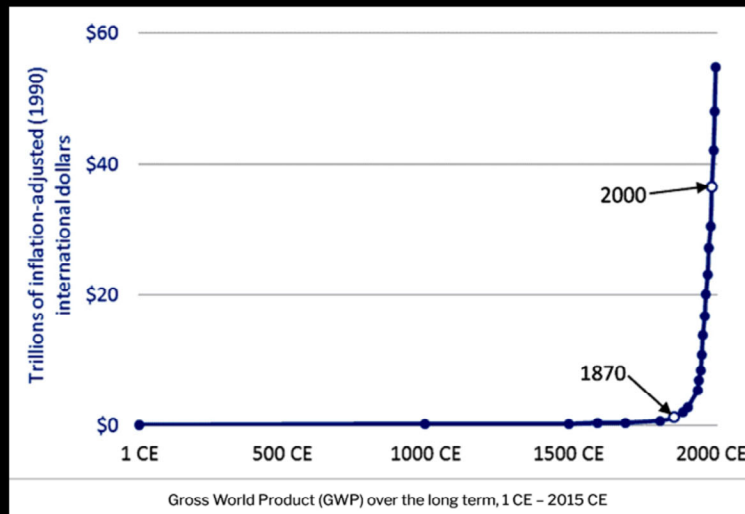


How is Today's World Different from the Past?

- Many of the ways that we have come to live our lives have been amazingly successful and have improved our lives immensely.
- But importantly, they have also changed the world that we live in.
- How is the world of today different from the past?

How is Today's World Different from the Past?

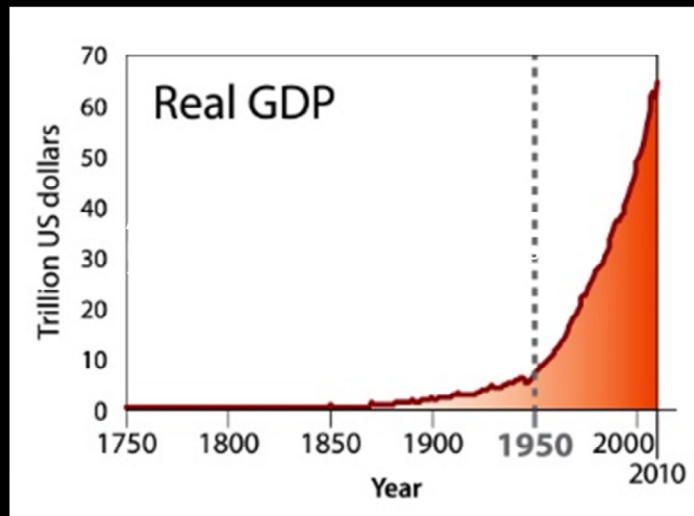


Qualman, D. 2017. *This isn't normal: 2,000 years of economic growth*. Available at <http://www.darrinqualman.com/2000-years-of-economic-growth/>

Graph sources: Angus Maddison. 2006. *The World Economy, vol. 2, Historical Statistics*. Paris: OECD. Tables 7b and 8b; and World Bank, *World DataBank: World Development Indicators*. Available at <https://data.worldbank.org/indicator>

- The graph places today's world in a long-term context.
- It plots Gross World Product (GWP), that is, the sum of all countries' Gross Domestic Products (GDP).
- The time frame is more than the past 2000 years:
- The units are trillions of US/international dollars adjusted for inflation (converted to 1990 dollars).
- The main source is Angus Maddison, and pre-20th century values are, by necessity, informed estimates by Maddison.
- The year 1870 is marked with a white circle.
- For almost 2000 years before that, the size of the global economy barely grew at all.
- Then, not long before the 20th century began, things changed dramatically.
- For most of human history, the economic trend-line has been almost flat — horizontal. Within just the last century, however, it had become almost vertical.
- Today's world is very different from the past.

How is Today's World Different from the Past?



Steffen, W., W. Broadgate, L. Deutsch, O. Gaffney, and C. Ludwig. 2015. The trajectory of the Anthropocene: The Great Acceleration. *The Anthropocene Review* 2(1), 81-98. Available at: <https://journals.sagepub.com/doi/abs/10.1177/2053019614564785>

- Certainly, things were changing by the turn of the 20th century, but they really ramped up after 1950.
- This graph shows only the economy of the world.
- Notice how it has grown phenomenally since 1950.

How is Today's World Different from the Past?

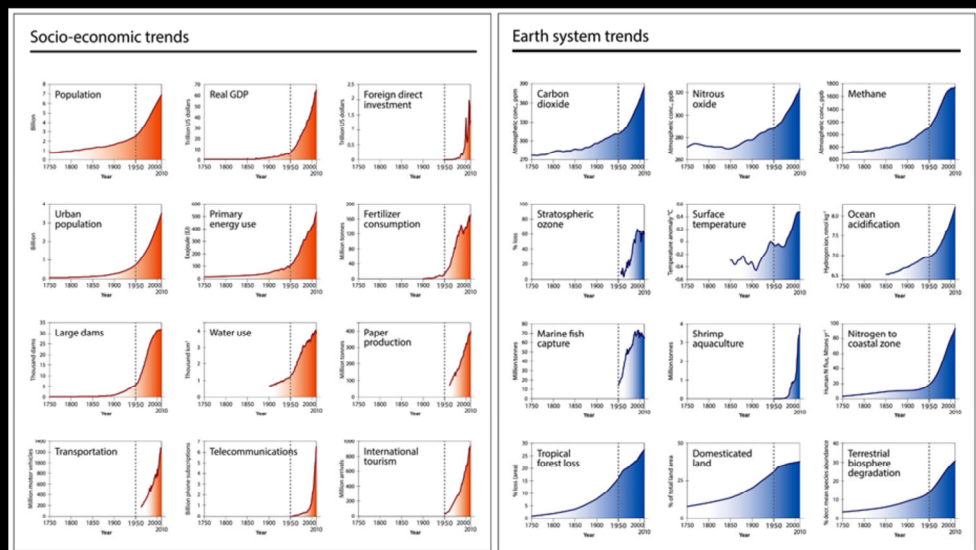
"The second half of the 20th Century is unique in the history of human existence. Many human activities reached take-off points sometime in the 20th Century and sharply accelerated towards the end of the century.

"The last 60 years have without doubt seen the most profound transformation of the human relationship with the natural world in the history of humankind."

http://www.igbp.net/globalchange/greatacceleration/4_1b8ae20512db692f2a680001630.html .

- As this quote from 2015 states, beyond any doubt, that today's world is profoundly different from all of human history.
- Our entire lives have occurred in what is an exceptional time, and yet, we consider it "normal," which does make it difficult for us to see it.

The Great Acceleration



Steffen, W., W. Broadgate, L. Deutsch, O. Gaffney, and C. Ludwig. 2015. The trajectory of the Anthropocene: The Great Acceleration. *The Anthropocene Review* 2(1): 81-98. Available at: <https://journals.sagepub.com/doi/abs/10.1177/2053019614564785>

- This research shows that it not just the economy that has grown since 1950 but also many socio-economic aspects as well as impacts that humans have had on the environment.
- They call this “The Great Acceleration.”
- The research states that “human activities have clearly evolved from insignificance in terms of Earth system functioning to the creation of global-scale impacts that:
 - are approaching or exceeding in magnitude some of the great forces of nature
 - operate on much faster time scales than rates of natural variability, often by an order of magnitude or more
 - taken together in terms of extent, magnitude, rate and simultaneity, have produced a no-analogue state in the dynamics and functioning of the Earth system.”
- “Twelve indicators depict human activity”, for example. In addition to economic growth (GDP) are:
 - population,
 - foreign direct investment
 - energy consumption
 - telecommunications

- transportation
- water use
- “Twelve indicators show changes in major environmental components of the Earth System,” for example:
 - the carbon cycle
 - the nitrogen cycle
 - biodiversity
- Many of the ways that we have come to live our lives have been amazingly successful and have improved our lives immensely.
- But importantly, they have also changed the world that we live in.
- And yet, in many ways, we have not adjusted to the changed conditions that those ways of life have created.
- To amplify, ignoring what is happening and considering it “normal” and even doubling-down on it without considering its nature seems foolish.
- The way that we are currently providing for humanity is through a continuous and exponential increase in the liquidation of natural capital.

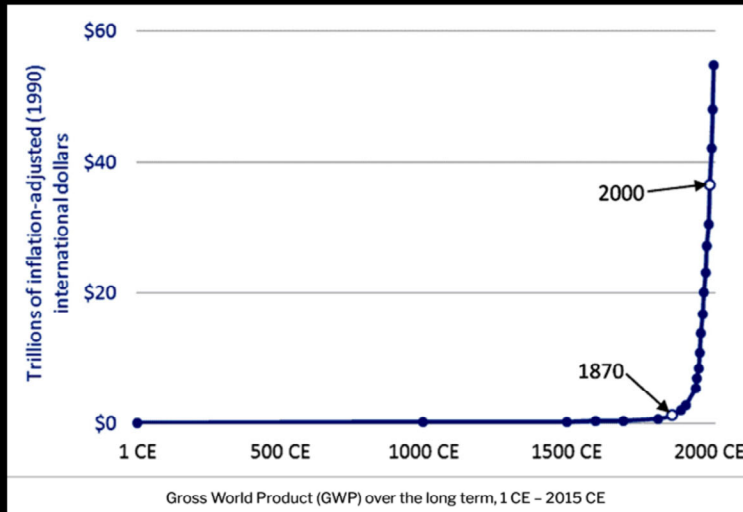
How is Today's World Different from the Past?

“The rapid global economic growth from the 1950s required ever-increasing quantities of raw materials and foodstuffs—metals, oil, coal, timber, fish, meat, and agricultural commodities of all types. Heightened demand for these pushed commodity frontiers ever outward.”

McNeill, J. R. 2014. *The Great Acceleration: An Environmental History of the Anthropocene since 1945*. Cambridge: Harvard University Press.

- J.R. McNeil has written about the tremendous and increasing demand that humans are making on the resources provided by the environment.
- He states that this has never happened before and will never happen again, and he argues that it will lead to a crash.
- Others, however, are not so certain. They indicate that there is insufficient evidence to either confirm or deny the claim of an impending crash.
- But the exponential growth is undeniable.

How is Today's World Different from the Past?



Qualman, D. 2017. *This isn't normal: 2,000 years of economic growth*. Available at <http://www.darrinqualman.com/2000-years-of-economic-growth/>

Graph sources: Angus Maddison. 2006. *The World Economy, vol. 2, Historical Statistics*. Paris: OECD. Tables 7b and 8b; and World Bank, *World DataBank: World Development Indicators*. Available at <https://data.worldbank.org/indicator>

- Clearly, the way that we have been living in the last few decades is very different from thousands of years of human history.
- It does seem that, now, humans are the most powerful influence on global ecology and have thrust the planet into a massive uncontrolled experiment.
- We should, at least, acknowledge that our current way of living is not “normal.”