

FUTURE-MAKING AGAINST THE ODDS: REFLECTIONS ON THE LIMITS TO GROWTH, 1972

By Richard A. Slaughter

Published 50 years ago, *The Limits to Growth* still remains an essential book that all futurists should read.

What is it about a work that determines over time whether it's seen as a 'classic' or fades quietly out of view?

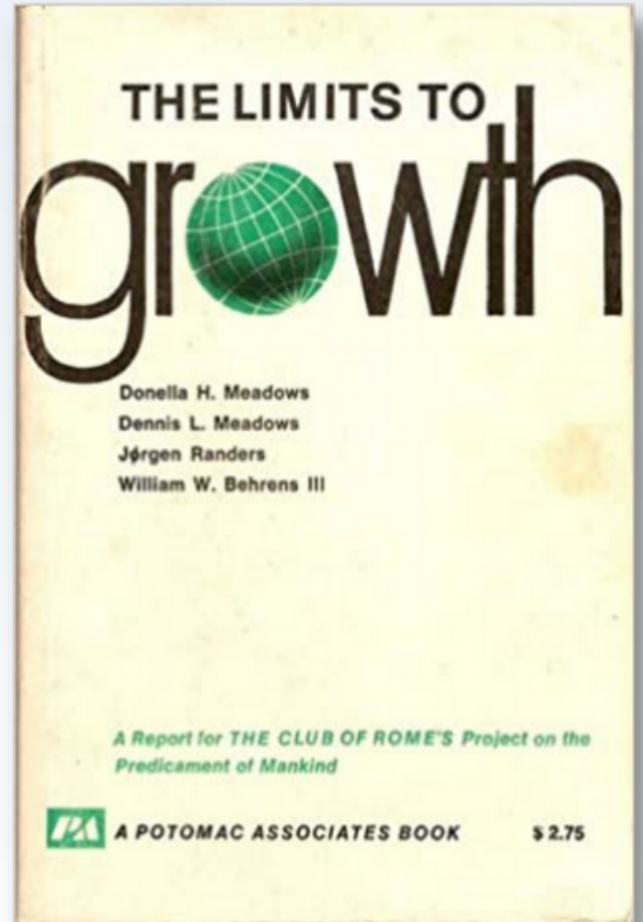
Is it the number of people who read it?

Is the respect in which it is held by informed collective opinion?

Does its wider value rise and fall over time?

These are straightforward questions, but they don't have easy answers. The *Limits to Growth* (LtG) is a case in point. Published in 1972, it was immediately attacked by mainstream critics and largely ignored thereafter. Yet as time passed this widespread rejection has itself come into question as others have found new and productive uses for the perspective it sought to establish.

Fifty years ago, while teaching in Bermuda, I was finding it hard to comprehend why this tiny, 20-square-mile island, had made a series of choices that, by the late 1960s, were having such problematic consequences.



The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind

Image source: Amazon.com

What had for centuries been a unique natural paradise characterized by a dense cedar and palmetto forest, a rugged coastline, pristine beaches, coral reefs and dense colonies of seabirds, was turning into a tense, mid-ocean metropolis. The costs and drawbacks of modernity such as crime, traffic issues and environmental deterioration were becoming unavoidable.

After living there for two or three years I wrote a series of newspaper articles exploring possible future options for Bermuda. The series sparked some interest among service clubs, conservation groups and individuals, one of whom suggested that we meet to exchange ideas. In due course, I was surprised and delighted to be presented with a first edition copy of *The Limits to Growth* (LtG). I could not know that the book would permanently change my perception both of local issues and the broader global context. Over time I began to feel that it was not merely an individual gift but, rather, a very particular gift to humankind as a whole.

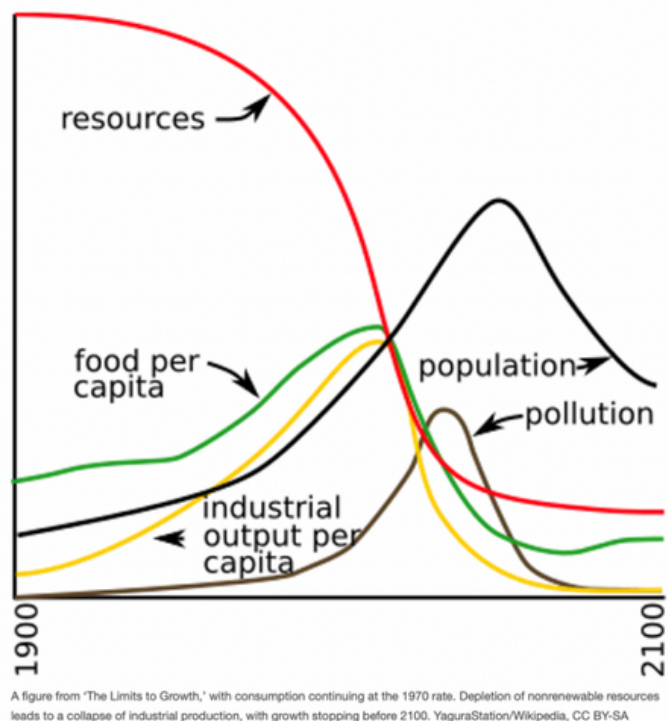
But...was humankind listening?

'LIMITS' AS AN EXPRESSION OF FORESIGHT

The book summarized early insights and provisional outcomes of a project started two years previously at the Massachusetts Institute of Technology (M.I.T.). As is well known, it used leading-edge techniques of the time (systems analysis, computer modeling), which allowed what became known as 'the Meadows team' to explore the interaction of five key factors: population, food production, industrial production, natural resources and pollution. These, it was suggested, would

largely determine the trajectory of growth over the coming decades.

This initial study of what became a continuing 30-year project, concluded that without deep cuts in resource consumption and pollution it was highly likely that population and industrial capacity would suffer precipitous declines by the mid-21st century. While, in the light of then-current trends, such events appeared likely, they were by no means inevitable if humanity could recognize the implications of continued rapid growth in a timely way and make appropriate choices. The full details of the project are beyond the scope of a short article, but they are widely accessible from online sources such as [Wikipedia](#).



Standard Run of the World3 Model, 1972

Although not viewed as such by mainstream media at the time, the LtG was a classic expression of what I called the [Foresight Principle](#). Careful use of well-

grounded forward views can inform the present and provide time for strategies of response to be crafted, tested and applied. The whole thrust and philosophy of the study was powerfully summarized in one paragraph, reproduced here. It could not have been more clear. If humanity was going to start making effective strategic choices about its own future, and that of future generations, a fundamental, global reorientation of understanding and effort was required.

REJECTION AND DENIAL

The LtG story gave rise to contrasting narratives. The most obvious and well-known response at the time can be characterized by terms such as 'rejection and denial.' Accusations that the LtG was predicting a 'gloom and doom' future dominated headlines and op-ed articles long after the initial launch. The core notion that economic growth might, even in theory, be subject to inherent limits was forcefully rejected, especially by dominant (i.e. corporate and business) interests.

At the time, the economics profession was caught up in a new economic theory known as 'economic rationalism' (more recently known as the 'Neoliberal ascendancy,' discussed [elsewhere](#)). In brief, it represents an outlook -- a way of approaching the world -- that insists on small government, de-regulation and market-led development in almost every sphere. Political leaders such as President Ronald Reagan (United States) and Prime Minister Margaret Thatcher (United Kingdom) lent unqualified support to the new orthodoxy. Notions of limits were viewed as sacrilege and widely dismissed.

There may be much disagreement with the statement that population and capital growth must stop soon. But virtually no one will argue that material growth on this planet can go on forever. At this point in man's history, the choice posed above is still available in almost every sphere of human activity. Man can still choose his limits and stop when he pleases by weakening some of the strong pressures that cause capital and population growth, or by instituting counterpressures, or both. Such counterpressures will probably not be entirely pleasant. They will certainly involve profound changes in the social and economic structures that have been deeply impressed into human culture by centuries of growth. The alternative is to wait until the price of technology becomes more than society can pay, or until the side effects of technology suppress growth themselves, or until problems arise that have no technical solutions. At any of those points the choice of limits will be gone. Growth will be stopped by pressures that are not of human choosing and that, as the model suggests, may be very much worse than those which society might choose for itself.

The Limits to Growth, 1972, pg. 153

It was not sufficient, however, to mount hard-hitting critiques of the LtG and its core suggestions. A full-spectrum campaign extending from learned journals to popular news media, sought to undermine and de-legitimize it. What was perhaps less clear then, but later became increasingly obvious, is that, to put it briefly, 'interests condition perception.' Those driven by what could be called 'mercantile' or 'profit-oriented' values and whose interests were grounded in 'growthist' economics could not but see the LtG as anything other than a threat to their worldview and *modus operandi*. Which, in a sense, it was.

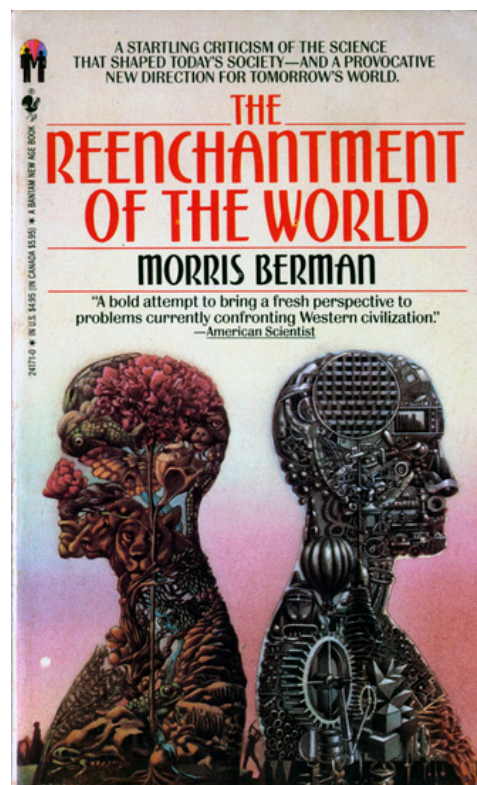
But what was widely overlooked at the time was that the warnings also embodied a deeper invitation. Time, distance and reflection would reveal other facts, other truths. Namely that ego-based, socio-centric thinking reinforced by short-term values that admit of no higher (or more integrated) principles, not only cannot see beyond self-interest, but are also blind to the many ways they undermine and compromise the future. In short, the invitation was to an expanded view of humankind in relation to itself, its world and hence the future.

You don't have to be a student of [Integral Futures](#) to see that the rejection of LtG was mistaken on a number of levels. Numerous studies have been undertaken over an extended period that have subjected the entire LtG project to careful evaluation. Some of them were summarized in an earlier article on [overshoot and collapse futures](#) in *World Future Review*. As far as I know, none of them contradicted the views expressed by qualified reviewers quoted in the Wikipedia item referenced above. Namely

that the LtG had provided a 'scientifically rigorous and credible warning;' also that 'its basis was indisputably correct.' However, perhaps the most thorough and satisfying example worth reading in detail is Kerry N Higgs book *Collision Course: Endless Growth on a Finite Planet* published in 2014 and reviewed [here](#).

EARTH-CENTERED RESPONSES

Another narrative that I'll refer to as 'Earth Centred,' has emerged over time and, in the long run, seems likely to prove more durable. As suggested above, for the LtG to be seen as helpful, or pivotal, to positive human futures rests on notions that were less clear, less obvious, in the early 1970s. They subsequently emerged for many people as significant developments

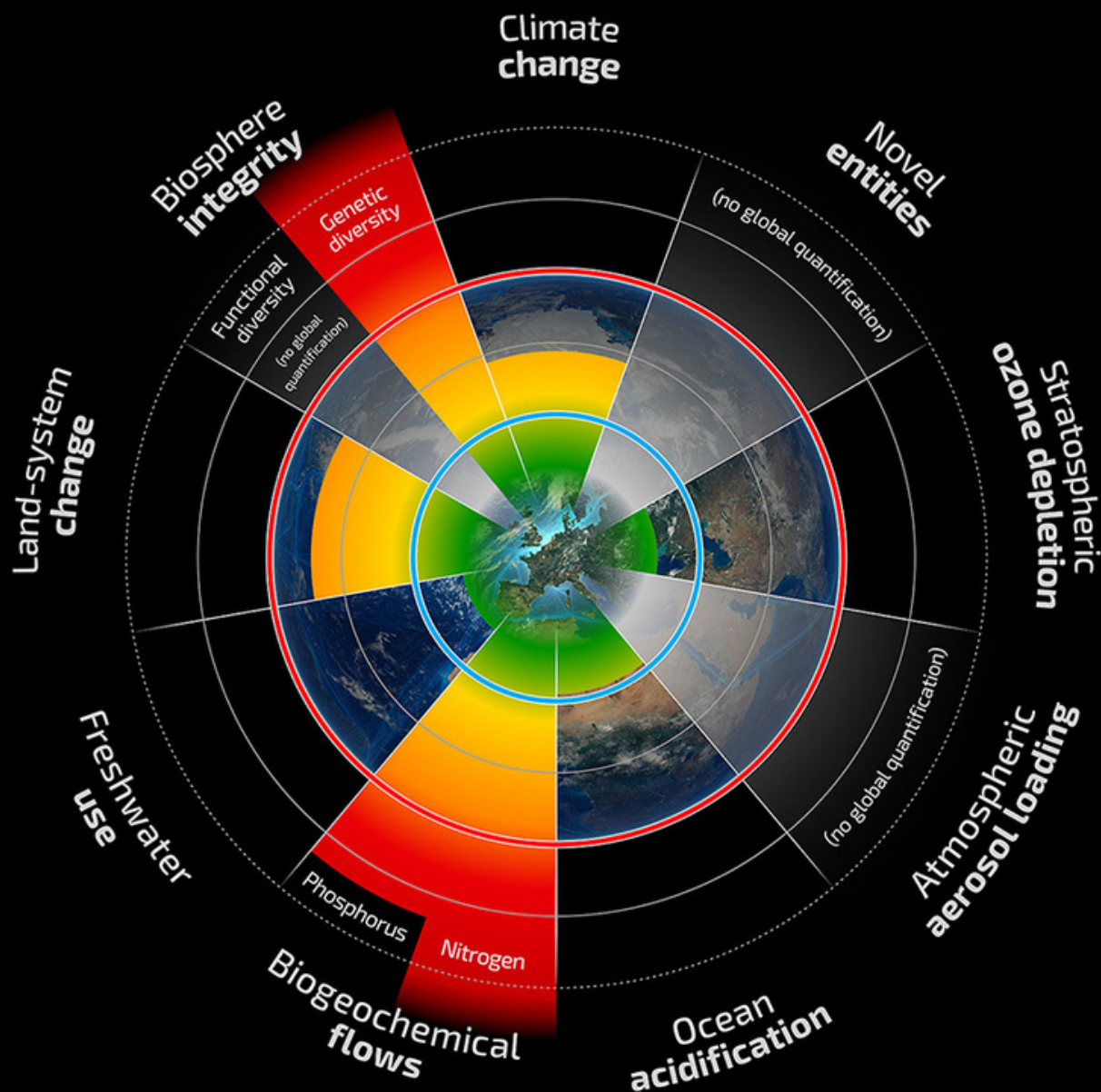


The Reenchantment of the World

Image source: Amazon.com

Planetary Boundaries

A safe operating space for humanity



Source: Steffen et al. Planetary Boundaries: Guiding human development on a changing planet, *Science*, 16 January 2015.
Design: Globalia

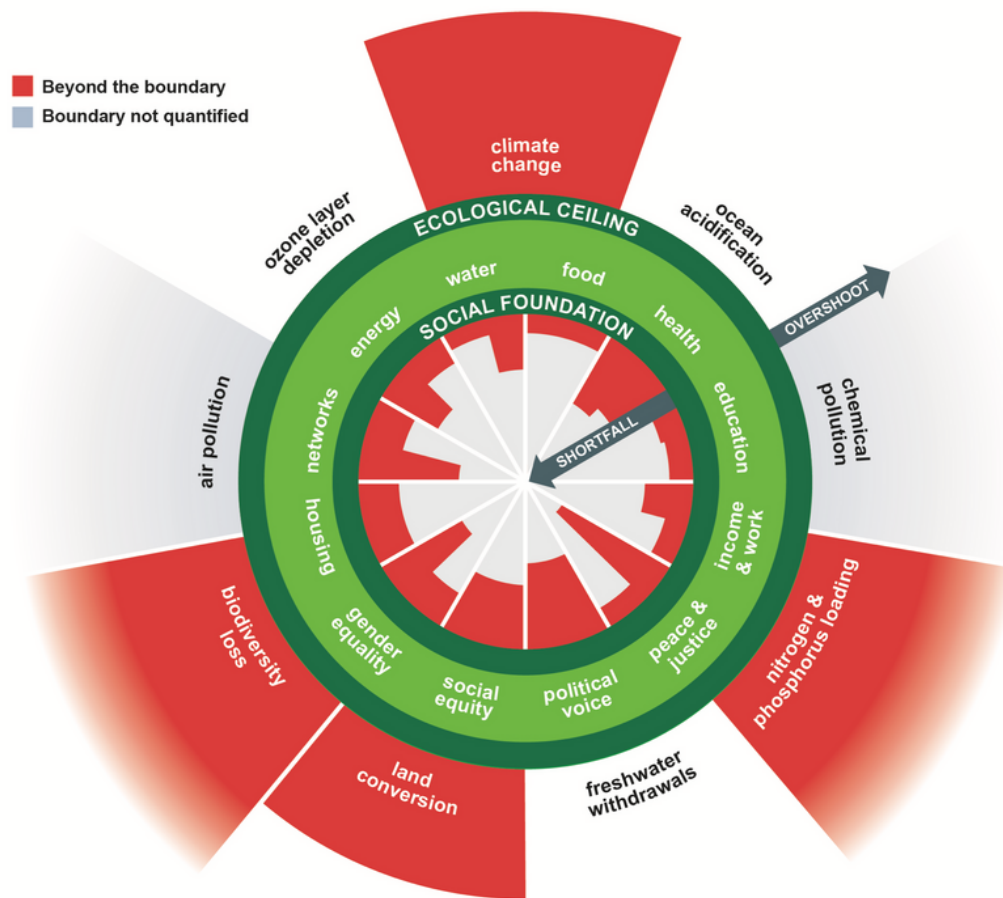
occurred that went well beyond the limited transactional universe of conventional economics. They included deeper insight into modes of human and social interior development that, in effect, revealed new psychic space and new options for understanding and relating to the world, especially the world of life with which we are intimately connected. The work of [Morris Berman](#) comes to mind here, in particularly his 1981 book [The Re-enchantment of the World](#).

Along with these developments, a fresh generation of scientists and researchers were bringing newly emerging empirical insights that provided a more detailed and nuanced understanding of the dynamics of the global system itself. New ways of reconciling these insights with those from other areas of knowledge and understanding allowed other, more inclusive ways of knowledge and action to arise. Reality was catching up with aspiration. Critical questions of policy and practice made more sense when they were consciously informed both by world-centric perspectives and more systemic, life-affirming values. These, in turn, enabled responses that can sustain broad understandings about how human and other life interact the global context.

Space precludes a full review of initiatives inspired by further iterations of the LtG project and related perspectives. But it's worth mentioning some outstanding examples. For example, in the early 2000s the Stockholm Environment Institute established a Global Scenario Group that published *The Great Transition* in 2002. Using scenario methods, the group asked four key questions: Where are we?; Where are we headed?; Where do we want to go?; and How do we get there?

From this starting point, other projects and publications emerged under the heading of the [Great Transition Initiative](#). It's worth noting here that, 20 years on, the term 'transition' is now in common use around the world. Another project inspired by the LtG was also initiated by the nearby Stockholm Resilience Centre to explore the nature and extent of [Planetary Boundaries](#). This work has proved to be highly productive. It not only provides greater clarity at the global level regarding human impacts on the global system but can also be used to suggest guidelines for development.

Parallel work on the [trajectory of the anthropocene and the great acceleration](#) added vital detail to our collective understanding of global processes. Accounts of the near-term future that omit such powerful factors are surprisingly common but lack credibility. Finally, the work of Kate Raworth on what she calls [the Doughnut Model](#) provides a straightforward way for many of getting to grips with what a 'safe space' for humanity may look like in the context of global boundaries and their associated limits. Her 2018 [TED Talk](#) has been widely influential and her work taken up in many different settings including addressing [economic problems](#). In many ways, therefore, these and a growing number of related projects, can be regarded as highly significant consequences of the LtG project. In summary, they enrich the 'gift to humanity' by providing previously unavailable insights, guidelines, points of stability and meaning for a very wide range of policy and practice settings.



Doughnut Model, Raworth, K. Doughnut Economics, 2017

TRANSCENDING THE FRACTURED PRESENT

Looking back half a century to the initially negative reception experienced by the LtG project clearly demonstrates the cost to humanity of limited values and ways of thinking. Yet the original response is surprisingly durable. It remains in place for those whose strictly short-term interests allow them to look the other way. Ironically enough, however, it's within the ambit of these same redundant responses that intimations of 'doom and gloom' really belong. Which helps to explain why, in 2022, humanity finds still itself poised on the edge of disastrous and diminished futures.

The tensions and contradictions involved in our fractured present are visible everywhere. They are clearly seen, for example, in a recent interview by Matt Simon with Carlos Pereira in the July 2022 issue of *Wired* magazine. Pereira is Vice President of the Club of Rome (an early sponsor of LtG and similar projects) and co-author of a new book *Limits and Beyond* that reviews what may have been learned in the interim. The interviewer's scepticism contrasts markedly with the interviewee's clear comprehension of what's at stake. For him the project was a vital investment in more positive futures. In his view, continuing to ignore the issues it raised means that we're still 'heading in the wrong direction' and, in his words,

'burning or stealing the time of people in the future.' The blindness and self-interest that greeted the LtG in its early years is still alive, active, and arguably more dangerous than ever. But those who have, over five decades, sought to undermine or deny the LtG project and its offspring now face further challenges.

The collective evidence regarding the causes of, and solutions to, growing threats to our global life support system won't be disproved, forgotten or set aside, any time soon. Such assertions can be stated with confidence given that the idea and reality of the Anthropocene represents a permanent change in our collective self-understanding which, in turn, makes a full re-set of our relationship with Planet Earth unavoidable. This deep 'meta-shift' has been lucidly described by many observers including, for example, [Lewis and Maslin](#) in their 2018 book [The Human Planet: How We Created the Anthropocene](#). It's now widely understood that the world is becoming a very different place as it continues to shift with unstoppable momentum under the weight of collective human impacts. To know that, at least in principle, is to accept that further attempts to avoid or deny our collective responsibility is part of a redundant worldview that makes less sense with each passing year.



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