

De crecimiento y decrecimiento: Apostilla al futuro sostenible

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Vuelvo al memorable libro *Consilience: The Unity of Knowledge*, de E. O. Wilson, para llamar la atención sobre un pasaje del último capítulo, relativo a la sostenibilidad de las economías humanas, especialmente las globalizadas. El autor prevé un colapso medioambiental que difícilmente se podrá evitar, con las dinámicas adquiridas por la economía y la población en expansión continua, y que llevará a grandes catástrofes tanto humanas como medioambientales. Es una historia desagradable, la que prevé Wilson para el próximo siglo, pero haríamos bien en verla venir. Un pasaje importante:

To summarize the future of resources and climate, the wall toward which humanity is evidently rushing is a shortage not of minerals and energy, but of food and water. The time of arrival at the wall is being shortened by a physical climate growing less congenial. Humankind is like a household living giddily off vanishing capital. Exemptionists are risking a lot when they advise us, in effect, that "Life is good and getting better, because look around you, we are still expanding and spending faster. Don't worry about next year. We're such a smart bunch something will turn up. It always has."

They, and most of the rest of us, have yet to learn the arithmetical riddle of the lily pond. A lily pad is placed in a pond. Each day thereafter the pad and then all of its descendants double. On the thirtieth day the pond is covered completely by lily pads, which can grow no more. On which day was the pond half full and half empty? [The twenty-ninth day.](#)

Shall we gamble? Suppose the odds are even that humankind will miss the environmental wall. Better, make it two to one: pass on through or collide. To bet on safe passage is a terrible choice, because the stakes on the table are just about everything. You save some time and energy now by making that choice and not taking action, but if you lose the bet down the line, the cost will be ruinous. In ecology, as in medicine, a false positive diagnosis is an inconvenience, but a false negative diagnosis can be catastrophic. That is why ecologists and doctors don't like to gamble at all, and if they must, it is always on the side of caution. It is a mistake to dismiss a worried ecologist or a worried doctor as an alarmist.

At best, [an environmental bottleneck](#) is coming in the twenty-first century. It will cause the unfolding of a new kind of history driven by environmental change. Or perhaps an unfolding on a global scale of more of the old kind of history, which saw [the collapse of regional civilizations](#), going back to the earliest in history, in northern Mesopotamia, and subsequently Egypt, then the Mayan and many others scattered across all the inhabited continents except Australia. People died in large numbers, often horribly. Sometimes they were able to emigrate and displace other people, making them die horribly instead.

Archaeologists and historians strive to find the reasons for the collapse of civilizations. They tick off drought, soil exhaustion, overpopulation, and warfare — singly or in some permutation. Their analysis are persuasive. Ecologists add another perspective, with this explanation. The populations reached the local carrying capacity, where further growth could no longer be sustained with the technology available. At that point life was often good, especially for the ruling classes, but fragile. A change such as a drought or depletion of the aquifer or a ravaging war then lowered the carrying capacity. The death rate soared and the birth rate fell (from malnutrition and disease) until lower and more sustainable population levels were reached.

The principle of carrying capacity, is illustrated by the recent history of Rwanda, a small and beautiful mountainous land that once rivaled Uganda as the pearl of Central Africa. Until the present century Rwanda supported only a modest population density. For five hundred years a Tutsi dynasty ruled over a Hutu majority. In 1959 the Hutu revolted, causing many of the Tutsi to flee to neighbouring countries. In 1994 the conflict escalated, and Rwandan army units massacred over half a million Tutsi and moderate Hutu. Then an army of the Tutsi, the Rwandan Patriotic Front, struck back, capturing the capital town of Kigali. As the Tutsi advanced, spreading out into Zaire, Tanzania, and Burundi. In 1997 Zaire, newly renamed the Republic of the Congo, forced many of the Hutu refugees back to Rwanda. In the maelstrom, thousands died of starvation and disease.

On the surface it would seem, and was so reported by the media, that the Rwandan catastrophe was ethnic rivalry run amok. That is true only in part. There was a deeper cause, rooted in environment, and demography. Between 1950 and 1994 the population of Rwanda, favored by better health care and temporarily improved food supply, more than tripled, from 2.5 million to 8.5 million. In 1992, the country had the highest growth rate in the world, an average of 8 children for every woman. Parturition began early, and generation times were short. But although total food production increased dramatically during this period, it was soon overbalanced by population growth. The average farm size dwindled, as plots were divided from one generation to the next. Per capita grain production fell by half from 1960 to the early 1990s. Water was so overdrawn that hydrologists declared Rwanda one of the world's twenty-seven-water-scarce countries. The teenage soldiers of the Hutu and Tutsi then set out to solve the population problem in the most direct possible way.

Rwanda is a microcosm of the world. War and civil strife have many causes, most nor related directly to environmental stress. but in general, overpopulation and the consequent dwindling of available resources are tinder that people pile up around themselves. The mounting anxiety and hardship are translated into enmity, and enmity into moral aggression. Scapegoats are identified, sometimes other political or ethnic groups, sometimes neighboring tribes. The tinder continues to grow, awaiting the odd assassination, territorial incursion, atrocity, or other provocative incident to set it off. Rwanda is the most overpopulated country in Africa. Burundi, its war-torn neighbor, is second. Haiti and El Salvador, two of the chronically most troubled nations of the Western hemisphere, are also among the most densely populated, exceeded only by five tiny island countries of the Caribbean. They are also arguably the most environmentally degraded.

[Population growth](#) can justly be called the monster on the land. To the extent that it can be tamed, passage through the bottleneck will be easier. Let us suppose that the last of the old reproductive taboos fade, and family planning becomes universal. Suppose further that governments create population policies with the same earnestness they devote to economic and military policies. And that a result the global population peaks below ten billion and starts to decline. With NPG (negative population growth) attained, there are grounds for hope. If not attained, humanity's best efforts will fail, and the bottleneck will close to form a solid wall.

Humanity's best efforts will include every technological fix for an overcrowded planet that genius can devise. Endless stand-by schemes are already on the board. Conversion of nitrogenated petroleum to food is one remote possibility.

Algal farms in shallow seas is another. The water crisis might be eased by desalinization of seawater with energy from controlled fusion or fuel cell technology. Perhaps as polar ice shelves break up from global warming, more fresh water can be drawn from icebergs herded to dry coasts. With a surplus of energy and fresh water, the agricultural revegetation of arid wasteland is attainable. Pulp production can be increased in such recovered lands with "wood grass", fast-growing, nitrogen-fixing tree species that can be harvested with giant mowers and then sprout new shoots from the severed stocks. Many such schemes will be tried as demand rises, and a few will succeed. They will be driven by venture capital and government subsidy in the global free-market economy. Each advance will reduce the risk of short-term economic calamity.

But be careful! Each advance is also a prosthesis, an artificial device dependent on advanced expertise and intense continuing management. Substituted for part of Earth's natural environment, it adds its own, long-term risk. Human history can be viewed through the lens of ecology as the accumulation of environmental prostheses. As these manmade procedures thicken and interlock, they enlarge the carrying capacity of the planet. Human beings, [being typical organisms in reproductive response, expand to fill the added capacity](#). The spiral continues. The environment, increasingly rigged and strutted to meet the new demands, turns ever more delicate. It requires constant attention from increasingly sophisticated technology.

The Ratchet of Progress seems irreversible. The message then for the primitivists, who dream of nature's balance in Paleolithic serenity: *Too late*. Put away your bow and arrow, forget the harvest of eels berries; the wilderness has become a threatened nature reserve. The message for the environmentalist and exemptionalists: *Go together*. We must plunge ahead and make the best of it, worried but confident of success, our hope well expressed but Hotspur's lines in *Henry IV: I tell you, my lord fool, out of this nettle, danger, we pluck this flower, safety*. (Consilience, 1998: 286-89)

En caso de que la cita parezca invitar al optimismo, recordemos que Hotspur se arriesga en la batalla y muere en ella. Podemos añadir una apostilla a lo que Wilson formula como el objetivo común que debe animar a la humanidad:

The common aim must be to expand resources and improve the quality of life for as many people as heedless population growth forces upon Earth, and do it with minimal prosthetic dependence. That, in essence, is the ethic of sustainable development. (289)

Sí, pero no. Quiero decir que es un objetivo compatible por todos, pero que no es ese un objetivo que defina un desarrollo sostenible. En absoluto.

A ver, un paréntesis a la apostilla. Sostenible, sostenible, no hay *nada*. El Universo no es sostenible, aunque por el momento se sostenga. De lo que estamos hablando es de *humanamente sostenible por un periodo de tiempo lo más largo posible*, un difícil (imposible) cálculo que conjuga lo que consideramos una existencia humanamente digna en un entorno de recursos limitados. El crecimiento ilimitado no es una opción (como nos deja claro la conferencia de Bartlett arriba enlazada). Hay que apuntar al crecimiento cero, o a una alternancia viable, no traumática, de crecimiento y decrecimiento. Los niveles actuales de población son de por sí insostenibles con las perspectivas energéticas actuales, pues el agotamiento de los combustibles fósiles está asegurado, y con ello el colapso del orden económico hoy vigente. Por ello son insensatos los demógrafos que pretenden tranquilizarnos con la predicción de una estabilización de la población mundial alrededor de los diez mil millones. La actual población ya ha acabado con los bosques del mundo y creado un colapso ecológico sin precedentes—como para pensar en mantener ese ritmo, e incrementado, unos centenares de años. Y si la superpoblación estable es absolutamente insostenible, piénsese cuánto menos sostenible, y cuánto más catastrófico, será el crecimiento continuado.

Wilson pasa a continuación a poner sus esperanzas en protocolos internacionales tales como las cumbres medioambientales de Río de Janeiro, Kyoto, etc. Que hemos visto vienen incumpliéndose, empeorando por tanto los pronósticos. Pero es que su misma definición de sostenibilidad no es coherente, como iba diciendo.

La parte incoherente de su definición es que podamos siquiera plantearnos la noción de convertir en sostenible toda la población que "el crecimiento poblacional insensato" le eche encima a la Tierra. De acuerdo que hay que hacerlo con las prótesis mínimas, pero Wilson mismo nos dice que las prótesis vienen solas, una vez la población añade su presión. La demanda acaba con los criterios y con las prioridades: cuando hay gente que quiere comer, matarán al último elefante, y cuando haya un beneficio que sacar, cortarán el último árbol, como en la película *Rapa Nui*, otro microcosmos de un colapso ecológico, esta vez en la Isla de Pascua. [Hay que verla](#). Solo observar que ahora, a nivel planetario, no podemos huir a Pitcairn.

No, hay que definir de otra manera el desarrollo sostenible. Lo que sobra realmente en la definición de Wilson es la noción de un objetivo común. *No existe, ni va a existir nunca, el objetivo común de un desarrollo sostenible*. Los objetivos humanos son a corto plazo, y el objetivo del desarrollo sostenible va a ser siempre un objetivo en conflicto con otros, más destructivos, pero más beneficiosos a corto plazo o localmente para quienes se adhieran a ellos. La lucha por la sostenibilidad siempre será eso, una lucha, nunca un acuerdo. Y la inmensa mayoría de los intereses y objetivos humanos, egoístas, serán a corto plazo, insostenibles por definición.

Sin contar con que hay elementos en la ecuación que nada tienen que ver con objetivos. El crecimiento incontrolado de la población no es un objetivo de nadie, y sin embargo es un resultado. El resultado de muchas decisiones individuales, o de actos que no apuntan a él, y que sin embargo resultan en ese crecimiento. Mejorar la calidad de vida para la población existente es, desdichadamente, una de esas acciones (bien intencionadas, benevolentes y buenas a corto plazo) que no hacen sino seguir contruyendo cimientos más firmes para más crecimiento, y para una crisis más tremenda en el futuro.

Y otra cosa a no perder de vista—esta crisis va por partes. La notan unos antes que otros. Nuestra crisis europea es una dulce crisis comparada con lo que cuenta como vitalidad económica en África. Por tanto, si los resultados de "expandir los recursos y mejorar la calidad de vida" de los africanos son incalculables (el mero resultado de los intentos en ese sentido es incalculable, de hecho)—cuánto más incalculables serán los resultados de las acciones que emprendamos los privilegiados del *primer mundo* para intentar expandir *nuestros* recursos y mejorar *nuestra* calidad de vida?

Ma place dans le trafic

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