

Answer to Malthus? Julian Simon Interviewed by William Buckley

Author(s): [Julian Simon] and [William F. Buckley, Jr.]

Source: *Population and Development Review*, Mar., 1982, Vol. 8, No. 1 (Mar., 1982), pp. 205-218

Published by: Population Council

Stable URL: <https://www.jstor.org/stable/1972721>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <https://about.jstor.org/terms>



Population Council is collaborating with JSTOR to digitize, preserve and extend access to *Population and Development Review*

JSTOR

Answer to Malthus? Julian Simon Interviewed by William Buckley

Not since the days of Paul Ehrlich's The Population Bomb has a work on population elicited as much popular interest as The Ultimate Resource, a book by Julian Simon published last year by Princeton University Press. A Review Symposium on this book appears elsewhere in this issue of the Review. Reprinted here in its entirety is a transcript of a television interview of Professor Simon by William F. Buckley, Jr. The unrehearsed nature of the interview is clear from the text.

Although hardly a substitute for reading the book, the interview manages to touch upon most of the important themes raised in The Ultimate Resource. Entitled "Is there an answer to Malthus?," the interview was taped on 18 October 1981 and originally telecast by the Public Broadcasting System on 8 November 1981, on the FIRING LINE program, copyright © 1981 by the Southern Educational Communications Association. The transcript is reproduced here for a fee by permission. Printed bound transcripts are available from SECA.

Mr. Buckley: Professor Julian Simon may be the happiest thing that has happened to the planet since the discovery of the wheel, but he is death to the doomsayers, though, come to think of it, that isn't a happy figure of speech because doomsayers more or less look forward to death. He is life for the doomsayers, whom he protects from the withering rays of the sun even as the gourd protected Jonah. What Mr. Simon has done in his book, *The Ultimate Resource*, is argue the anti-Malthusian case. It simply isn't so, he says, that we are headed for asphyxiation, strangulation, death by overpopulation or by the dissipation of resources. His book has here and there been remarked as one that will dominate the debate on the subject during the 1980s.

Julian Simon was born in New Jersey, attended Harvard, went on to do graduate work at the University of Chicago where he took his Ph.D. He entered business for a few years af-

ter leaving the navy, but went to the University of Illinois where he is now a professor and a most prolific author, having written 10 books and dozens upon dozens of scholarly articles. His most recent volume before *The Ultimate Resource* was *The Economics of Population Growth*.

The examiner today is Mr. Mark Green, the lawyer and activist, about whom more in due course.

I should like to begin by asking Mr. Simon to dispose of the problem of infinity, perhaps by explaining the treatment of it he gives in his book.

Mr. Simon: I'd like to dispose of the notion of finitude rather than infinity.

Mr. Buckley: You can do both at the same time as a matter of fact. You can't do one without doing the other.

Mr. Simon: I think that's right. It seems to

me that the notion of something being finite is very much a matter of how we look at it and what we choose to do about it. That is, the food in your larder is finite right now and if you have twice as many guests over tonight, you may crowd it to the limit and you may exhaust it; and you may think of what's in there right now as being finite, but because you know there's a supermarket down the street, you know that you can replenish the larder and therefore you don't think of it in another way as being finite and limited. In the same way we tend to think about many of the other resources that we deal with, whether it be copper or wheat or oil. We tend to think of the supply as being fixed at a given moment because of any of the many preconceptions that we have about it, and then it seems finite and we think about running out; but if we think instead about our capacities to increase that supply by finding substitutes or by finding better ways to get more of it or by replacing it, just as we in fact grow oil in Illinois, then we begin no longer to think about the supply of oil or copper as being finite.

Mr. Buckley: So you would authorize the use of the word "infinity" to describe the world's wheat supply since the regeneration of wheat is a well-known summer phenomenon, but you would not authorize it, would you, to describe, say, the earth's residue of copper? Or would you insist that the word "infinite" was applicable in that instance because a metaphor of copper would be a substitute for it?

Mr. Simon: I do think there is a distinction between looking at it from the point of view of the word "finite" and the word "infinite." What I want to do is dispose of the word "finite" and not to bring in the word "infinite" and to argue to you that the supply of anything is infinite. What I want to suggest to you is that we can indeed think of what's important to us with respect to copper and that is, the services that we get from copper, as not being finite in any way, and in fact the whole history of mankind with respect to copper has been one of copper getting more and more abundant every year.

Mr. Buckley: Can you point to anything that has disappeared other than a species?

Mr. Simon: Yes.

Mr. Buckley: What?

Mr. Simon: Great paintings that have been lost in a war.

Mr. Buckley: No, but those would be particularistic.

Mr. Simon: Yes, they are, and those are exactly the kinds of things that can get lost. More general things don't get lost because we can replace them. You cannot replace a great painting. You can't replace a great basketball player in exactness. But I think it's more important for us to recognize that what concerns us as people—although this is a matter of values and we can talk about that later, I'm sure—that what concerns us as consumers in our economic role isn't any commodity; it's the services that we get from the commodity, and we've got to keep our eyes firmly fixed on that.

Mr. Buckley: So if you don't have copper for telephone lines but you do have satellites to transmit messages, you're as well off as though you had an infinite supply of copper.

Mr. Simon: Exactly.

Mr. Buckley: Now, the thesis of your engaging and provocative book is that there's been a lot of doomsaying going around, the Club of Rome Report in 1972 and more recently the [Global 2000] Report to the President in 1980 being two conspicuous examples. What do you take to be the motives, for instance, of the people who gathered together in Rome to tell us in effect that we were running out of everything?

Mr. Simon: You've gotten quickly to I think the most difficult, complex question with respect to the whole subject and one, that I should point out, I am not an expert on. I'm not a social psychologist. I think that I am something of an economist. I think you're asking a social-psychological question. I'd be happy to speculate on it, though.

Mr. Buckley: You're enough of a scientist to say flatly that the book is mistaken—that *The Limits to Growth* is a book that is deficient in methodology and deficient even in its empirical assertions, right? So therefore they put out a bunch of stuff that wasn't correct—

Mr. Simon: Yes.

Mr. Buckley: —and as you point out, no significant economist believes it is correct. Therefore, why did they do it? You say to an-

swer that question you have to go into social psychiatry. You must have reasons for thinking why they do it; you must have some reasons.

Mr. Simon: Sure, I'll be happy to speculate with you about it, but it's important I think for me to mark off what I think of myself as having special knowledge about and that which in fact I am something of a layman, as you are—the two of us speculating about this together.

Mr. Buckley: Right.

Mr. Simon: By the way, not only did economists dismiss the Club of Rome's *Limits to Growth*, but the Club of Rome itself four years later turned around completely and as much as said, "We were telling you lies before to shake you up." So it's not only the economists, it's by their own hands. As to speculation, I think that there are many motives, and they're very mixed motives. I think that on the one hand it's very clear that many well-meaning people believe that exaggeration will further their cause and they don't worry about the possible bad effects of this exaggeration on public trust and on the public will. On the other side, it's very clear that many agencies, both domestic and international, have a funding stake in people believing that things are very bad with respect to what they work on. Let's say the FAO has a certain stake in us not believing that the food situation in the world is getting better rather than getting worse. I think another reason—one that I've only thought about in the last few days—is that people with a lot of education tend to lack respect for the capacity of people who are poor and have had less education to cope, and we therefore worry that they won't be able to handle their problems in their parts of the world; and that is something that has only struck me recently.

Mr. Buckley: So that to the extent that these scholars were not consciously dissimulating, you think it was simply an underestimation of what it is that people can do when up against a shortage? You think that's their problem?

Mr. Simon: You put your finger on it very directly I think. They, in fact, leave out entirely from their view of the world people's capacity to meet problems with new ideas which, in fact, leave us better off afterwards than we were before the problem arose. When I say "better off" again I mean that the cost of

these materials gets lower and lower and lower over time, meaning less and less scarcity of these materials rather than the higher and higher cost that would be implied by greater scarcity. That's the history of mankind.

Mr. Buckley: You do acknowledge, though, do you not, that there are demographic periods during which there is a scarcity that may last 10–15–20 years because it isn't all that easy to come up with a satellite, say—

Mr. Simon: Sure.

Mr. Buckley: —to replace copper. Now, applying your analysis for instance to oil, do you actually predict that oil will at some time in the future—oil or a suitable substitute for oil—be available to the American consumer at the equivalent of 20 cents a gallon?

Mr. Simon: I don't know about 20 cents a gallon, but I'm prepared to bet that the price of gasoline 10 years from now—20 years from now—will be lower than it is now once we adjust for inflation because that has been the long-run course of the price of gasoline and of other raw materials.

Mr. Buckley: Is there not a marginal factor that causes the extractive cost to rise at the margin? For instance, as you point out in your book first of all when they struck oil they just put rags on their pastures and picked them up and turned the rags into bottles and then they took it from gas and it was flowing out, and now you're going 10,000–15,000 feet for oil. Doesn't this tell you something about the increasing difficulty and scarcity of a product?

Mr. Simon: There is indeed increasing difficulty. Elsewhere in the book I point out how the copper that we mine is less and less rich per ton year after year, but despite this our inventive capacities have been greater—that is, they have dominated the decreasing richness and the increasing difficulty in getting this stuff out. You see, in the end, copper and oil come out of our minds. That's really where they are.

Mr. Buckley: You said a moment ago that you didn't want to pose as an expert in social psychiatry, but aren't you now posing as an expert in a sense in philosophy? You're saying that a human being can generate that which he needs of a material nature. Now I can understand if you were to say that of a spiritual na-

ture if you were limited, but of a material nature, what makes you think that because we were successful in decocting copper out of X number of substitutes, that we would be successful in doing that 100 years from now?

Mr. Simon: What I offer you is not in any way a logical deduction. It is an extrapolation from all of humankind's history. It's an extrapolation that says that if we had had the same discussion and I had made the same prediction at all dates in the past for the last 10,000 years or the past 50,000 years and we picked random dates in the future, that the predictions would have come out on balance in the way that I'm suggesting—that on that sample of dates in the past looking forward, if we'd said that things are going to be becoming more available and cheaper, that that prediction would have been verified more often than not.

Mr. Buckley: So that notwithstanding the huge rates of consumption, which have of course intensified with the Industrial Revolution, we in fact have greater known reserves right now of everything?

Mr. Simon: Sure.

Mr. Buckley: Per capita?

Mr. Simon: Per capita.

Mr. Buckley: Okay. Now let's get into the problems——

Mr. Simon: Reserves, by the way, are a very tricky thing and I would much prefer we ignored reserves entirely.

Mr. Buckley: Let's define reserves the way you do. I think it's a useful sort of definition.

Mr. Simon: Yes. Reserves are in fact simply the amount of oil or whatever that we have gone out, spent the time to look for and written down in our catalogue where it is; and it costs us money to go out and find out where it is and there's no point in our doing that for materials we won't use for a long time in the future just as there is no point in stocking up your larder in the kitchen with three years' worth of groceries.

Mr. Buckley: And it should not be confused therefore with potential reserves?

Mr. Simon: Absolutely, absolutely.

Mr. Buckley: All right. Now, probably the most controversial part of your thesis has to do of course with population. You find yourself

asserting in effect that inasmuch as that which an individual creates is almost always more than that which he consumes, the greater the number of people who inhabit the globe, the greater the per capita production. Did I get it right?

Mr. Simon: Yes.

Mr. Buckley: Now, how would this apply, say, to a city like Bombay?

Mr. Simon: This comes up all the time. People say, "But look, if big is rich, how come India and China are not as rich as or richer than the United States?" We've got to also take into account that there are historical differences among countries and that the whole course of modern economic development basically arose in the West, which means that we've had a lead over the East in this respect, but there's no reason to think that India and China and poor countries now will not be following our lead in the future. They may in fact eventually overtake us. It's by no means something that is unlikely to happen, and in fact—this may be important—the less developed countries—the poor countries—have been growing economically at a percentage rate at least as fast and maybe faster than the more developed countries over the years since World War II and this, I think, runs quite contrary to people's conception of them as stagnating.

Mr. Buckley: This has in part to do with scientific medical progress, has it not?

Mr. Simon: Longer life——

Mr. Buckley: Long life, yes.

Mr. Simon: ——helps economic progress, sure. People live longer; they want to invest in their own futures. They're healthier; they can work more. But it's not so much curative medicine as preventive medicine, and better food as much as preventive medicine that keeps people well and alive.

Mr. Buckley: Of course these per capita growth figures get to be tricky if you start too low, don't they? An infinitesimal increase in Chinese production would result in a huge increase in the per capita productive growth, would it not?

Mr. Simon: Yes, indeed. The point I want to make here, though, is that they are not stagnating as is the popular view.

Mr. Buckley: And one of your theses of course is that notwithstanding the increase in population in the last 20 years, people are eating better, is that correct?

Mr. Simon: Yes. People have been eating better on the average in the whole world since World War II.

Mr. Buckley: Which doesn't mean of course that there isn't here and there starvation, but that's a matter of communications, right?

Mr. Simon: And transportation.

Mr. Buckley: Well, if in fact people are eating 28 percent better, as you allege, than they were, is this the result, you say, of more people devoting themselves to the soil or is that the result of a sudden spurt of successful technology in agriculture?

Mr. Simon: It's the result of many complex processes, but in a country like the United States, it's very clearly not because we are devoting more of our labor force to agriculture. In fact it's fallen from 70-some percent to 2.7 percent of our population by last count, and still you're able to produce more and more and more and we're able to produce so much more that you read in the papers that the farmers are pressing the government to constrict our production in order to keep prices up and we're likely again to enter into the same cycle that we entered in the 1970s—constrained production, difficulties abroad, lessened ability on our part to help cries of impending famine—and around we go again because, in many ways, we are too bounteous in our production here for a lot of reasons.

Mr. Buckley: That which causes such extraordinary plenitude in the central part of our own continent in agricultural production is in fact known, is it not, to residents of India and the Soviet Union? So what is it that prevents them from simply imitating what we do in order to imitate our output?

Mr. Simon: With respect to the Soviet Union I think it's easier—

Mr. Buckley: Ideological.

Mr. Simon: There I think it's a matter of organization more than anything else. I think this will not come as an unwelcome statement to you, Mr. Buckley, but the private plots in the Soviet Union produce a great deal. From a

very small proportion of their land they produce a large proportion of their total food output. I think the difficulty there is that they are running things in a very different organization. Here it's largely the family farm. The individual farmer is making decisions about what to do on his farm, and on a farm every field is different. You can't make those decisions very easily from Washington or from Moscow and you can't motivate people the same way. So I think the biggest difference between our agriculture and the Soviet's is organizational.

Mr. Buckley: Would that cause you then to go so far as to say that those societies which have cracked the organizational problem are encouraged to increase in population, but not so those that have not?

Mr. Simon: Encouraged by whom?

Mr. Buckley: Encouraged by you.

Mr. Simon: Encouraged by me?

Mr. Buckley: Yes.

Mr. Simon: I don't take it really upon myself to encourage anybody else to have more children or less children in any country. I think that's people's own decisions, given their own views of their values and what's important and their willingness to take on additional costs in the present in order to have benefits in the future, and it's very clear that additional people now mean additional costs in the short run just as I think that your family size is a decision for you to make, and I'm not—I may cheer if you have more children, but I certainly would not encourage you one way or the other.

Mr. Buckley: Yes, I understand the distinction; however, you are rather severe on those organizations, both national and affiliated with the United Nations, that seek to frighten other societies about the dangers of overpopulation. Why are you severe with them when you have just finished acknowledging that unless the organization of that society is successful, you're going to have scarcity?

Mr. Simon: I want to make a distinction between organizations that are private [and government]. It seems to me that a private organization or a private individual is entitled to encourage, discourage, cheer, boo, whatever you like with respect to other people's behavior in this society or elsewhere. What distresses me is that we have federal funding

by the United States government, both directly and indirectly, of a great many organizations that are trying to impose our values upon other countries and other people. That I find out of the spirit of our society.

Mr. Buckley: But isn't it in the spirit of our society to accost countries like India which clearly do suffer from an excessive population and point out the benefits of, say, birth control?

Mr. Simon: I hope it's not within the spirit of our society. Maybe I've misread the spirit of our society and the nature of what we are.

Mr. Buckley: If it's the spirit of any society to help any other society to accomplish what it seeks to do, assuming that what it seeks to do is morally acceptable, then would you deny to India access to such technology on birth control as is developed here?

Mr. Simon: Absolutely not. I hope that we as individuals in our country help other people in every possible way to attain the goals that they have for themselves. What I don't want us doing is trying to change other people's values or to try to coerce them to do certain things that we think are good for our own interests—in which case we're very often wrong—which run against their own values. I'm delighted to make available in any way we can any technology, any devices that will help people attain their goals, but I don't want us telling them how many children we think they ought to have.

Mr. Buckley: Well——

Mr. Simon: We're a long way from the economics of the book——

Mr. Buckley: Yes.

Mr. Simon: ——and deep into values.

Mr. Buckley: We're a long way from the economics, but there's a sense in which your book does touch on these values—isn't there?——

Mr. Simon: Oh, yes.

Mr. Buckley: ——because it is an accepted axiom of most international organizations that the best way to help the Chinese, for instance, and the Indians is to encourage them to lower the birth rate. Now you point out that almost every society in fact is lowering the birth rate, and you point out that, for instance, such so-

cities as Egypt had as many people 3,000 years ago as they have now. Now, notwithstanding these fluctuations, you want to be thought of as a technician—as a scientist—who says, "If you want to have more people, it's not going to lower your [standard] of living." That's correct, isn't it?

Mr. Simon: That's correct. And one of the——

Mr. Buckley: Provided you organize your society correctly?

Mr. Simon: I think that's right. But I want to go back: One of the reasons I am against our suggesting to India or to China that they lower their birth rates is that the economic model upon which those conclusions by Americans have been based is in my judgment totally unsound and leaves out some of the most important elements that occur when people have more children and a larger population.

Mr. Buckley: Would you expand on that?

Mr. Simon: Sure. One of the things that happens is that they work harder. It happens in our society too. Your parents had more children and they worked more hours a week on the average. Another thing that happens is—this takes somewhat longer—as you get greater population density, you get better transportation systems. When you get better transportation systems, then the Indian farmers can begin to produce for the market rather than just for subsistence. As you begin to have more people, you begin, in a more developed society like ours, to have more people to have ideas, and this in the long run is most fundamental of all. If we select 10,000 people——

Mr. Buckley: You wipe out disease enclaves too, don't you?

Mr. Simon: Pardon?

Mr. Buckley: You wipe out disease enclaves—malarial forests and that kind of stuff.

Mr. Simon: Absolutely. Thank you for mentioning it. That's right. You settle the land more densely and you get rid of malaria, and that's the only way you're going to get rid of malaria in the long run. We found out that DDT won't do the job permanently.

Mr. Buckley: So that you are merely satisfied to say, "On the basis of historical experience, there is no reason to assume that the warnings of Malthus, which he himself modi-

fied, should govern us.” But you would not, would you, say that this is infinitely correct? You would not say that a population of 100 billion people by the year 2020 would be tolerable, would you? Or do you simply resist limitations of that sort?

Mr. Simon: I tend to resist discussions that extend so far into the future because I think that we should confine ourselves to that horizon over which our planning may make some important difference, and I think that thinking of what may happen 300 years from now is far, far beyond that. Among other things, the possibilities out of our own minds, the possibilities of our own earth, are very difficult to foresee. There’s a little joke about this. A kid in class was dozing and all of a sudden he woke up with a sudden start, and he said to the fellow next to him, “What happened? What did he say? What did he say?” And the fellow next to him said, “Well, he said that the sun is going to burn out in seven billion years.” And he said, “Thank goodness, I thought he said seven million.” This highlights the absurdity of our worrying about things in such a very long horizon.

Mr. Buckley: When you made your assertion that the people appointed by the President in 1980 were in gross error, you produced tables, as I remember, in which you showed that the price of wheat had in fact declined over the generations. You were then criticized for having shown tables that referred only to wheat, and the assumption was that other foodstuffs had in fact increased in price. Is that correct?

Mr. Simon: First of all, we’ve got to decide which way we’re thinking about cost or price. One way of thinking about the price of something is relative to the price of our own time.

Mr. Buckley: True.

Mr. Simon: And all raw materials have fallen in price over the decades with respect to the cost of our own time. That is, wages have gone up relative to the amount of wheat or any other food that you could buy with them.

Mr. Buckley: You would spend, say, 10 percent of your time—the average person would, let us say—in buying foodstuffs or raw materials needed to live whereas before that he might have been spending 50 percent.

Mr. Simon: That’s generally true, but we’ve got to remember also that what we buy is a

much richer array of food, packaged in many different ways that weren’t available 100 years ago so that the percentage of our income for food may itself be a bit misleading. But another possible price— Yes, one possible price is relative to our wages. Another possible price is proportion of our income. But a third way of comparing the price of something like wheat is compared to all the items in the Consumer Price Index, and that’s a very tough test because all the items in the Consumer Price Index, on average, have been produced more efficiently over time so that if the price of some goods simply keeps up with the Consumer Price Index over a period of 50 or 100 or 150 years it means that we are getting it more efficiently and more cheaply in terms of our own time.

Mr. Buckley: Right.

Mr. Simon: But wheat and other raw foodstuffs have fallen in price even relative to the Consumer Price Index and that’s a terrifically tough test. So it’s not just wheat. It’s all—almost all, everything I can think of—raw foodstuffs—all raw materials, except for two exceptions, oil recently and lumber. There are special reasons for those two commodities.

Mr. Buckley: And of course we’re all working on a substitute for oil, and presumably a substitute for lumber would be plastics, right?

Mr. Simon: Yes.

Mr. Buckley: Concerning which there’s a certain amount of progress.

Mr. Simon: We are finding substitutes. For lumber we find— As a matter of fact we grow kenaf now. We can begin to replace newsprint with it. We replace wood with steel and aluminum and so on. But the price of lumber is more interesting because originally lumber prices were so low because people were just trying to get rid of it. When farmers first began to clear their farms, the lumber was nothing but a nuisance on the farm and they would sell to people to get rid of it. Now that it’s becoming a commercial crop we can anticipate I think that the price of wood will follow the same downward trend over time that other raw materials have.

Mr. Buckley: And therefore the productive exertions of the people will by definition go toward the development of that which they don’t need, but merely that which they desire.

Mr. Simon: The distinction between what you need and what you desire is——

Mr. Buckley: We need shelter, we need clothes, we need food.

Mr. Simon: I think I'd prefer to leave those kinds of distinctions to you. As economists we tend to think that people value what they're willing to pay for and what they're willing to work for to get. To make the distinction between shelter and fancy shelter or food and fancy food is a tricky one. Our government will say that for poor people very often a car is a necessity. So I would prefer to stay away from making those kinds of distinctions.

Mr. Buckley: Okay. Well let's hear from our examiner, Mr. Simon. Mark Green is the president of the research institute called the Democracy Project. His forthcoming book is called *Winning Back America*. He has been associated with Ralph Nader. He is a lawyer and a graduate of Cornell. Mr. Green.

Mr. Green: Thank you. *The Ultimate Resource*, your book, is a vigorous brief which attacks environmentalists who are worried about excessive population growth and pollution as doomsayers and, in the vernacular, full of crap. The fairness doctrine compels me to say that these environmentalists regard your book as full of crap. Let me just indicate some of their objections since they're not here. Lester Brown of Worldwatch, whom you rake over the coals, has said that while it's true that per capita production of certain commodities like fish, lumber, oil, beef and grain did go up in the third quarter of the century, in the fourth quarter of the century, which we're in now, they're going down. The second——

Mr. Buckley: Let's take one at a time, shall we?

Mr. Green: Fine.

Mr. Buckley: Do you want to comment on that, Mr. Simon?

Mr. Simon: Yes, I would. That's a particularly interesting one because fish is one of the things that Mr. Brown has dealt with, and curiously enough up through about 1975— from about 1970 to 1975—the world fish catch seemed to have leveled off and reached a plateau, and Brown and the Global 2000 Report to the President which came out last year made a great deal of this and extrapolated the

fish catch to be level from 1975 until the year 2000. Well, bingo. Along came the figures for '76, '77, '78, '79 and so on and the fish catch proceeded to continue upwards on this long secular trend. And what has happened here I think is, as so often, that people have seized upon the evidence of a short period—a very few years—assumed that that meant a basic change in the long-run trends and have reached wrong predictions on that basis.

Mr. Green: Did they have that information—— I mean, you can't know this for a certainty, but did they not have the information that you had access to? Why do they—— Gus Speth, who helped write Global 2000 as did Lester Brown, has argued that we are at the maximum fish yield in the oceans today, which is why—this is factual—that most countries, if not almost all countries, are trying to limit fish catch to preserve that resource.

Mr. Simon: You ask me why, and did they have access to this information? I certainly don't want to speculate that they ignored available information. The most charitable explanation is that they were writing over a period of, say, three years the Global 2000 Report, that the information that they published was that information which was available at the beginning of that period and over the, say, four years since then a lot more information has become available. The important thing, though, isn't why the last few years' data didn't appear in these reports, but the tendency for a lot of people to look at a very short-run period and to draw conclusions about the future from that short-run period rather than the very long-run trend of which it's a part and of which it simply turns out to be a blip historically.

Mr. Green: The World Bank has said that there are currently 800 million to a billion people who are malnourished; they defined it as "near absolute poverty." And Global 2000 says that 90 percent of the world's population growth now is in less-developed countries. So even if you are untroubled by population growth in the aggregate—worldwide—there is a greater increase in poorer nations. Is the World Bank and Global 2000 wrong about this also? And does it worry you?

Mr. Simon: Let me preface this by saying that I'm not saying that everything is fine now in the world. I don't promise that everything's

going to be rosy in the future. People are sick, children are hungry. All I'm saying is that on the average things are getting better and the people are eating better. The statistics about the number of people who are malnourished has been one of the interesting scientific, I think, scandals since about the year 1949 when the first statements about "One-fourth of the world's population goes to sleep hungry every night"——

Mr. Green: I know that——

Mr. Simon: Somebody just pulled that figure out of the air. It took two years to bring to bear some scientific information that suggested that there was nothing whatsoever behind that and yet these things go on being repeated from decade to decade.

Mr. Green: Well, some earlier people may or may not have used exaggerated estimates, but that doesn't disparage of course the World Bank today by estimating 800 million to a billion people. Could you comment on that and the fact that 90 percent is in lesser developed countries?

Mr. Simon: I can only comment that these are terribly, terribly slippery kinds of estimates to make. For example, they will make such estimates on the basis of the total number of calories. They'll look at the number of people in a given country, divide through by the total number of calories and say, "My goodness, these people are undernourished." But as some people have shown, by some standards, children in middle-class schools—very well fed by all measures—will, by some of these tests in some countries, fall below the apparent standards that would record them as being in malnutrition. The definition of malnutrition and the measurement of it is truly one of the great slippery and difficult statistical exercises of our time.

Mr. Green: So it's a difficult exercise——

Mr. Simon: Yes, indeed.

Mr. Green: ——and it's slippery, but it may be true. That is, if something is difficult to estimate, it doesn't of course mean that we should not attempt to estimate it. So they may be right.

Mr. Simon: What I am saying is that we have had a series of statements of this sort over the past 30 or so years, and when careful re-

searchers have gone to work on them, time after time they have found that these statements have been wrong. The latest ones I can't grapple with. I can't draw upon two years' worth of work by careful investigators on them yet, but my guess is that we'll have a repetition of the same history.

Mr. Buckley: It seems to me that's a perfectly intelligible thing to say, that if the same kind of people working with the same kind of data have issued reports which turned out to have been defective, then one should be presumptively skeptical of fresh reports that say the same thing. That's fair enough, isn't it?

Mr. Green: Not if you believe in Mr. Simon's book, which says that the ultimate resource is the human capacity to learn and be inventive; and if the Club of Rome issued a faulty report in 1972, presumably those people don't work for the World Bank and presumably the World Bank is not eager to repeat a disparaged report.

Mr. Buckley: It's ridiculous that the Soviet Union has had 52 consecutive bad harvests since 1917. It isn't because they are not capable of learning but because ideology holds them to a bad organization of their society.

Mr. Green: Right, and that you wrote a book about Yale in 1950 predicts nothing about Yale students in 1981 and that someone in the Club of Rome said something 10 years ago is not predictive of the World Bank. The Soviet Union is an integral entity. The Club of Rome and the World Bank are separate entities. But this is metaphysical. Let me move on to something——

Mr. Buckley: But if you've validated something as recently as one year ago, then he's certainly working with pretty fresh material. He's not always going back to the Rome report. He's talking about the President's report of 1980.

Mr. Simon: And the sad fact is that we do not seem to learn from these kinds of mispredictions. We've been making the same kinds of predictions since Malthus and in fact long before, and in fact the same people. Many of the same people who were involved in the Club of Rome report were involved as advisors and as part of the staff——

Mr. Buckley: Global 2000 business.

Mr. Simon: —of the Global 2000 thing, despite the fact that that *Limits to Growth* study was discredited by the very Club of Rome that did it—the very same people saying the very same kinds of things.

Mr. Green: That's not actually accurate. I called the author of "Global 2000," and he said to me, "Yes, I agree. The Club of Rome *Limits to Growth* was faulty. We therefore didn't depend on it. What we did is say that if current trends continue, not that they will, but if they continue, by 2000 there are resource and population problems. Therefore, let us use the ultimate resource, human ingenuity, and apply government planning to avoid these pollution problems." Well, are you saying that the ultimate resource, the human mind, works only in the private sector but not the public sector? Don't you agree that government can forestall these problems as the Global 2000 Report attempted to do?

Mr. Simon: Government is crucial in our coming to grips with many important social problems. Pollution happens to be one of them. Having said this, however, this doesn't mean that I am very enthusiastic about the relative capacities of people's imaginations to be at work successfully in the government sector versus the private sector. I guess—I think we're missing connections here somehow.

Mr. Buckley: May I suggest something that might be helpful? The operative phrase I think in Mr. Green's analysis was "if they continue." Now, I don't think you have any problem with that. If, for instance, if you consider 1945. If the United States continues with only the existing number of classrooms, it won't be able to handle the baby boom.

Mr. Simon: Absolutely.

Mr. Buckley: But you would say, "However, I predict that they will not settle with the same number of classrooms; therefore, I predict that the forthcoming generation of Americans will become educated." Isn't that what's missing here?

Mr. Simon: You're absolutely right, I think, that at the foundation of many of these predictions is the notion that our capacities will remain fixed.

Mr. Buckley: That if we do nothing?

Mr. Simon: If we do nothing. But the very

trends that that particular report—the Global 2000 Report we're talking about—would say, "If present trends continue—" The fact of the matter is they have the trends wrong. That report was supposedly based upon trend data. They say our predictions should be based on trend data and yet that report was marked for its almost total absence of trend data, and the very trends they're talking about such as the trend in how well people are eating, that trend is a positive trend, not a negative trend. Their trend, let's say—

Mr. Green: Actually that report said that they anticipate a 15 percent increase in per capita food production by the year 2000, an increase. They were worried that there might be, under current trends, a 50 percent increase in population from 4.4 billion to a little over 6½ billion by then.

Mr. Simon: The trend we want to look at is the trend in per capita food consumption.

Mr. Green: Right.

Mr. Simon: And that trend has been a positive, not a negative trend. That is, people are eating better than before. The number of people who die of famine has been going down rather than up. The prices of raw materials have been going down rather than up. These are the trends, among others, that they are talking about. They say, "If present trends continue, et cetera, things will get worse," but they misread the trends. They see trends getting worse when in fact the long-run trends are getting better with respect to resources, energy costs, food consumption, trees growing in the United States, purity of the environment. The United States environment is purer now in its air and its water than it was 10 years ago.

Mr. Green: Is that partly because of government—

Mr. Simon: Partly because of government.

Mr. Green: —anti-pollution regulations? Right?

Mr. Simon: Absolutely. But the point is—

Mr. Green: Do you agree with that, Mr. Buckley?

Mr. Simon: But the trends are getting better rather than worse, and that's the bottom line. You're saying to me, "They're only saying, 'If

present trends continue——’ ” I’m saying that the trends they’re talking about are not getting worse, as they think they are; they are getting better, and that’s what the data in the book are intended to show.

Mr. Green: Right.

Mr. Buckley: The answer is, of course I agree with it. I’ve always agreed, as do all conservatives, that air and water are socially owned, and under the circumstances we have an obligation and the government is there to enforce that obligation to keep us from contaminating other people’s water.

Mr. Green: By the way, given that agreement, are either of you upset at a news report that appeared in yesterday’s *New York Times* that the Environmental Protection Agency, under Anne Gorsuch, has recommended over a two-year time that it be cut by half in terms of funding. She’s already abolished the Office of Enforcement. Are you worried that that will weaken the kind of anti-pollution effort, since we all own the air and the water, that will reverse the favorable trend that you laud?

Mr. Simon: Shall I speak for both of us? (laughter) I’ll speak for myself.

Mr. Green: He’ll speak later.

Mr. Simon: I don’t know enough about it to be able to come to a simple answer, but I believe that whenever we look at this, we’ve got to look at two sides, not just what happens to pollution. We’ve got to look at the cost of that pollution. Just as we decide for ourselves as homeowners and as a town how often do we want garbage collection. Do we want it every day? Too expensive. Do we want it twice a week? Maybe that’s about right. Would, all things being equal, more garbage collection be better? Sure, if it were free. I don’t know what the costs are of keeping the rest of those people on in that organization. I don’t know what the side effects of their decisions will be. It’s a very complex situation, and I don’t think one can know simply by looking at a bunch of numbers about the number of people working there.

Mr. Buckley: That’s exactly the answer I would have given, to which I would, however, have added that the moment in which to tighten your requirements in respect to clean air ought not to come at the same time that

OPEC cartelizes the price of oil. That’s just dumb. But a lot of dumb people have been running the government lately.

Mr. Green: Even currently. (laughter)

Mr. Buckley: No, no, no. On the contrary. It’s the current government that’s retrenching on this.

Mr. Green: That’s another show. In your book—— By the way, let me ask you, if you had to vote today as a senator simplistically pro-choice/pro-life, what’s your personal point of view on the issue of abortion?

Mr. Buckley: But that’s not relevant. I don’t think that’s relevant. I don’t see why you should ask Professor Simon that question unless he chooses to answer it, but it’s not relevant to the agenda.

Mr. Green: Actually, in his book, he says that since taking a life by murder is a bad thing, in some sense—it’s not equal to—but in some sense it is also bad to forestall more births since it leads to more productivity. I mean, I could read the quote to you. So since he raised it in his book, I think it not unfair to ask that personal and political question.

Mr. Simon: I’ll give you a very simple answer. Perhaps my highest value of all is that people should be able to run their lives as they want to, and that means that if people wish to abort children, I may feel badly about it, but I do not wish to get in the way of their decision to abort before children come.

Mr. Green: Okay. Mr. Buckley asked about population growth in Bombay or Calcutta, and you said, “Gee, I’d really rather not answer because in the long run one can’t predict.” That’s part of the point of your book—that ingenuity can overcome these problems. But you’re fighting the hypothetical. In your book you say that, “Larger populations achieve greater economies of scale.” There’s no qualification of that statement.

Mr. Simon: All things being equal, of course.

Mr. Green: All right, I’ll accept that amendment. Is there a point at which you would, like Malthus did, reverse your thesis? That is, if Calcutta today doubled or tripled—if they had two billion people in Calcutta—you think that would only encourage growth and productivity as opposed to leading to more

starvation, because that is counter-intuitive. Most people couldn't understand what you're saying if you agreed with that.

Mr. Simon: When you talk about Calcutta, you're talking about one city as part of an entire nation. The question originally arose in the context of how fast India's economy was growing and how much knowledge it produced relative to other countries. I think it's important to recognize that India has perhaps the fourth or fifth biggest knowledge-producing industry in the world. We are the beneficiaries of the output of many Indians' minds, both those Indians who are in India and Indians here. I have no reason to believe that India will not retrace the history of the United States and that India may not be reasonably seen as where the West was in, say, 1750. Many of the conditions on Calcutta streets were the conditions of European cities several years ago.

Mr. Green: In other words, the Indians may replicate our success, but other countries—the Soviet Union—have not even though it hurts their people. You're confident that India—

Mr. Simon: I'm sorry, I didn't follow that about the Soviet Union.

Mr. Green: You previously said that the Soviet Union has it within their capacity to feed their people. They have the technological know-how, but there's an ideological blockage. But India you think—

Mr. Simon: No, I did not say—I never said the Soviet Union could not feed its people. I certainly would never say that.

Mr. Green: No, I didn't say that either.

Mr. Simon: Okay.

Mr. Green: I said that they had the potential to, but they're not.

Mr. Simon: No, they are feeding their own people.

Mr. Buckley: No, they're not. They're importing.

Mr. Simon: Yes, they are. They are importing our food to feed to their cattle so that they can eat more meat.

Mr. Buckley: Same sort of—

Mr. Simon: But if it's simply a matter of them feeding their people at a lower level of food quality, they can do so.

Mr. Buckley: The fact is they exported

grain up until the Revolution. Now they import it.

Mr. Simon: I'll take that as a fact if you tell me that.

Mr. Green: In your book one continuing leitmotif is that all is self-correcting, in a sense, and you haven't talked at all in your book about a common phrase, "the tragedy of the commons," which is that a cattleman or an industrialist, it may benefit them to have one more cow grazing or one more piece of pollution in a river although it hurts everybody else. The problem is if everybody does it you have no more grazing land and no more rivers; hence, the tragedy of the commons. So if there's greater population growth and industrialization in certain areas, not in the empty Midwest perhaps in this country, but in more urbanized areas, doesn't that raise the pollution problem, the tragedy of the commons?

Mr. Simon: Not necessarily, not if we run our society well. We can privatize many things. We can privatize garbage collection. You can decide how clean or how dirty you want your own land to be. A city can very effectively decide on the basis of the expressed wishes of its people how much cleanliness it wants on its city streets, and I don't think we're doomed in any way by any mechanism—of any failure of any human organization—that we are going to have increasing filth in the streets of New York or Champaign-Urbana. That's the opposite of the long-run trend.

Mr. Green: You also argued in the book, as you did on this show, that the more offspring someone has, the more they may work to feed those offspring. Again, is someone with 14 children presumptively more efficient than myself with three? And is there a point of diminishing returns? Your book has still not repealed the law of diminishing returns at which point that is no longer true.

Mr. Simon: (laughing) Well, there never was a law of diminishing returns.

Mr. Green: So you didn't have to repeal it?

Mr. Simon: I didn't have to repeal it. You look at economic texts and you find that they struggle like the dickens to avoid using that phrase because it has misled so many laymen so many times. So there's no such thing as a law of diminishing returns.

Mr. Green: The more children the better?

Mr. Simon: As to whether someone with 14 children will be simply overcome by the thing rather than rise to the challenge, that's indeed possible.

Mr. Buckley: But mightn't society benefit from the fact that if Mr. Green had 14 children, he wouldn't have the time to write so many books? (laughter)

Mr. Simon: He might turn around and say the same thing about us, so— But before you said something: that I assume that everything is self-correcting. I do not assume that everything is self-correcting. I only assume that, taken in the large and taken over a very long period of time, we tend to do better rather than worse. We tend to respond to challenges in such a way that we not only meet them, but leave ourselves better off in the long run, on the average. Some kinds of challenges beat us for the time being; we have catastrophes. That's not all self-correcting.

Mr. Green: I do agree with you, for example, that in the fuel area that there are not really limits, especially since the sun coming into this planet can create an energy form that is as close to infinite as we have, but as you quote and as everyone quotes Lord Keynes' saying, "In the long run, we're dead." In the short run, you are skeptical of conservation efforts, but in the short run we have presidents who may risk war in the Persian Gulf to protect our access to oil; in the short run, there is an OPEC cartel whose price does not reflect the value of the product because there's a bottleneck—it's called a monopoly. And there's an externality cost not in the price—that is, the risk of war. So why are you so skeptical of conservation efforts—again, in the short run, because in the long run energy will probably work itself out if we work out the distribution system.

Mr. Simon: First of all, I didn't quote Keynes with any approval about "In the long run, we're all dead." I think it's a fatuous remark; I think he made it because he couldn't stand not making a clever remark when the opportunity offered.

Mr. Green: In the spirit that I quoted it.

Mr. Simon: Okay, and it may be appropriate in certain circumstances, but in general it tends to be indeed fatuous. I'm not at all skep-

tical about conservation. I believe that we ought to conserve our resources individually and socially in accord with our efforts to make our lives as efficient as possible. What I am saying is we should not conserve some special resources just because we believe that cutting down a tree is a bad thing. We should save wastepaper if indeed the value of the paper that we save is greater than the cost of the effort to us of saving the paper, but we shouldn't save wastepaper if in fact it costs us three times as much in our effort and in other energy costs, if you like, to save it just because our hearts bleed when a tree is cut down, unless you have a personal value about trees and about not cutting them down, and many conservationists do. They really feel that not only are our values as people important but trees too.

Mr. Buckley: They're cuckoo on the subject.

Mr. Simon: No, I won't say that.

Mr. Buckley: Well, some do.

Mr. Simon: I say that they have different values than you and me, and I presume Mr. Green too.

Mr. Green: Well, there are some—

Mr. Simon: Unless you happen to share their feeling about trees.

Mr. Green: I am a non-cuckoo conservationist who thinks that conservation is a source of energy which is both cheap and almost inexhaustible, and, given the short-run difficulties of energy distribution—there is an OPEC, there are nations at war around that area which threaten our economic vitality—it may be wise for our country in the short run to engage in—to encourage even via tax incentives—our conservation since price doesn't reflect value.

Mr. Simon: I think it would be totally unwise, totally uneconomic in all respects to this society to encourage me to pedal my bicycle from Champaign-Urbana to New York to get here for this interview by any reasonable accounting.

Mr. Green: Is that a *reductio ad absurdum*?

Mr. Simon: I think it is. But that's exactly what I read in the papers and on the bumper stickers. Curiously enough, it's on the bumper stickers of automobiles that they suggest you should "use pedal power," and I'm always

turned around by that. (laughter) What about the guy driving his car who's trying to tell me to pedal a bicycle? And indeed that's exactly what they are urging as a way of saving energy. It's not a *reductio ad absurdum*; it's a real example of the kinds of things that are urged on us.

Mr. Green: There are two trends going on in the United States that are going toward opposite ends. One is the increase-yield-per-acre of our farmland; the other is that an area the size of almost Connecticut each year is taken out of cultivation. In your book you acknowledge that one of the few places on the planet that we are losing cultivatable area is the United States—

Mr. Simon: Not losing it, no.

Mr. Green: —which is the breadbasket of the world. You didn't say that in your book?

Mr. Simon: No. There are more things in your last statement that I disagree with than—

Mr. Buckley: You have only 20 seconds.

Mr. Simon: First of all, I don't know how big Connecticut— The so-called loss of crop land in the United States is one of the scientific scams of our time. We're not losing three million acres; at most, a million acres a year are going into urbanization, which is the same as the long-run history, and furthermore, the amount of crop land has been going up since the 1960s until now rather than going down.

Mr. Buckley: Thank you—

Mr. Simon: Those are the facts.

Mr. Buckley: Thank you, Mr. Julian Simon, author of *The Ultimate Resource*; thank you, Mr. Mark Green.

The Beijing Declaration on Population and Development

The population conference circuit, once the private domain of peripatetic demographers, has increasingly come to encompass also gatherings of politicians. The Asian Conference of Parliamentarians on Population and Development, sponsored by the UN Fund for Population Activities and held in Beijing on 27–30 October 1981, is the most recent. It was one of a series of regional meetings planned to follow up the International Conference of Parliamentarians on Population and Development in Colombo, 1979 (see PDR vol. 5, no. 4, pp. 730–736 and vol. 7, no. 4, pp. 719–725)—in turn spawned by the 1974 Bucharest conference. It brought together government delegations from 19 countries of Asia (in the UN's expansive definition) ranging from Cyprus to Fiji. There were large delegations from China, India, and Japan, and representatives of such lesser known parliaments as those of Iraq and Democratic Kampuchea. The main outcome of the conference was the Beijing Declaration on Population and Development, reproduced below.

The Declaration, substantively unremarkable though it is, should not be simply seen as yet another product of wheel-churning activity by the UN system. There is, of course, a self-serving element in the desire by international agencies to keep the popu-