



Man's Mind: Malthus' Missing Mark

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In 1798, Reverend Thomas Malthus anonymously published his most famous work aptly named *An Essay on the Principle of Population*. Within his essay, Malthus purported that the supply of food grows linearly while populations grow exponentially. As a result, the demand for food from the population will outstrip its supply, resulting in mass starvation (Malthus). Despite an almost seven-fold increase in world population from when Malthus published his legendary essay and no shortages of food in sight, supporters of his "doom and gloom" theory, as well as many of its offshoots, are still rampant 211 years after its publication (Worldometers). The improvement of the world is due to the technology and innovations created by the individual mind, an entity that Malthus completely disregards. Today, environmentalists branch off Malthus' theory when they speak about the potential hazards of global warming and the inevitable resource depletion of oil, land, food, and even water.

This critique of the Malthusian theory will be broken down into four separate sections: *Why Malthus Was Mistaken*, *Current Malthusian Presence*, *Malthusianism's Merit*, followed by the conclusion, *Closing Thoughts on Malthusianism*.

Why Malthus Was Mistaken

Malthus assumed that the food supply grows linearly, and simultaneously, populations grow geometrically. At the point where the population exceeds the supply of food, known as the "point of crisis," Malthus predicts that "the power of the population is indefinitely greater than the power in the earth to produce subsistence for man" (Malthus 5). In short, Malthus believed that when population growth spun unrestrained, its only checks and balances would be famine, war, and death; a process that he named "The Malthusian Crisis" (Malthus). As a result, the only way to avoid such disasters would be to apply population controls, which have historically included both voluntary restraints, as well as coercive measures, such as limits on family size and mass sterilization of "undesirable groups" (Veksler). Notice immediately how Malthus only spoke of the population's exponentially increased need for food (demand), all the while assuming that food extraction and production methods (supply) are static and never-changing. This is patently false. Even though nothing that involves human choice has a predetermined

growth rate, unconstrained production growth continually and historically has always outpaced population growth.

One of the many problems with Malthusianism is that it assumes that the resources humans need are fixed. Malthus' view is that each marginal individual born requires a predetermined amount of food, land, water, and other resources to survive. However, this is not consistent with reality. Individual values are constantly evolving and substitutes for virtually all goods, services, and resources exist. Because of this, each marginal individual born not only produces demand for the products of civilization, but also provides new resources and insight for meeting those needs (Veksler). The concern with Malthus' theory is that he only concentrates on the demand side of economic thought, neglecting the supply side (particularly Say's law that production creates the ability to demand) and, as a result, production and human ingenuity.¹

Population growth, typically, is not exponential because the cost of children in industrialized nations is extremely high. Observe:

The reason for the natural decline in population growth rates is that children are much more expensive in industrial countries. Increasing productivity levels in the developed world mean higher standards of living, lower child mortality, and a higher opportunity cost of having children. Child labor is no longer necessary for families to survive, and children have become expensive in terms of both direct expenses and lost economic opportunities for parents. (Veksler)

This is because if a man and a woman live in a developed part of a country, they have no need to birth numerous children in order to plow and irrigate the fields, sow seed, or partake in other menial farming tasks. When the parents refrain from having children, they reduce both their explicit costs *and*, more importantly, their implicit costs. The ability to decrease the costs related to having children are incentives for *not* having children and they do affect individual's behavior. The parents will save money because they do not have several children to feed and clothe (explicit costs that reduce population). More significantly, the man and the woman can now engage in productive opportunities to expand their wealth that would have been forgone if they chose to birth and raise large amounts of children (implicit costs that reduce population). Such a cost differential between agrarian and industrial living can be seen in the 1998 data between China and Hong Kong. China had a population of 409 people per square mile and a gross domestic product per capita of \$320, while Hong Kong, with a population density more than 450 times *greater*, had a per capita GDP of \$8,260 (National Center For Policy Analysis). Individuals that live in an industrialized city experience more opportunities for exchange and a greater specialization of labor, which raises their individual wealth, and as a result, it is more costly to have and raise children. In this respect, population is self-regulating.

However, if man is permitted to produce freely, food production grows faster than the growth of the population, contrary to Malthus' theory. How can this be so? Throughout existence, the living standards of all humans have risen dramatically, making

¹ Say's Law is the principle that supply (i.e. production) constitutes demand, or in Say's own words "...a product is no sooner created, than it, from that instant, affords a market for other products to the full extent of its own value." Malthus ignores this fact by focusing entirely on the demand side of economics, neglecting the importance of supply and its meaning for economic growth.

life in the past seem strange, foreign, and somewhat unrealistic. For instance, a 17th century experiment in Lyons, France, confirmed that one-fourth of the population in England earned a daily income of *less* than the daily minimum requirement of bread needed for survival and penniless beggars in England were so widespread that in 1547 Parliament passed a law that stated that those vagrants “should simply be sent into slavery” (Bernstein 59). It has also been reported by individuals living during the first half of the 18th century that over 74% of children in London died before they reached the age of five (Bernstein 63). The mortality rate of impoverished infants during the same period was between 80% to 90% and as high as 99% for infants under 12 months of age (Bernstein 63).

Throughout history living standards have increased because individuals continually use their minds to find, create, and increase their access to available resources in order to maximize their individual utility. Through another vein, individuals also use their minds, not only to extract and manipulate known resources, but also to *create* new goods and services, as well as fresh methods for the production and the extraction of these previously unknown resources discovered by man in his creative and ingenious quest for human wellbeing. David Veksler of the Ludwig von Mises Institute mentions this transformation from traditional resources to more current ones: “Whale oil, rubber trees, and native forests for paper and fuel have been replaced by petroleum, plastics, tree farms, and coal.” This economic progress is possible in environments where entrepreneurs are free to innovate and produce because such civilizations permit the existing knowledge and capital within society to be compounded upon by new, abundant, and ambitious profit-seeking entrepreneurs. While many natural resources are indeed finite—making it is easy for most to believe that we will eventually run out of them—it ignores the most fundamental and virtually infinite resource—the human mind. The mind is sole the reason why food production outpaces population growth, because its productivity and potential are fundamentally limitless.

Current Malthusian Presence

One would think that after Malthus’ 19th Century starvation prediction did not materialize that the merit of his theory might have diminished. Maybe the fact that the total economic product increased over *sixty times* since 1820 despite the quadrupling of the European population in the 18th century may have, at some point, caused the public to steer away from his theory (Madisson 4). Or, how in 1800, 95% of American workers were required to produce enough food to feed the entire United States, but in 1900 it only took 3%, resulting in the decline of farmers needed to produce food for the entire United States at 3.40% every year² for 100 years (Caplan 42). The overabundance of historical facts such as these should have put the nail in the Malthusian coffin years ago. Yet, public sentiment laments almost daily over the issues of “catastrophic overpopulation,” the “dependency” that all people have on oil, and the upcoming world “food shortage” (Spencer). As it turns out, these concerns are entirely unfounded. For example, if the entire population of the world were put into the land area of Texas, each person would have an area equal to the

² This statistic was found by using the time value of money formula. $Present\ Value \cdot (1+i)^n = Future\ Value$: Present Value = .95; Number of Compounding Periods = 100; Future Value = .03; this results in an annual declination rate of roughly 3.40%.

floor space of a typical U.S. home and the population density of Texas would be about the same as Paris, France (National Center For Policy Analysis).

The public also fails to take into consideration the well-known, efficient, and historically-proven pricing mechanism when speaking of the world's "addiction to oil" (as well as other natural resources). As the resource of oil becomes increasingly scarce, the supply of oil decreases, resulting in an increase in price due to the law of supply and demand. Technological advancements throughout the years concerning oil reserve discovery have yielded extremely positive results. In 1900, only 2,900,000,000 barrels of proved crude oil existed in the United States; compare this to 1970, where 39,001,000,000 barrels of proved crude were discovered (Energy Information Administration). This results in the annual increase in crude oil discovery to be roughly 3.78% every year for 70 years.³

Such an increase in the discovery of crude oil reserves is no accident; it is the result of technological advancement. New technology permits the enhanced knowledge about where to locate new reserves, about calculating how much oil is pooled within them, how to reach these reserves more efficiently, and numerous other areas of interest concerning oil reserve extraction. This is because technology converts the discoveries of theoretical science into practical applications to man's life (Rand). Simply put, technology is the physical application of the ideas of the mind. Such a concept is absent in Malthusianism since it completely disregards the mind as a productive agent in industry.

Even if the price of oil rises due to genuine scarcity (oil *actually* becoming depleted instead of individuals just not being able to find reserves because of a lack of technology), the price rise is still not cataclysmic. This increase in price will naturally cause individuals to move to *other* markets for *other* substitutes that utilize *other* resources. Such a shift in consumer demand will also cause investment to flow to these new, non-oil, emerging markets. Investors, through their drive of the profit-motive, will want to be the first to innovate and invent new modes of, in the case of oil, energy and transportation. Investor's funding will continue the growth of these new markets, causing individuals to eventually forget about everyone's "addiction to oil" in the same manner that they forgot about whale oil usage for heating and the horse-and-buggy mode of transportation.

In addition, the supply of food is not fixed. It is prone to technological breakthroughs that promote its production just as much as any other good in any other market. This can be seen through the progress of various harvesting and growing methods all throughout history. It also includes breakthroughs in chemistry. Dr. Norman Borlaug, a recently deceased agronomist, started what is known today as the "Green Revolution." By introducing semi-dwarf high-yield, disease-resistant wheat varieties and modern agricultural production techniques to third-world countries (including Mexico, Pakistan, and India), it is speculated that Dr. Borlaug has prevented over 1,000,000,000 individual deaths, more than anyone else in the history of the planet (Easterbrook).

Unsurprisingly, the Malthusians are not pleased about the preservation of over a billion lives because, according to them, population growth is "unsustainable" and should be curbed. Their sentiment towards the death of humans is encouraging. Observe Alexander King's, the founder of the Malthusian Club of Rome, statement regarding the high correlation between human survival and DDT usage:

³ See footnote #2 for the calculation method that was used.

My own doubts came when DDT was introduced. In Guyana, within two years, it had almost eliminated malaria. So my chief quarrel with DDT, in hindsight, is that it has greatly added to the population problem. (Williams)

According to King, individuals surviving, living longer, and *not* dying from malaria is considered a “problem.” Such is the mind-frame of most, if not all, Malthusians.

With these economic transformations historically documented and Malthusianism all but debunked, individuals today *still* cling to this theory. Dr. Paul Krugman, a recent winner of the Nobel Memorial Prize in Economics, is one of these individuals. Observe:

The crisis will eventually end and when it does, we’ll discover that the neo-Malthusians were not wrong...The environmental resource scarcity issues also still look entirely real...Fundamentally we are moving towards a world where Malthusian type pressures are increasing and it’s a problem...Specific institutional remedies should be discussed. But there ought to be something. (Krugman)

Instead of allowing the pricing mechanism to allocate resources, Paul Krugman recommends that government legislation needs to administer “remedies” because something “ought” to be done. Rather than allowing proven market forces and capital movement to determine the transformation from one resource to another, Paul Krugman suggests that the government, a proven inefficient agent concerning market activity, should be at the forefront of the market and civilization’s progress towards new developments.

Malthusianism’s Merit

As it turns out, Malthus’ theory is not *entirely* incorrect. This is because Malthusianism applies and functions accurately with respect to animals and collectivist societies. Malthus observed that in nature, plants and animals reproduce far more offspring than could ever possibly survive, and man, as a component within nature, will face over-reproduction also if the population is not regulated by war, disease, and famine (Malthus). Because Malthus was a reverend, he assumed that these natural regulations were unavoidable outcomes bestowed upon man by the hand of God. As aforementioned, this is entirely untrue concerning man.

Malthus’ position is false because man possesses a rational mind that is used to continually innovate and produce, whereas animals do not have the capacity to reason; animals are driven, not by thought, choice, and free-will, but by instinctual urges. The existence and usage of the mind is how humans fundamentally differ from animals. This is why the Malthusian model accurately depicts animal “productivity” as linear and animal population growth as exponential. The “productivity” of animals is limited by their biology (not possessing a rational mind to be *truly* productive) and they lack the mental capacity to voluntarily control their reproductive rates. Throughout history, humans have proven their adaptability to environmental changes, whereas “animal populations can crash rapidly when the carrying capacity of their environment changes” (Veksler). It is no coincidence then that Charles Darwin cited Malthus as the reason for his breakthrough in evolutionary theory:

In October 1838, that is, fifteen months after I had begun my systematic inquiry, I happened to read for amusement Malthus on Population, and being well prepared to appreciate the struggle for existence which everywhere goes on from long-continued observation of the habits of animals and plants, it at once struck me that under these circumstances favourable variations would tend to be preserved, and unfavourable ones to be destroyed. The results of this would be the formation of a new species. Here, then I had at last got a theory by which to work. (Darwin)

The problem concerning Malthus' and Darwin's views is that they both classified man into a very broad category of "animals and plants," not acknowledging the primary difference between humans and animals: man's rational faculty. This difference of man's mind is the only reason why food production transcends population growth and why populations are voluntarily stifled in developed countries. Consequently, it is also the same reason why animals cannot engage in actual food production or the voluntary constraint of their population size.

The Malthusian model also holds validity in collectivist states. Because collectivist states in the past have implemented coercive policies to limit population growth (China's One Child Policy for an adequate example), one may think that China should never face problems concerning food shortages. As cited before, this is only one side (demand) of a two-sided equation (supply *and* demand). To continue with the same example, observe how China has treated its producers historically. Were producers free to use their minds to innovate or were they tortured, murdered, and victimized? Observe the late Chairman Mao Zedong's sentiments towards businessmen:

Such remoulding of members of the reactionary classes can be accomplished only by a state of the people's democratic dictatorship under the leadership of the Communist Party. When it is well done, China's major exploiting classes, the landlord class and the bureaucrat-bourgeoisie (the monopoly capitalist class), will be eliminated for good... When the time comes to realize socialism, that is, to nationalize private enterprise, we shall carry the work of educating and remoulding them a step further... These classes, led by the working class and the Communist Party unite to form their own state and elect their own government they enforce their dictatorship over the running dogs of imperialism-the landlord class and bureaucrat-bourgeoisie...the Kuomintang reactionaries and their accomplices-suppress them, allow them only to behave themselves and not to be unruly in word or deed. If they speak or act in an unruly way, they will be promptly stopped and punished (Zedong).⁴

Because this overtly hostile environment does not protect the productive minds of society, it is not conducive to economic progress (and results in, for example, a linear production of food).⁵ Businessmen are not allowed to use their minds to create new methods of food production for fear of reprisal from the government for "exploiting"

⁴ Emphasis added.

⁵ Observe how in previous sections I stated that: "...where entrepreneurs are free to produce..." and "However, if man is permitted to produce freely, food production grows geometrically..." These statements concerning producer freedom are important, because if not free to produce, the producer cannot turn his ideas into reality. In other words, producers can exist, but they aren't necessarily *free* to produce. If free, exponential food production will occur, if they are not free, it cannot be assured.

others. Even if those Chinese industrialists were permitted to innovate, they had no incentives to do so because the wealth that they would have earned would have been stolen from them and would have been redistributed. Additionally, the absence of a rule of law hinders long-range entrepreneurial planning. Instead of lionizing the virtues of the producers and their industrious ability, Mao loathed them. To show his faith in physical labor (*not* mental exertion in innovation and technology), Mao put forth a program known as the "Great Leap Forward," an ode to an agricultural lifestyle absent of technological progress (read: a movement absent of the usage of man's mind), which resulted in the largest famine ever recorded in human history, costing the lives of over 30,000,000 Chinese (Courtois, Werth, and Panne 490). This is because in totalitarian societies, humans are reduced to operate much like animals. They have no need to produce or to innovate; simply put, they have to need to use their *minds*. In this respect, the food production of humans resembles that of animals, which is, at the most, a linear increase (or in the case of Mao's "Great Leap Forward" a massive *decrease*).

Closing Thoughts On Malthusianism

Even though *An Essay on the Principle of Population* was written in 1798, it still permeates itself through society today. Malthus' disdain and under appreciation of the human mind - as *the* singular cause for economic progress - finds itself nestled in the minds of many people. It is now seen that the food supply has vastly outpaced the growth of world population, demonstrated by individuals like Dr. Borlaug (and the usage of his mind). Such instances of proven food production should have resulted in Malthusianism fading away long ago. Instead, Malthusianism's variants run amok with their catastrophic predictions on non-issues such as overpopulation, oil dependence, and food shortages. These current mistaken predictions are the product of, similar to Malthus' postulate, the lack of confidence attributed to the potential of the individual mind. Before humanity can truly rid itself of the pestilence that is Malthusianism, individuals must ask themselves questions like: "Where does this ideology sprout from?", "What are the consequences of embracing such an ideology?", and "Is this ideology consistent with facts and reality?" Only when those questions are answered will Malthusianism finally be uprooted from its philosophical foothold.

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