are in powerful operation. On the other hand, from a small proportion of annual deaths may be inferred either a rapid increase of numbers, or a strong prevalence of the preventive checks. The average duration of life in England is greater than in the United States of America; but so much greater is the force of the preventive checks, that the rate of increase in America is double that in England. Again, the average duration of life in the Swiss villages that I have before referred to, is the same as it is in England; but the preventive check in England, strong as it appears when compared with its force in America, is so much weaker than it is in some districts in Switzerland that with the same annual mortality the population is in the one country stationary, in the other rapidly progressive.

But although the average longevity in a country affords no decisive evidence as to the increasing or stationary number of its inhabi-

tants, it is among the least deceitful tests of their prosperity: far less so than that on which statesmen formerly relied, the number of births. There is not an evil, moral or physical, which has not a tendency, directly or indirectly, to shorten life, but there are many which have a direct tendency to increase fecundity. The extraordinary duration of life in England, exceeding, as it does, the average of any other equally extensive district, is a convincing proof of the general excellence of our climate, our institutions, and our habits.

In my next Lecture I shall consider the preventive checks to population.

## LECTURE II.

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### POPULATION.

I OBSERVED in my last Lecture that the expansive power of population is such that it necessarily and inevitably will be restrained by some check, positive or preventive. I then considered the positive checks, and found them to consist of the different modifications of physical evil. In the present lecture, I propose to consider the preventive checks. We have seen that they are promiscuous intercourse and abstinence from marriage.

The first does not appear to me to be of sufficient importance to require much consider-

ation. It is said to produce some effect in checking the increase of the higher classes in Otaheite, and in some of the other South Sea Islands; and it appears to produce the same effect to a considerable extent among the West Indian Negroes. But the nobility of the South Seas scarcely deserve to be separately considered. And where the other forms of moral and physical evil are accumulated as they are among the West Indian slaves, it is probable that the removal of this obstacle alone would do little to facilitate their increase.

But with these exceptions, there are scarcely any females whose fecundity is prevented or diminished by promiscuous intercourse, except those unhappy individuals whose only trade is prostitution. And they form so small a proportion of the population of the whole world, that the check to population occasioned by their unfruitfulness may safely be disregarded.

The only remaining check is abstinence from marriage. You are of course aware that by the word "marriage," I mean to express not

the peculiar and permanent connexion which alone, in a Christian country, is entitled to that name: but any agreement between a man and woman to cohabit exclusively for a period, and under circumstances likely to occasion the birth of progeny. I observed, in my last Lecture, that abstinence from marriage is almost uniformly founded on the apprehension of a deficiency of necessaries, decencies, or luxuries, or, in other words, on prudence. Some cases certainly occur in which men remain unmarried, although their fortunes are so ample that the expenses of a family would be unperceived. But the number of persons so situated is so small, that they create an exception which would scarcely deserve attention, even if this conduct were as common among them, as it is in fact rare.

We shall scarcely, therefore, be led into error if, in considering the preventive checks, we confine our attention to prudence, and assume that, as nothing but physical evil diminishes the longevity of mankind, nothing but an ap-

prehended deficiency of luxuries, decencies, or necessaries, prevents their fecundity.

The check from an apprehended deficiency of luxuries is but slight. The motives, perhaps I might say the instincts, that prompt the human race to marriage, are too powerful to be much restrained by the fear of losing conveniences, unconnected with health or station in society.

The fear of losing decencies, or perhaps more frequently the hope to acquire, by a longer accumulation during celibacy the means of purchasing the decencies of a higher social rank, is a check of far more importance. Want of actual necessaries is seldom apprehended by any except the poorest classes in any country. And in England, though it sometimes is felt, it probably is anticipated by none. When an Englishman stands hesitating between love and prudence, a family really starving is not among his terrors. Against actual want he knows that he has the fence of the poor laws. But, however humble his desires,

he cannot contemplate, without anxiety, a probability that the income which supported his social rank while single, may be insufficient to maintain it when he is married; that he may be unable to give to his children the advantages of education which he enjoyed himself; in short, that he may lose his caste. Men of more enterprise are induced to postpone marriage, not merely by the fear of sinking, but also by the hope, that in an unencumbered state they may rise. As they mount, the horizon of their ambition keeps receding, until sometimes the time has passed away for realizing those plans of domestic happiness which probably every man has formed in his youth.

There are few triter subjects of declamation than the contrast between ancient simplicity and modern luxury. Few virtues, however useful, have received more applause than the contented and dignified poverty, the indifference to display, and the abstinence from unnecessary expense which all refined nations at-

tribute to their ancestors. Few vices, however mischievous, have been more censured than the ostentatious expenditure which every succeeding generation seems to consider its own peculiar characteristic.

It certainly appears, at first sight, that habits of unnecessary expense, as they have a tendency to diminish the wealth of *an individual*, must have the same effect on the wealth of a nation. And, separately considered, it appears clear that each act of unproductive consumption, whatever gratification it may afford to the consumer, must be *pro tanto* detrimental to the rest of the community. It is so much taken from the common stock and destroyed. And, as the national capital is formed from the aggregate savings of individuals, it is certain, that if each individual were to expend to the utmost extent of his means, the whole capital of the country would be gradually wasted away, and general misery would be the result. But it appears to me equally certain,

that if each individual were to confine his expenditure to mere necessaries, the result would be misery quite as general and as intense.

We have seen that the powers of population, if not restrained by prudence, must inevitably produce almost every form of moral and physical evil. In the case which I am supposing, the wants of society would be confined to the food, raiment, and shelter, essential to the support of existence. And they would all consist of the cheapest materials. It may be worth while to trace some of the consequences which would follow, if such a change of the objects of human desire could take place in England.

At present the cultivation of the land does not employ more than a third of our population, and a great part of the labourers so employed are producers of luxuries. Indeed, as potatoes afford a food, five or six times as abundant as corn, and more than twenty times as abundant as meat, and as far as can be judged from the appearance and powers of

the lower Irish, quite as wholesome, meat and corn may be considered as decencies or luxuries to the extent in which they are more expensive than potatoes. Nor is our present mode of cultivation directed to the obtaining the largest possible return. The object is always to obtain the largest possible return that is consistent with profitable farming, but in the pursuit of this object, quantity of produce is often sacrificed to economy of labour or time.

If there were no desire for luxuries, both the existing partition of the land and the existing division of labour would be varied. No family would wish to occupy more land than the small spot necessary to afford them potatoes and milk; and supposing them to give to it the utmost nicety of garden cultivation, its management would still leave them time to produce the coarse manufactures necessary for their own use. The whole of our population would be agricultural. At present the four millions so employed, although their

labour is far from being directed to the production of the greatest possible amount, provides subsistence for the whole twelve millions. If all were so employed, and if quantity of subsistence were their sole object, it is probable, that in ordinary seasons the soil of England could feed at least one hundred millions of people. And in the absence of any checks more powerful than those experienced in the United States of America, our population might, in seventy-five years, amount to one hundred millions. Indeed, it is probable, that under the circumstances which I am supposing, the increase in England would be, for a considerable time, rather more rapid than that which has taken place in America. Preventive checks would not exist; marriage could not be hindered or even delayed by prudence, since there could be no reason to anticipate want; the habit of early marriages would put an end to profligacy; and as our habits would be eminently healthy, the positive checks which even now affect us less than

they do the inhabitants of America, or indeed of any other extensive district, would be reduced to their minimum.

So far the picture is rather pleasing; it exhibits a nation, not rich certainly, nor refined, but supporting a very numerous population in health and strength, and in the full enjoyment of the many sources of happiness connected with early marriage.

Supposing our population to have increased, as would be the case by the beginning of the next century, to one hundred millions, about an acre and a half would be allotted to each family; and, as I before observed, I think that allotment might be sufficient. But it can scarcely be supposed, that three roods would be enough, which would be their allotment in twenty-five years more, or granting that to be enough, it cannot be supposed that at the end of a further term of doubling a family of four persons could live on the produce of a rood and a half.

Sooner or later, therefore, the increase must

be checked, and we have seen that prudence is the only check that does not involve vice or misery. But such is the force of the passions which prompt to marriage, and such is each man's reliance on his own good conduct, and good fortune, that the evils, whatever they may be, the apprehension of which forms the prudential check, are frequently incurred. Where the evil is the loss of luxuries, or even of decencies, it is trifling in the first instance, and bearable in the second. But in the case which I am supposing, the only prudential check would be an apprehended deficiency of necessaries; and that deficiency, in the many instances in which it would be incurred, would be the positive check in its most frightful form. It would be incurred not only in consequence of that miscalculation of chances to which all men are subject, and certainly those not the least so, who are anxious to marry, but through accidents against which no human prudence can guard. A *single* bad harvest may be provided against, but a succession of

unfavourable seasons, and such successions do occur, must reduce such a people to absolute famine. When such seasons affect a nation indulging in considerable superfluous expenditure, they are relieved by a temporary sacrifice of that superfluity. The grain consumed in ordinary years by our breweries and distilleries is a store always at hand to supply a scarcity, and the same may be said of the large quantity of food used for the support of domestic animals, but applicable to human subsistence. To these resources may be added the importation from abroad of necessaries instead of luxuries, and the materials of luxury; of corn, for instance, instead of wine.

It appears, therefore, that habits of considerable superfluous expenditure afford the only permanent protection against a population pressing so closely on the means of subsistence, as to be continually incurring the misery of the positive checks. And as these habits can exist only in an opulent society, it appears to me equally clear, that as a nation advances

in opulence, the positive checks are likely to be superseded by the preventive. If this be true, the evil of a redundant population, or to speak more intelligibly, of a population too numerous to be adequately and regularly supplied with necessaries, is likely to diminish in the progress of improvement. As wealth increases, what were the luxuries of one generation become the decencies of their successors. Not only a taste for additional comfort and convenience, but a feeling of degradation in their absence becomes more and more widely diffused. The increase, in many respects, of the productive powers of labour, must enable increased comforts to be enjoyed by increased numbers, and as it is the more beneficial, so it appears to me to be the more natural course of events, that increased comfort should not only accompany, but rather precede, increase of numbers.

But I must admit that this is not the received opinion. The popular doctrine certainly is, that population has a tendency to

increase beyond the means of subsistence, or, in other words, that, whatever be the existing means of subsistence, population has a tendency fully to come up with them, and even to struggle to pass beyond them, and is kept back principally by the vice and misery which that struggle occasions. I admit that population has the power (considered abstractedly) so to increase, and I admit, that, under the influence of unwise institutions, that power may be exercised, and the amount of subsistence bear a smaller proportion than before to the number of people; and that vice and misery, more or less intense and diffused, according to the circumstances of each case, must be the result. What I deny is, that, under wise institutions, there is any *tendency* to this state of things. I believe the tendency to be just the reverse.

As the subject is one of great interest and importance, I will lay before you, to be compared with my own views, those of Mr. Malthus, Mr. M'Culloch, and Mr. Mill.

“ There are few states,” observes Mr. Malthus, “ in which there is not a constant effort in the population to increase beyond the means of subsistence. This constant effort as constantly tends to subject the lower classes of society to distress, and to prevent any great permanent melioration of their condition. These effects, in the present state of society, seem to be produced in the following manner. We will suppose the means of subsistence in any country to be just equal to the easy support of its inhabitants. The constant effort towards population, which is found to act even in the most vicious societies, increases the number of people before the means of subsistence are increased. The food, therefore, which before supported eleven millions, must now be divided among eleven millions and a half. The poor, consequently, must live much worse, and many of them be reduced to severe distress. The number of labourers also being above the proportion of work in the

“ market, the price of labour must tend to fall,  
 “ while the price of provisions would, at the  
 “ same time, tend to rise. The labourer,  
 “ therefore, must do more work, to earn the  
 “ same as he did before. During this season  
 “ of distress the discouragements to marriage,  
 “ and the difficulty of rearing a family, are so  
 “ great, that the progress of population is re-  
 “ tarded. In the mean time, the cheapness of  
 “ labour, the plenty of labourers, and the ne-  
 “ cessity of an increased industry amongst  
 “ them, encourage cultivators to employ more  
 “ labour upon their land, to turn up fresh soil,  
 “ and to manure and improve more completely  
 “ what is already in tillage, till, ultimately, the  
 “ means of subsistence may become, in the  
 “ same proportion to the population, as at the  
 “ period from which we set out. The situation  
 “ of the labourer being then again tolerably  
 “ comfortable, the restraints to population are  
 “ in some degree loosened; and, after a short  
 “ period, the same retrograde and progressive  
 “ movements, with respect to happiness, are  
 “ repeated.”—*Population*, Book i. Chap 2.

And he afterwards repeats the same doctrine more explicitly in the following words:—

“ According to the principle of population,  
 “ the human race has a tendency to increase  
 “ faster than food. It has, therefore, a con-  
 “ stant tendency to people a country fully up  
 “ to the limits of subsistence; meaning, by  
 “ these limits, the lowest quantity of food which  
 “ will maintain a stationary population.”—  
 Book iii. Chap. 1, Note.

Among the valuable notes which Mr. M'Culloch has appended to his edition of the *Wealth of Nations*, one of the most interesting treats of population: and one of the objects of that note is to show, that the population of the United States of America cannot continue to increase for any very considerable period, at the rate at which it has increased during the last hundred years.

I am perfectly convinced of the truth of this position, and I shall read to you the following extract, not with any intention to oppose Mr. M'Culloch's anticipations as to America, but

because I am anxious to express my dissent to what I conceive to be his general doctrine on the subject of population; and am also anxious, by using his own words, to avoid the chance of misrepresenting them.

“ It may be said, perhaps, that allowance  
 “ must be made for the effects of the improve-  
 “ ments which may be supposed to take place  
 “ in agricultural science in the progress of  
 “ society, or for the possible introduction, at  
 “ some future period, of new and more prolific  
 “ species of crops. But it is easy to see, that  
 “ the influence of such improvements and  
 “ changes must, supposing them to be realized  
 “ in the fullest manner, be of very temporary  
 “ duration; and that it cannot affect the truth  
 “ of the principle, *that the power of increase in*  
 “ *the human species must always, in the long run,*  
 “ *prove an overmatch for the increase in the means*  
 “ *of subsistence.* Suppose, by some extraor-  
 “ dinary improvement, the quantity of food,  
 “ and other articles, required for the subsist-  
 “ ence and accommodation of man, annually

“ produced in Great Britain, were suddenly  
 “ doubled, the condition of all classes being, in  
 “ consequence, signally improved, there would  
 “ be less occasion for the exercise of moral re-  
 “ straint; the period of marriage would there-  
 “ fore be accelerated, and such a powerful  
 “ stimulus would be given to the principle of  
 “ increase, that in a very short period the  
 “ population would be again on a level with  
 “ the means of subsistence; and there would  
 “ also, owing to the change which must have  
 “ been made in the habits of the people, with  
 “ respect to marriage, during the period that  
 “ the population was rising to the level of the  
 “ increased supply of food, be an extreme  
 “ risk, lest it should become too abundant,  
 “ and produce an increased rate of mortality.  
 “ Although, therefore, it is not possible to  
 “ assign any certain limits to the progress of  
 “ improvement, it is, notwithstanding, evident,  
 “ that it cannot continue for any considerable  
 “ period to advance in the same proportion  
 “ that population would advance, supposing

“ food were abundantly supplied. The cir-  
 “ cumstance of inferior lands, which require  
 “ a greater outlay of capital and labour to  
 “ make them yield the same supply as those  
 “ that are superior, being invariably taken into  
 “ cultivation in the progress of society, demon-  
 “ strates, what is otherwise indeed sufficiently  
 “ obvious to every one, that, in despite of im-  
 “ provements, the difficulty of adding to the  
 “ supplies of food is progressively augmented  
 “ as population becomes denser.

“ Mr. Malthus has endeavoured to show,  
 “ that while population has a power to increase  
 “ indefinitely in a geometrical proportion, or in  
 “ the proportion of 1, 2, 4, 8, 16, 32, 64,  
 “ 128, 256, &c., doubling itself every five-  
 “ and-twenty years, the supplies of food and  
 “ other necessary accommodations could not be  
 “ made to increase faster during the same pe-  
 “ riods, than in an arithmetical proportion, or  
 “ in the ratio of the numbers 1, 2, 3, 4, 5, 6, 7,  
 “ 8, &c. But it is impossible to lay down any  
 “ fixed or certain principle with respect to the

“ ratio of the increase of food. I should, how-  
 “ ever, be inclined to think, that the ratio stated  
 “ by Mr. Malthus would be found to be too  
 “ high for countries whose best lands have  
 “ already been brought under tillage. But  
 “ whether Mr. Malthus has over or under  
 “ stated the increase of food, is of no conse-  
 “ quence to the theory of population. It is, at  
 “ all events, unquestionably true on the one  
 “ hand, that an increased difficulty of obtain-  
 “ ing increased supplies of food, though occa-  
 “ sionally obviated for a while by new disco-  
 “ veries and inventions, is uniformly experienced  
 “ according as society advances, and population  
 “ becomes denser; while, on the other hand,  
 “ it is equally true, that the power to produce  
 “ fresh human beings, a power capable of dou-  
 “ bling the population every five and twenty  
 “ years sustains no diminution. And hence it  
 “ results, as was stated at the commencement  
 “ of this note, that the *natural tendency* of po-  
 “ pulation is to outrun production; and that  
 “ if this tendency be not counteracted by the

“ prevalence of moral restraint, it must be  
 “ counteracted by want, misery, and increased  
 “ mortality.”—Vol. iv. p. 133.

Mr. Mill's views are to be found in his discussion of wages. *Principles, &c.* Ch. ii. sec. 2.

“ If it were,” he observes, “ the natural  
 “ tendency of capital” (under which term Mr. Mill designates the instruments of labour, the materials on which they are to be employed, when produced by labour, and the subsistence of the labourer) “ to increase faster than population, there would be no difficulty in preserving a prosperous condition of the people. If, on the other hand, it were the natural tendency of population to increase faster than capital, the difficulty would be very great. There would be a perpetual tendency in wages to fall. The progressive fall of wages would produce a greater and a greater degree of poverty among the people, attended with its inevitable consequences, misery and vice. As poverty and its consequent misery increased, mortality would

“ also increase. Of a numerous family born, a  
 “ certain number only, from want of the means  
 “ of well-being, would be reared. By whatever proportion the population tended to increase faster than capital, such a proportion of those who were born would die: the ratio of increase in capital and population would then remain the same, and the fall of wages would proceed no further. That population *has* a tendency to increase faster than, in most places, capital has actually increased, is proved incontestably, by the condition of the population in most parts of the globe. In almost all countries, the condition of the great body of the people is poor and miserable. This would have been impossible, if capital had increased faster than population. In that case wages must have risen, and higher wages would have placed the labourer above the miseries of want.

“ This general misery of mankind is a fact  
 “ which can be accounted for, upon one of two  
 “ suppositions: either that there is a natural













































