Malthusian views on population growth

Thomas Malthus, the famed British scholar, argued that the world would enter a “ cycle of despair” due to his claim that the human population growing geometrically while resources grow arithmetically. However, his theory did not account for human innovation. Cornucopian ideals are on the opposite end of the spectrum and they are certainly possible and sustainable.

In their paper regarding the topic Quamrul Ashraf and Oded Galor say “ While living standards in the world economy stagnated during the millennia preceding the Industrial Revolution, income per capita has encountered an unprecedented ten-fold increase in the past two centuries, profoundly altering the level and the distribution of education, health and wealth across the globe” (Ashraf and Galor, 2011: 1). In Malthus’s time, people lived roughly the same way as their parents and their parents before them and so on, but the industrial revolution changed everything. With the increase in per capita income came the ability to specialize workers. No longer did individuals need to focus on subsistence farming or trading for goods, as society had shifted to a more capitalistic economic system in which they’d be compensated in wages they could just buy food with.

Obviously, Malthus could not have predicted the massive boom in technology, but nevertheless it proved his principles wrong. Even when the Industrial Revolution’s discredited many Malthusian ideals Neo-Malthusian ideals have become increasingly prominent in today’s world which is faced with new environmental challenges. Currently there are so many environmental issues it has become hard to keep track of them all; we are running out of arable land, fresh water is at an all time high in scarcity, and

extreme disparity of wealth and resources among classes. Despite these new issues the human spirit can and will find a way. This principle is represented by the definition provided for induced intensification in Nature and Society: A Critical Introduction , where authors Paul Robbins, John Hintz, and Sarah A. Moore define induced intensification as " A thesis predicting that where agricultural populations grow, demands for food lead to technological innovations resulting in increased food production on the same amount of available land" (Robbins, Hintz, and Moore, 2014. 21). There already has been an immense increase in the yields of modern agricultural fields due to the Green Revolution, but there is nothing to say that it was the last revolution of such kind. Just as no one could have predicted the industrial revolution and the impact it had on society, modern theorists cannot predict when and how impactful the next revolution may be, but we may be getting some insights into what it may entail.

Automation has become increasingly present in our society; it is everywhere from our cars to the thermostats in our own houses. With the right ideas and backing automation could easily be applied to agriculture and increase the yields of current farms. According to Robbins, Hintz, and Moore the technological advancements that were developed and triggered the Green Revolution were able to increase rice production in Indonesia and the Philippines, in the 1970s, by thirty-seven and forty percent respectively (Robbins, Hintz, and Moore, 2014. 21). If the improved yields of automation can come anywhere near the increases that were a result of the Green Revolution the abundance of food would mean there would be more than enough food to feed the world.

Regardless of how much more production we gain, as a society, the greatest factor in the sustainability of human life for the future will be consuming less in the developed countries and bringing up those in underdeveloped countries. The unequal division of resources is the greatest hindrance on productivity and growth of society. According to Mark Koba in a 2013 Public Radio International article “ Of the roughly 7 billion people in the world, an estimated 870 million suffer each day from hunger” (Koba 2013. 1). The ratio of these numbers means almost 1 in every seven people worldwide are not getting enough food daily, which speaks to the uneven distribution of resources. In the same article Koba talked with Roger Johnson, the president of America’s National Farmers Union, who estimated around half of all the food produced in the world is wasted rather than consumed. Whether it the food spoils before or after use or just becomes scrap that is never eaten this amount of food being wasted is unacceptable while one seventh of the world goes hungry. These issues of lack of availability of food to those who need it most must be solved in order for cornucopian ideals to be met. When these issues are solved the entire focus of the human race can be how to live sustainably on the Earth, rather than just being able to live, and this increase in manpower will eventually lead to innovation that benefits society to the same amount as the Industrial Revolution.

Along with a more even distribution of the food we produce, production of food that has a lower environmental impact will greatly aide in the goal of feeding the world. According to the Beef Cattle Research Council of Canada it takes “ 1, 910 gallon per pound or 15, 944 liters per kilogram of water” to get beef to dinner tables (Beef Research, 2019. 1). While this figure does

account for the water needed for cattle feed, like grass or corn for example, it doesn't take into account how many people could be fed with the corn produced for cattle rearing. A majority of the corn produced in the United States is used to feed cattle or other livestock, which is alarming because the amount of people who could eat said corn is insurmountably greater than those who are fed the beef produced in this process. Though it would be quite an undertaking a global shift to a pescatarian or vegetarian diet would allow for a more efficient production of the worldwide food supply, as there would not be so much food being produced just to raise meat to eat. The prominence of meat eating in western culture and its current rise in places like China makes the possible shift much harder, but if done there will be an even greater supply of food that can be distributed evenly to the world.

Just as Malthusian ideals had flaws, so do cornucopian ideas. The basic structure of the idea, that more people will lead to greater ingenuity, hold true today, but there are many social changes that must come about to allow humanity to reach its peak. Until, the issues of division of resources are solved the progress of humanity will be slowed due to nearly half of the world's population living in poverty. The problem isn't about how many people the world will be able to hold, it's how we can consume the resources we have available equally and then use that equality to push on and find new resources.

Evidence:

- Ashraf, Quamrul, and Oded Galor. 2011. " Dynamics and Stagnation in the Malthusian Epoch." *American Economic Review* , 101 (5): 2003-41.

- Koba, Mark. “ Millions Hungry despite World Food Surplus.” *Public Radio International* , 22 July 2013, www. pri. org/stories/2013-07-22/millions-hungry-despite-world-food-surplus .
- Research, Beef. “ How Much Water Is Used to Make a Pound of Beef?” *Beef Cattle Research Council Blog* , Beef Cattle Research Council of Canada, 27 Feb. 2019, www. beefresearch. ca/blog/cattle-feed-water-use/.
- Robbins, Paul, et al. *Environment and Society: a Critical Introduction* . 2nd ed., Wiley-Blackwell, 2014.