

## Overcoming Patriarchy and Sexism Won't Save Us

William R. Catton, Jr.

Professor Emeritus, Washington State University, 12108 Gravelly Lake Drive, SW, Lakewood, WA 98499-1416 USA<sup>1</sup>

Throughout the winter of 1997-98, as the southeastern and southwestern corners of the continental United States experienced some of El Niño's especially harsh effects, one had to hope the weather events and their serious impact might be opening some minds, yielding a rising consciousness of at least the possibility that our habitat is undergoing major changes. It remains uncertain how much realization there will be that seriously harmful anthropogenic changes are possible. Writers arguing that *Homo sapiens* has already worsened the conditions of life on this planet will probably continue for a while to seem eccentric.

Eccentric or not, an outspoken description of what *Homo sapiens* has done to the world in ten thousand years should convey an important message. Thomas Lough vividly contrasts the Earth ten thousand years ago with today's world. For humans alive back then, he tells us, their environment was "an extensive supermarket" in which everything was "free." All about them was "common land, neither public nor private," except for comparatively modest assertions of territoriality by thousands of small societies comprising no more than eight million people altogether. Now we live on a planet where human population is approaching 6 billion and is organized into fewer than 200 much larger societies. And, as Lough points out, all claims of common land are challenged.

To conventional thinking, the growth from small to large societies, enabling the world to support billions instead of mere millions of people, might seem like real progress. But important human societies today are industrial (or industrializing). The dire significance of this might be made clearer by invoking the once familiar concept of cultural lag (Ogburn 1922) — stress arising when parts of a culture change more than other parts so that there is no longer the former degree of adjustment between them. When there were only 8 million hunter-gatherers, whatever useful materials could be found in the world around them were to all intents and purposes inexhaustible (in any time frame meaningful to them). But not now. Based in the Northern industrialized countries, the organizations that function as instruments of industrial living have been, in effect, staking claims to fragments of that former planetary "supermarket" and then exploiting whatever resources to which this gives them exclusive access as if the supply were inexhaustible.

As Lough rightly points out, these organizations are "destroying our life-support systems." He is not alone. In letters to *Science* (19 September 1997, 1746-7), America's

political leaders were said by Hoover Institution Visiting Scholar B. Meredith Burke to "have sealed our ecological fate" by having chosen "to maximize rather than optimize population," while retired University of Colorado physics professor Albert A. Bartlett questioned whether scientists themselves are being responsible when they "hold out the hope that endless population growth can be matched by endless doublings of world food production."

Will the ominous message in Lough's opening paragraphs "soak in," or will it encounter a "duck's back" response among readers? In an effort to avoid such dismissal, he insists modern societal entities "continue to destroy our life-support systems, and plan to finish the job as rapidly as possible." To emphasize, he reiterates. "They may well succeed," he suggests, "because they control almost all the forces of organized violence in the world. They also control the technologies, equipment, and payrolls they need to destroy our life support systems."

The important message of so clear a comparison of the world at the dawn of agriculture and the world today is that humanity is committing ecocide. But the interest groups antagonized by Lough's passionate "explanation" will surely resist that message. To be too intent on placing blame may be counterproductive. Finger-pointing can be emotionally satisfying, but unless culprits are few and relatively powerless compared to those in a position to "correct" their behavior by applying sanctions, even the most indignant revelation of culpability is unlikely to produce needed change.

The problem of adverse human impact on the planet upon which we depend is indeed serious, but a call to arms against patriarchy and sexism is not likely to save the world. Because many attributes of today's social structure and culture are reprehensible, it does not follow that the necessary ecological redirection can be attained (or even facilitated) by exposing the alleged connections of system flaws to patriarchal patterns and sexist manifestations of power. Such an approach to the profound danger confronting human societies today is just too simplistic.

The naivete of attributing all human woes to faulty institutions and expecting what would amount to merely political change to put things right was pointed out two centuries ago by Malthus when he wrote (Appleman 1976, 66):

*The great error under which Mr. Godwin labours throughout his whole work is the attributing almost all the vices and misery that are seen in civil soci-*

*ety to human institutions. Political regulations and the established administration of property are with him the fruitful sources of all evil, the hotbeds of all the crimes that degrade mankind. Were this really a true state of the case, it would not seem a hopeless task to remove evil completely from the world, and reason seems to be the proper and adequate instrument for effecting so great a purpose. But the truth is, that though human institutions appear to be the obvious and obtrusive causes of much mischief to mankind, yet in reality they are light and superficial, they are mere feathers that float on the surface, in comparison with those deeper seated causes of impurity that corrupt the springs and render turbid the whole stream of human life.*

It is important to stand back and contemplate “the big picture.” We must try to transcend natural tendencies toward ethnocentrism — to see whether flaws in our own society’s relation to the Earth upon which life depends may not just be elements of our culture, but are perhaps widely replicated in other societies. If so, that suggests their causes are somehow deeper and more pervasive and they will be harder to change. It is also important to transcend anthropocentrism. Are we as a species uniquely susceptible to temptations to behave in ways that diminish the carrying capacity upon which our future depends? If overshooting carrying capacity is a problem not unique to *Homo sapiens*, then it surely will take more than some ordinary political revolution or even a major cultural transformation to ensure our future.

If, for the sake of argument, we grant that somehow it has been our patriarchal and sexist tendencies that led us to overshoot carrying capacity, shouldn’t we ask whether we differ from our animal relatives in being patriarchal and sexist? If similar patterns prevail among other species, what causes them to arise and persist among non-human populations? What contributions do they make to survival and reproduction? Can we depend for ecological salvation on prescriptions that fail to take into account the possibly pre-human origins of human behaviors we deplore?

No social scientist should presume to answer (or dismiss) these questions without having at least sampled the recent literature on animal behavior, ethology, and evolutionary theory. There is a good deal of evidence that practices we can pejoratively label “patriarchal” and “sexist” arise in response to challenges confronting many species. They are common among social bands of our nearest relatives, the great apes (Byrne and Whiten 1988; Kano 1992; Rubenstein and Wrangham 1986; Standen and Foley 1989; Tanner 1981). If sins against the laws of ecology are not uniquely human, they are unlikely to be eradicated by preaching, however well it may document its castigations.

The fact remains, we are today using the planet in unsustainable ways to an unsustainable extent. With our modern technologies and modes of organization, we have exceeded Earth’s carrying capacity for these ways. Lough is justifiably concerned about the consequences of our having overshoot carrying capacity, but many readers will question his notions about how and why this has happened, and few (apart from more or less fanatic ideologues) will accept the notion that expunging patriarchy and sexism from our culture will solve the overshoot problem. In a chapter on “Unsustainable Human Ecology,” Freese (1997, 171-208) has provided a much more illuminating discussion of the causes and ramifications of the condition we have wrought.

The innovative idea most important for our time may well be the human relevance of the concept of carrying capacity. Without it, trashing of the planet by our species will continue dragging us toward ultimate catastrophe. By (human) “carrying capacity” I mean the maximum load (of human use) that can be sustained by an environment without diminishing its future suitability for supporting an equivalent load. The key word is “sustained.” An environment may be able temporarily to “support” a larger load than it can permanently sustain.

The heuristic importance of such a concept of carrying capacity is not diminished by the difficulty of specifying its numerical value. In fact, attempts to assign it a numerical value have tended to mislead, because they misconstrue the very idea of carrying capacity. They imply that somehow the planet can “support” X number of people, with any beyond that number starving immediately, as if, somehow, there were an absolute numerical limit, an impenetrable ceiling. Whenever someone’s estimate of that “ceiling” has been surpassed by actual population, it has then seemed easy to scoff at the very idea of “limits to growth.” By not conceiving the possibility (and implied consequences) of overshooting carrying capacity, numerical estimates of a limit have tended to make the limit concept too fragile.

But carrying capacity is not a maximum number which it is impossible to surpass. Populations (of various species) do sometimes overshoot carrying capacity (Catton 1982). As the load grows larger, observable environmental degradation must be seen as symptomatic of having overshoot carrying capacity. Numerical estimates fail usually to provide enlightenment regarding the consequences of exceeding the limit, which are not as simple as mere starvation of the excess. In a book whose title asks, “How many people can the Earth support?” Joel E. Cohen (1995, 161, emphasis added) was led to decide that the question was “obviously incomplete,” and required further specification: “Support with what kind of life? With what technology? *For how long? Leaving what kind of Earth for the future?*” As those two questions I have italicized imply, it is becoming increasingly evident that the

essence of the carrying capacity concept is the issue of sustainability (see, e.g., Brown 1981; Milbrath 1989; Daily and Ehrlich 1992; Hardin 1993; Catton 1995).

It is important to stop merely wondering how many people the earth could "support," and to start facing the more realistic question. How much of the ecological load human living imposes can the world sustain, over a prolonged stretch of future time. The load we are imposing has many dimensions. The number of people imposing it is just one dimension, and does not alone suffice as an adequate measure of the load's magnitude. Not just the human head count has escalated; the kinds of materials we use as "resources" has also proliferated; the amount of energy expended per capita is vastly larger today than among past generations; the quantity and diversity of life-threatening stuff human life generates has greatly increased our disposal problems. In short, our per capita ecological impact was becoming ever more enormous at the same time our numbers were "exploding."

The history of efforts to determine the planet's human carrying capacity has been considered in abundant detail by Cohen (1995, 237), who found "at least four different concepts of carrying capacity" have been used in "ecology as a basic science," plus "at least five additional concepts of carrying capacity" which turned up in applied ecology's various specialties (i.e., range management, wildlife management, fisheries management, forest management and agriculture). Unfortunately, because he concluded that none of these previous concepts of carrying capacity in basic or applied ecology could fit for the human population, his book may too easily be misconstrued as documentation of a basis for rejecting further use of any carrying capacity concept. Simon and Kahn (1984, 45) had, of course, already declared that "Because of increases in knowledge, the earth's 'carrying capacity' has been increasing throughout the decades and centuries and millennia to such an extent that the term 'carrying capacity' has by now no useful meaning."

A careful reader should realize Cohen's message was not an endorsement of their flagrantly cornucopian view. His chapter about the diverse definitions of carrying capacity closed with sentences in which the sustainability idea remains implicit. That idea is basic to the human relevance of carrying capacity limits. "This generation inherited the Earth and will surely leave it to future generations," said Cohen (1995, 260). "The view that your generation and mine take of the role and importance of future generations will influence how we treat the Earth today." Lough's paper is clearly intended to persuade readers to cease and desist from preparing as our legacy for posterity a ruined ecosphere.

It may be easier to condemn mining and manufacturing for being environmentally devastating, but it should shock readers to encounter Lough's contention that agriculture, too,

involves the destruction of habitat. Whose habitat? Obviously when an area is farmed it no longer serves as habitat for whatever creatures might have used it in its wild state. But more to Lough's point, modern farming techniques, so dependent on energy subsidies in the form of chemical fertilizers and pesticides as well as fuels for the "labor-saving" machinery now so indispensable, all add up to "a non-sustainable land use." That familiar expression "labor saving" masks reality; modern machinery's real significance is that it turns humans into giants. Their labor is not so much "saved" as amplified.

Amplified by modern devices, agricultural labor destroys the soils on which we utterly depend. The destruction occurs faster than new soil is naturally formed. So our habitat is diminished. Farming has become a form of mining. Ostensibly renewable resources are produced today largely by the prodigal expenditure of nonrenewables.

Although there are many people who will regard as absurd Lough's proposals for paying people not to do what they have previously been paid to do, given the ecological state of the world there is probably a real need to get outlandish ideas onto the agenda. Converting agriculture to a form of mining, as we have done with modern methods and equipment, has enabled more mouths to be fed in the present, at the cost of worse famines in the future. The longer we continue destroying carrying capacity, the worse the crash will be.

There are constraints on Earth's human carrying capacity. According to Cohen (1995, 356), they are no less real than the choices people and their institutional agents have to make within such limits. As "one example of the many civilizations that undercut their own ecological foundations" he cited Easter Island — an example we must learn to realize is entirely consistent with Darwinist evolutionary theory. Natural selection is a process of selective survival and differential reproduction. Its biases are shaped by existing environmental conditions, not future conditions. In proliferating, the Easter Islanders had thrived on short term advantage at the cost of long term ruin.

There was apparent aid and comfort to believers in the cornucopian faith when Cohen (1995, 358) declared that a "number or range of numbers, presented as a constraint independent of human choices, is an inadequate answer to the question 'How many people can the Earth support?'" But that aid and comfort was contradicted when he almost echoed Malthus by saying, "If human choices somehow failed to prevent population size from approaching absolute upper limits, then gradually worsening conditions for human and other life on the Earth would first prompt and eventually enforce human choices to stop such an approach."

As a heuristic concept, carrying capacity is essential to realistic thinking about the human prospect. Carrying capac-

ity constrains whether or not it is known and accurately measured (like gravity, or chemical reactivity). No criticism of the various methods used heretofore in attempts to establish the numerical magnitude of a sustainable global load can repeal the principle that exceeding present carrying capacity is destructive of future carrying capacity. In the final analysis, the following statements by Garrett Hardin (1993, 207, 213) must become humanity's guide: "Exceeding the carry-

ing capacity in one year diminishes the carrying capacity in subsequent years." — and "at a sustainable size of population, the quality of life and the quantity of it are inversely related."

### **Endnote**

1. Email address: WRNLCATTON@aol.com. Footnotes and references can be found at: [members.aol.com/tdietzvt/HER\\_lough.html](http://members.aol.com/tdietzvt/HER_lough.html)