Energy Policy

### Arithmetic, Population and Energy, Part 7

Revision B, 2021

**For the love of the human race.**

### Our Thesis

This is not a game of blind chance. This is not a game of fear mongering. This is a zero-sum game of war[[1]](#footnote-1): if rationality does not prevail in this war; we, our children, grandchildren, and great- grandchildren will lose. Deciding not to play is a decision to lose. If rationality does not prevail, the forces we call nature will make the necessary decisions for us: we will lose and be stranded without the necessary survival map and plan. Nobody will like the solution.

### Arithmetic, Population and Energy, Part 7

<http://www.albartlett.org/presentations/arithmetic_population_energy_video1.html> Better results were achieved by playing the video clip directly from this site, rather than by linking through YouTube. Click on the arrow in the middle of the picture, rather than on the black bar at the top. This is Part 7.

Dr. Bartlett begins by addressing the problem of technological optimism. In spite of the fact that it is obviously untrue, many people, including engineers, mathematicians, and scientists continue to embrace the delusion that man can solve any problem: if we only had enough time and money.

**“We must educate people to see the need to examine carefully the allegations of the technological optimists who assure us that science and technology will always solve all of our problems of population growth, food, energy and resources.”**[[2]](#footnote-2)

Dr. Julian Simon (1932-1998) of University of Illinois, University of Maryland, Heritage Foundation, etc.[[3]](#footnote-3) “Copper can be made from other metals.”[[4]](#footnote-4) … “Clearly there is no meaningful limit to this source except the sun’s energy…. But even if our sun were not as vast as it is, there may well be other suns elsewhere.”[[5]](#footnote-5)

These and other statements that result from cornucopian theories need little refutation.

**“In 2010, worldwide biofuel production reached 105 G-liters (28 G-gallons US), up 17% from 2009, and biofuels provided 2.7% of the world's fuels for road transport, a contribution largely made up of ethanol and biodiesel.”**[[6]](#footnote-6)

NB: gallons, not barrels, this amount is minuscule. At this rate, when fossil fuels run out, the world will face a 97% reduction in energy resources: this must be viewed as a catastrophic drop.

Biomass may be a scientific possibility; but. it is far from being a practical reality. It’s development threatens the food supply, and it has yet to be shown that it is truly exothermic in the overall scale. Presently, the only biomass fuels really on the table are biodiesel and ethanol. Even Dr. Simon cannot possibly be suggesting that we burn hay, straw, and wood in internal combustion engines. The return to external combustion steam engines as the principal mode of transportation would be a major problem.

Even so, Simon “was a trusted policy advisor at the very highest levels in Washington D. C.”2

Simon’s supporters include Kemp and Forbes.

“People are not a drain on the resources of the planet.”[[7]](#footnote-7)

“CNN recently ran a silly series purporting to show the world is in mortal danger because there are too many of us. In poorer countries those many mouths mean poverty. In richer countries we are wrecking the earth’s atmosphere with pollution. It’s all nonsense.”[[8]](#footnote-8)

We conclude that Mr. Kemp and Mr. Forbes are all nonsense. Don’t waste your money on *Forbes Magazine*.

Dr. Bartlett then looks to Isaac Asimov (1920-1992)[[9]](#footnote-9) with Bill Moyers.[[10]](#footnote-10)

“Moyers: What happens to the idea of the dignity of the human species if this population growth continues at its present rate?

“Asimov: It will be completely destroyed. I like to use what I call my bathroom metaphor; if two people live in an apartment, and there are two bathrooms, then both have freedom of the bathroom….”

“Asimov: In the same way, democracy cannot survive overpopulation. Human dignity cannot survive overpopulation. Convenience and decency cannot survive overpopulation. As you put more and more people into the world, the value of life not only declines, it disappears. It doesn’t matter if someone dies, the more people there are, the less one individual matters.”

Dr. Asimov’s delightful and humorous parable, nevertheless falls short of the reality, even though we have heard reports, from serious social students, about thirty or more people being crammed into single bedrooms in Cleveland, with no bathroom, only a place at the end of the hall. Sharing bathrooms, is, for the most part an inconvenience, not a hardship. A better illustration would be thirty people sharing two plates, and those without food. Indeed, if two bathrooms represent the whole world, thirty people may be a problem. However, thirty people with two plates and no food is an even bigger problem. Dr. Asimov’s parable fails to address the grim reality that the problem is more than an inconvenience, it is an issue of life and death. Even if the population was reduced to two, and plates need not be shared, there is no food left to put on them, and both will die of starvation. It is access to food, clothing, and shelter; perhaps, even the air we breathe, that must be conserved. The termination of fossil fuels many spell the end of food, clothing, and shelter for many people.

Quality of life, Asimov’s hodgepodge of terms is ambiguous. “Dignity, decency, and value of life” need definition. My lifestyle may require an unobstructed view of Pikes Peak from my living room window: this is hardly a life and death necessity. We might even think of the person who insists on such a thing, as a spoiled brat. We are not interested in this sort of philosophical discussion. We are only interested in those concrete realities, which threaten human life. We must draw a distinction between the inconvenience of the shared bathroom and existence itself.

Because we subscribe to the conviction that less government is better government we have trouble taking Dr. Bartlett’s political illustrations about Boulder and the United States very seriously. The inevitable and ultimate collapse of all democracies is thoroughly examined elsewhere.[[11]](#footnote-11) Democracy cannot be made into a successful form of government on any large scale: like a whale on the beach, it is doomed to perish under its own weight.

**“The simple arithmetic makes it absolutely clear that long-term preservation of the environment in the U. S. is impossible in the face of continued U. S. population growth!”**2

Nevertheless, we are compelled to agree that:

**“Smart growth destroys the environment. Dumb growth destroys the environment. Now, smart growth just destroys the environment with good taste. So, it’s a little like buying a ticket on the Titanic; if you’re smart, you go first class; if you’re dumb you go [steerage], any way you go: the result’s the same.”**2

The problem with the Titanic is not that there were too many people on board. The problem with the Titanic is that a complexity of problems existed for which there were inadequate and insufficient solutions. It was the lack of solutions that resulted in so many tragic and unnecessary deaths. In the ensuing panic, good men turned cruel, locking victims below deck, and guaranteeing slaughter. It is the consumption and destruction of the environment with which we are primarily concerned.

We do not agree with the idea that global warming is a major problem. With the demise of fossil fuels clearly in sight, once they are gone, the earth will probably begin to cool again. If, in a hundred years or so, global warming continues to be a problem; it will not be because of fossil fuel combustion; it will be because of factors that are most likely beyond our control.

What we fear is that we will fail to manage the resources we do have in time to prevent disaster. When we are faced with a complexity of problems for which there are only inadequate and insufficient solutions, panic will be the inevitable result. Formerly good men will turn cruel, and the guaranteed slaughter will commence.

Dr. Bartlett concludes this part:

“Now, except for those petroleum graphs, the things I’ve told you are not predictions of the future, I’m only reporting facts, and the results of some very simple arithmetic. But I do so with confidence that these facts, this arithmetic and more importantly, our level of understanding of them, will play a major role in shaping our future. Now, don’t take what I’ve said blindly or uncritically, because of the rhetoric, or for any other reason. Please, you check the facts. Please check my arithmetic. If you find errors, please let me know. If you don't find errors, then I hope you’ll take this very, very seriously.2

**“You are important people. You can think. If there’s anything that is in short supply in the world today, it’s people who are willing to think.”**2

### Our Conclusion

Dr. Bartlett has challenged us to examine his facts, his arithmetic and look for errors. He has challenged us to think. There is nothing wrong with his arithmetic. His data, by his own admission, need constant and incessant updating, as will ours. Nevertheless, we believe, by failing to push for a solution including all of the necessary conditions, not just one of these necessary conditions, that Dr. Bartlett has left the door open for a significant false bias. A solution including all of the necessary conditions is also sufficient. A solution including only some of the necessary conditions is insufficient. We will continue to press for the solution which is both necessary and sufficient. We believe that such a solution is expressed by The Law of Carrying Capacity.

1. In terms of game theory, this is probably closer to a game of Chicken. [↑](#footnote-ref-1)
2. Dr. Bartlett [↑](#footnote-ref-2)
3. http://en.wikipedia.org/wiki/Julian\_Simon [↑](#footnote-ref-3)
4. *Science*, June 27, 1980, Volume 208, page 1431 [↑](#footnote-ref-4)
5. Simon, Julian Lincoln, *The Ultimate Resource* (Princeton University Press, 1981: page 49) [↑](#footnote-ref-5)
6. http://en.wikipedia.org/wiki/Biofuel [↑](#footnote-ref-6)
7. Kemp, Jack (HUD Secretary), *High Country News*, January 27, 1992, page 4 See http://en.wikipedia.org/wiki/Jack\_Kemp [↑](#footnote-ref-7)
8. Forbes, Malcolm S., Jr., “Fact and Comment,” *Forbes Magazine*, June 8, 1992, page 25 See http://www.mrc.org/mediawatch/mediawatch-june-1992?, page=9http://en.wikipedia.org/wiki/The\_Population\_Bomb, and http://en.wikipedia.org/wiki/Malthusian\_catastrophe [↑](#footnote-ref-8)
9. http://en.wikipedia.org/wiki/Isaac\_Asimov [↑](#footnote-ref-9)
10. Moyers, Bill, *A World of Ideas* (Doubleday, New York City, 1969: page 276) [↑](#footnote-ref-10)
11. Crozier, Huntington, Watanuki, *The Crisis of Democracy* (Trilateral Commission: 227 pages) [↑](#footnote-ref-11)