Staving off a future of gloom and doom

A small library of tomes in recent years — most notably "The Global 2000 Report to the President" (SN: 8/2/80, p. 70)—have offered glimpses of the future. And more often than not, what they pictured wasn't pretty. Depending on the clarity of their crystal balls, the reports' authors offered more or less compelling portraits of impending gloom and doom. Now two new treatises (see page 253) pick up the theme, suggesting somewhat sunnier prospects. But while both appear compelling and reasoned, the two books differ markedly. And that's because ideologically their authors couldn't be much farther apart.

At issue is how to accommodate indefinitely the world's growing population and activities with the earth's finite resources. In *Building a Sustainable Society*, Lester Brown makes a case for systematic, government-backed global conservation of resources — using less and recycling more. It is the best way to get the most equitable distribution of finite resources among living and future generations, he claims. Julian Simon, on the other hand, says that people like Brown are attempting to perpetuate the "myth" of growing resource scarcity.

In *The Ultimate Resource*, Simon contends that "our supplies of natural resources are not finite in any economic sense. Nor does past experience give reason to expect natural resources to become more scarce. Rather, if the past is any guide, natural resources will progressively become less scarce, and less costly, and will constitute a smaller proportion of our expenses in future years." As if that were not enough to get Simon labeled a futurist heretic, he also blatantly proposes that "population growth is likely to have a long-run *beneficial* impact on the natural-resource situation."

Both economists marshal a wagonload of data—often the same data—to support their claims. The primary difference between Simon, a professor of economics and business administration at the University of Illinois, and Brown, an agricultural economist and president of the Washington-based Worldwatch Institute, is one of interpretation and perspective.

Simon discusses market forces and how they determine the "availability" of a given resource. However, he downplays discussion of biological factors and the role they have historically played in the global economic theater. In contrast, Brown bases his economic forecasts and socio-political analyses on the vitality of biological systems; during the late 1960s, Brown coordinated the Agriculture Department's technical-assistance programs in 40 countries. That government experience has fostered Brown's cynicism about how abruptly and how quickly political powers are likely to change their ways as they respond to environmental and economic warnings. It may also underscore a pivotal difference in the economists' perspectives — time.

Simon claims, "There is no physical or economic reason why human resourcefulness and enterprise cannot forever continue to respond to impending shortages and existing problems with new expedients that, after an adjustment period, leave us better off than before the problem arose." He says that "adding more people will cause us more such problems, but at the same time there will be more people to solve these problems and leave us with the bonus of lower costs and less scarcity in the long run. The bonus applies to such desirable resources," he adds, "as better health, more wilderness, cheaper energy and a cleaner environment.'

Simon's ultimate resource for solving the crisis of the future is people. Conversely, Brown sees a growing global population as the primary factor precipitating most global crises.

Says Simon, if you have enough people, some will wrest the imaginative solutions necessary to overcome any adversity. And motivation for the application of this human ingenuity may be short-term crises.

Simon concedes "there will always be shortage crises because of weather, war, politics and population movements." But only over the short term. Seen over the long term, he suggests "an increased need for resources usually leaves us with a permanently greater capacity to get them, because we gain knowledge in the process. And there is no meaningful physical limit — even the commonly mentioned weight of the earth — to our capacity to keep growing forever.... We see the resource system as being as unlimited as the $\,$ number of thoughts a person might have or the number of variations that might ultimately be produced by biological evo-

Of course there will be momentary backsliding in society's maturation, he says. But every "backward step leads to 1.0001 steps forward, or thereabouts." And "that's enough to keep us headed in a life-sustaining direction." Charts, graphs and statistics shore up his claims that

A PROPOSED POPULATION STABILIZATION TIMETABLE

| YEAR | WORLD POPULATION (In Billions) | ANNUAL GROWTH RATE (%) | ANNUAL INCREASE (In Millions) |
|---------|--------------------------------------|------------------------------|-------------------------------------|
| 1970 | 3.6 | 1.9 | 69 |
| 1980 | 4.4 | 1.7 | 75 |
| 1990 | 5.0 | 1.1 | 55 |
| 2000 | 5.5 | 0.8 | 44 |
| 2010 | 5.8 | 0.4 | 23 |
| 2020 | 6.0 | 0.0 | 0 |
| Worldwa | tch Institute | | |

globally, humans have sufficient resources—food, agricultural land, money and mineral resources—to sustain themselves in the future as successfully as in the past.

Brown is less sanguine, particularly about the availability of time to dream up solutions for what he sees as looming terminal—not short-term—crises in food, agricultural land and mineral resources. Working from essentially the same resource statistics as Simon, Brown sees earth's growing human population as already taxing the carrying capacity of the biological systems upon which it has relied. Without them, Brown contends, there is no long-term future. And the only way he sees to save them is with a halt in population growth - he suggests a timetable for that (see chart) - and in a resource-conserving lifestyle. Not only is there still time, he says, "But if we do things right, we have the opportunity preceding generations didn't have of creating a society that could last forever."

Image problems for Shroud of Turin

A federal district judge in Detroit has ruled that a Michigan publishing company can go ahead and distribute the book *Verdict on the Shroud*. The book, whose publication had been enjoined a day earlier by a county judge, contends that the Shroud of Turin is physical evidence for the resurrection of Jesus of Nazareth (SN: 10/3/81, p. 211). It was written by Kenneth E. Stevenson and Gary R. Habermas and is being published by Servant Publications, Inc. of Ann Arbor.

Meanwhile, in a prepared statement, the Shroud of Turin Research Project, Inc. (STURP), said, "We can conclude that the Shroud image is that of a real, human form, of a scourged, crucified man. It is not the product of an artist. The blood stains are composed of hemoglobin." But the statement went on to emphasize that there is no conclusive evidence to prove that the image is that of Christ.

In its suit against the publishing company, STURP charges that the book claims to represent the project's final report. The defendants deny the allegation and point out that the authors wrote that their conclusions do not necessarily represent those of the research team. Before the injunction was overturned, Circuit Judge Ross W. Campbell said that publication of the book might jeopardize STURP's attempt to get permission for radioactive dating of the Shroud's cloth—the final phase of the project investigation. The Shroud's official guardian, Anastasio Alberto Ballestro, archbishop of Turin, is considering a request to allow the dating test. The publishers, according to news reports, have agreed to send an insert page with the books stating the book is not connected with the research project.

OCTOBER 17, 1981 245