



COGNITIVE OBSOLESCENCE AND THE NEED FOR REIMAGINING

William E Rees, PhD, FRSC
Professor Emeritus
UBC Faculty of Applied Science
Vancouver, Canada

(8 May 2024)

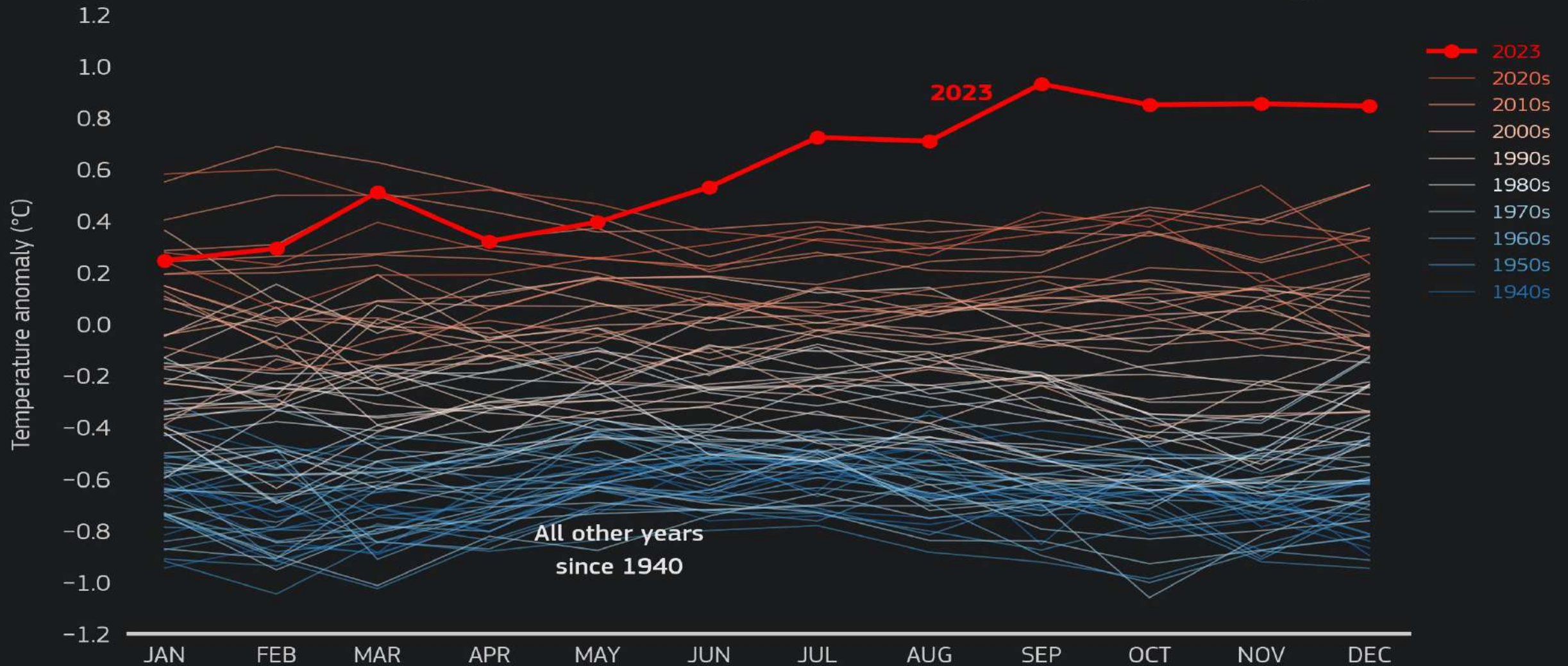
Climate chaos is not *the*
existential eco-threat to
the human enterprise
(and the rest of nature)

Let's be clear – global heating really *is* a horrific challenge

- Carbon dioxide levels are the highest they have been in 14 million years.
- Temperatures in the early 2020s are unprecedented in the past 24,000 (possibly 100,000) years.
- Rate of heating over the last 150 years far exceeds the rate Earth has experienced over at least the 24 millennia period.
- The world in 2023 saw record-shattering heatwaves, drought, wildfires and floods—extreme weather events—destroying human lives and ecosystems on every continent.
- 2023 was the warmest year in the instrumental record.
- January, February and March 2024 were the hottest January, February and March on record (the latest in a series of 10 hottest months).

GLOBAL SURFACE AIR TEMPERATURE ANOMALIES

Data: ERA5 1940–2023 • Reference period: 1991–2020 • Credit: C3S/ECMWF



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What climate scientists are saying

- “For the past nine months, mean land and sea surface temperatures have overshoot previous records each month by up to 0.2° C – a huge margin at the planetary scale.”
- Climate scientists “don’t really know what’s going on.” We are unable “to reconcile our theories with what has happened.”

(Gavin Schmidt, Director NASA’s Goddard Institute for Space Studies [March 2024])

Nevertheless

- While climate change is important it is not *the* existential eco-threat facing humanity.
- The present focus on climate change is a prime example of a *pan-cultural shared delusion*.
- Acceptable solutions to global heating (wind turbines, solar panels, EVs, etc.) are not fixing the climate and are worsening our eco-predicament.
- **I.e., climate change is a *distraction* from a greater meta-problem.**

The *real* existential eco-threat is overshoot

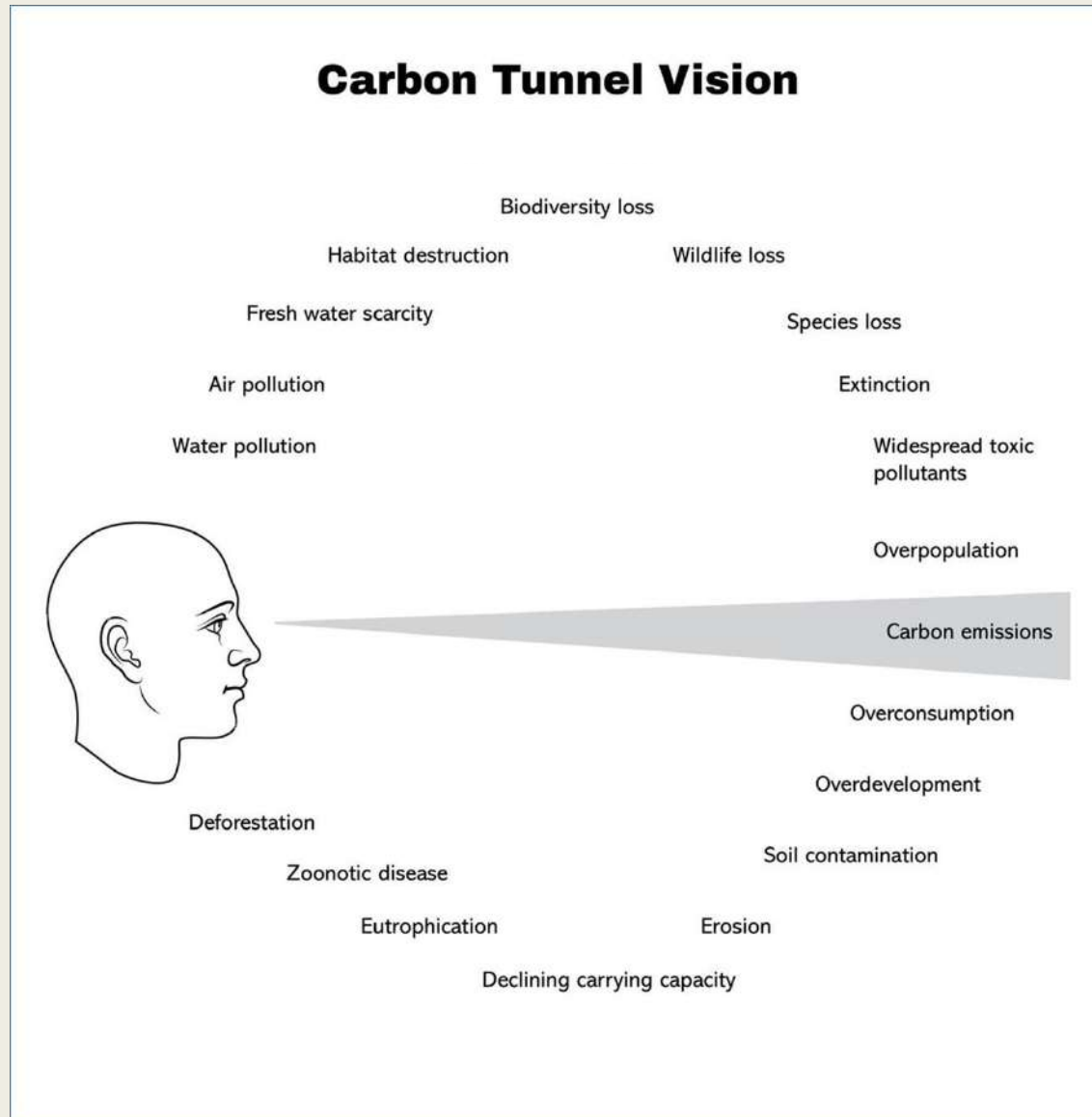
- Overshoot means that:

The human enterprise is consuming even self-producing resources (e.g., fish stocks, forests) and replenishable resources (e.g., fresh-water aquifers, arable soils) faster than they can regenerate and producing – often toxic – waste in excess of nature’s assimilation capacity.

- *We are literally consuming and polluting the biophysical basis of our own existence.*
- *Virtually all so-called ‘environmental problems’—plunging biodiversity, ocean acidification, tropical deforestation, desertification, more frequent pandemics, soil/landscape degradation, falling sperm counts, pollution of everything, land/resource wars—are co-symptoms of overshoot. (Climate change/global heating is an excess waste [CO₂] problem).*

Overshoot is the overriding disease

Missing the big picture



- Modern techno-industrial society (MTI) tends to fixate on a single problem at a time—the economy, climate change (emissions), the pandemic, the Mid-east war—then back to climate change.
- We don't 'get' complexity; we don't connect the dots among various 'environmental' problems; we don't see these as symptoms of the same meta-problem, OVERSHOOT.

Why can't we see the 'big picture'?

Hypothesis: The human brain is obsolete

- The human brain evolved when *H. sapiens* lived in small tribal groups, in spatially limited, predictable environments that posed only modest challenges to the evolving nervous system.
- Result? *H. sapiens*' brain is adapted to relatively simple environments – we tend to think in simplistic, linear, reductionist ways that were once perfectly adequate for survival.

However, modern techno-industrial (MTI) humans

- Live in a mind-numbingly complex, rapidly changing world-system of overlapping sub-systems that we ourselves have created and that *constantly challenge our limited cognitive capacities*.
- Are not cognitively equipped to fully understand, let alone control the workings of any major cultural sub-system – the global economy, the internet, AI, geopolitics – or their interactions with the climate system or anyother biophysical sub-system of the ecosphere. Again, *we don't connect the dots*.
- In effect, ***our brains are functionally obsolete*** – i.e., no longer adapted for survival in a mega-system of our own making

A crucial difference

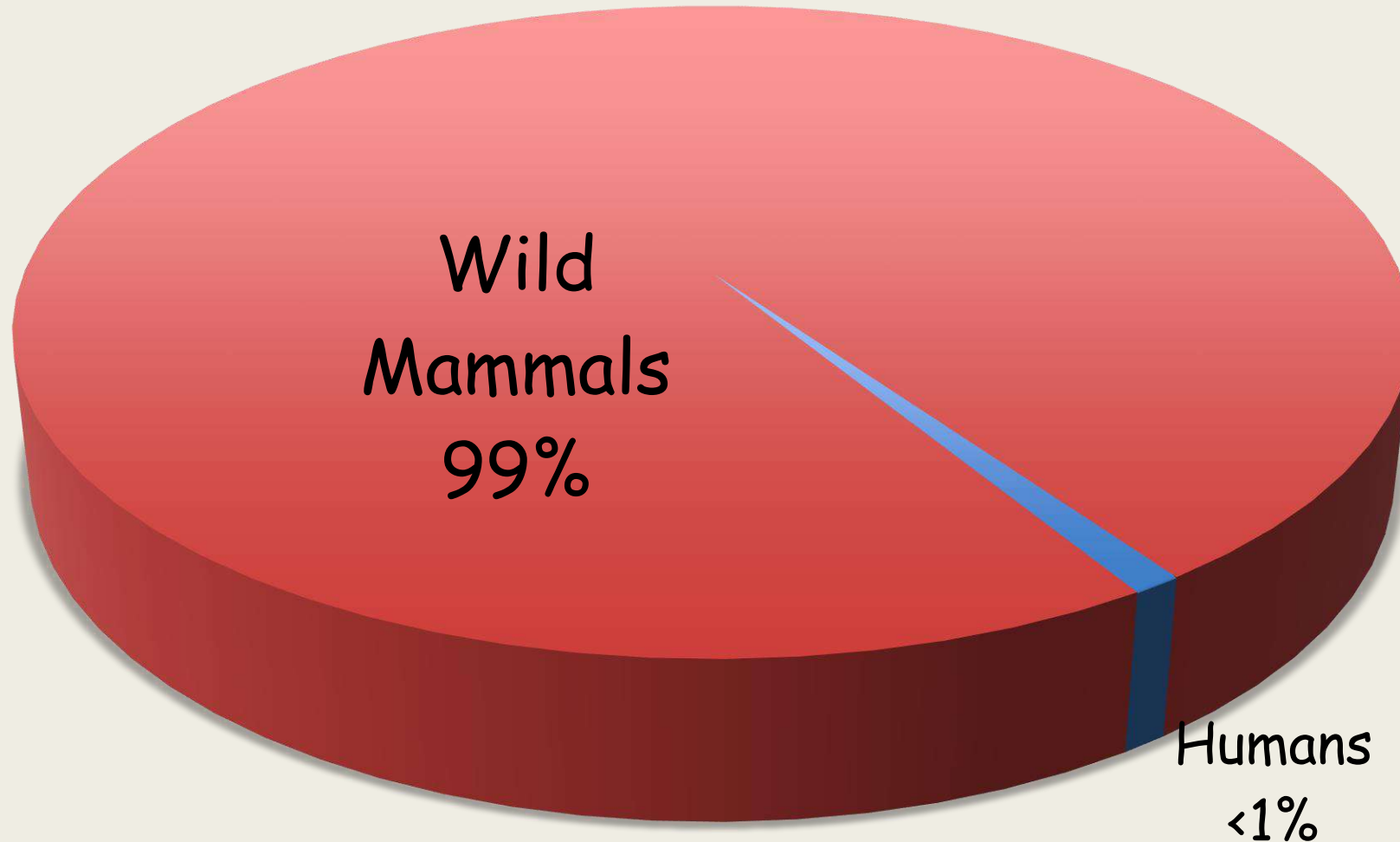
■ *Primitive tribal myths and other shared delusions were relatively harmless.*

■ *Contemporary tribal narratives and shared delusions are potentially catastrophic.*

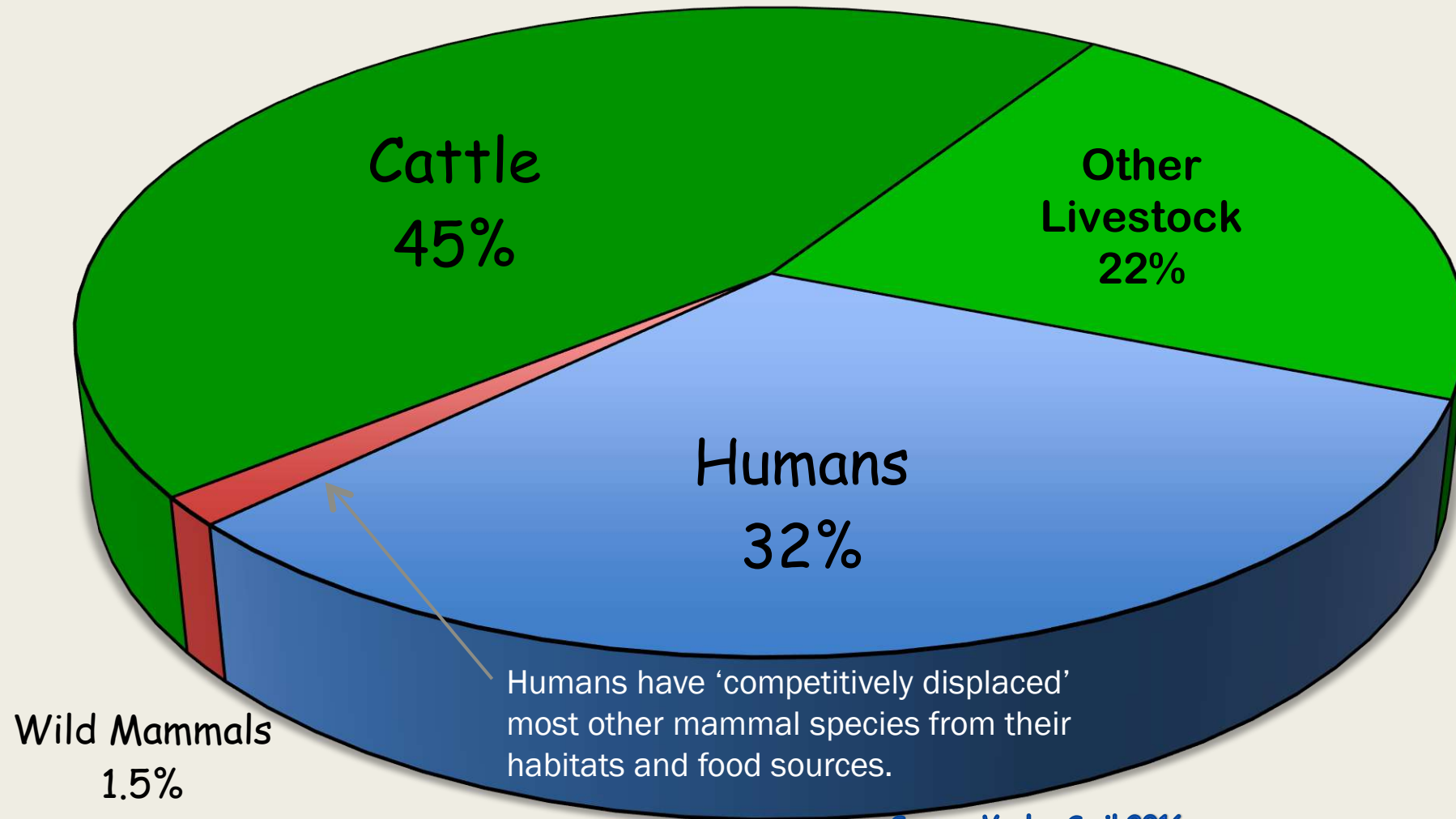
Example: Economists and other techno-optimists fantasize that the modern economy is decoupling from 'the environment' (i.e., dematerializing).

But consider this co-symptom of climate chaos: humanity's **competitive displacement** of non-human species

Terrestrial mammalian biomass 10,000 years ago



Terrestrial Mammalian Biomass Today



Source Vaclav Smil 2016

It's not just mammals

- Wild bird populations are also tumbling. (Domestic poultry now constitute 70% of the world's avian biomass.)
- Average populations of thousands of wild vertebrate species **have** declined ~70 percent since 1970.
- Populations of invertebrates, including essential pollinators, are also in free-fall: Butterflies down 53%; beetles down 49%; bumblebees down 46%.

Bottom line

- Contrary to the decoupling fantasy, *H. sapiens* is the greatest consumer organism and an ever-larger component of every major accessible ecosystem on Earth.

Another innate cognitive barrier

- Humans ‘socially construct’ their lived realities.

More accurately:

- Human groups create simplifying interpretations of reality, e.g., political ideologies, religious doctrines, economic paradigms, scientific models, cultural narratives, etc.
- Every culture/tribe generates somewhat unique perceptions which its citizens (**often unconsciously**) assume to be the one and true reality.

Why this matters:

- *The socially constructed frames through which we view reality determine the kind of ‘reality’ we perceive.*

Potential problem

- People live out of their constructed realities (read ‘made-up stories’ or ‘shared delusions’) as if they were accurate.
- Sometimes this is harmless – e.g., ‘the Earth is flat’, while inaccurate, was an adequate first approximation of reality for most of human evolutionary history.

But consider our socially-constructed dominant economic narrative

- Modern techno-industrial (MTI) culture is ‘living out of’ an overly-simplistic, nearly universal mythic construct called ‘neoliberal economics’.
- Neo-econ is a product of the human mind and is *virtually untethered from biophysical reality*.

Neoliberal economics

- Springs from human exceptionalism — the socially constructed belief that humans are not part of nature and not bound by biophysical laws.
- Promotes unlimited economic growth
 - “There are no... limits to the carrying capacity of the earth that are likely to bind any time in the foreseeable future...” (Summers 1991).
- Assumes that any exogenous constraints will be overcome by continuous efficiency gains and technological advances (e.g., so-called green renewable energy).
 - “We have in our hands now... the technology to feed, clothe and supply energy to an ever-growing population for the next 7 billion years...” (Simon 1995).

This shared delusion defies basic cybernetic maxims

- “We cannot regulate our interaction with any aspect of reality that our model of reality does not include.” (From Stafford Beer: *I said, you are Gods*)
- “When the variety or complexity of the environment exceeds the capacity [i.e., variety/complexity] of a regulatory system, **the environment will dominate and ultimately destroy that system**” (Ashby’s law of requisite variety).

Failing the test of Ashby's Law

- Neoliberal economics is simplistically reductionist (i.e., it lacks essential 'variety').
- Its basic models contain *no useful information about the structure or functional dynamics of the ecological or social systems with which the economy interacts in the real world.*
- Neoliberal economics is *utterly incompetent* to guide MTI culture's interactions with biophysical or social reality.
- ***As a globally-shared delusional program, it is potentially catastrophic.***

Yet another cognitive impairment – once adaptive, now partially obsolete

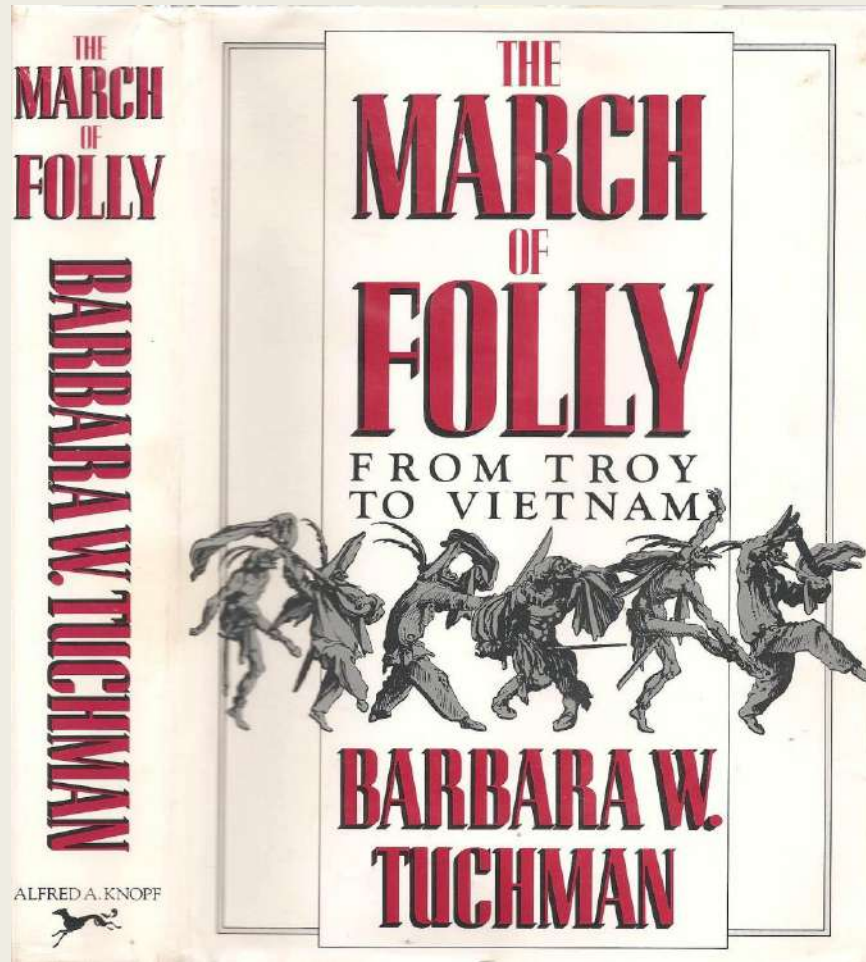


- During individual development, repeated sensory experiences and cultural norms literally shape the human brain's synaptic circuitry in patterns that reflect and embed those experiences. **Patterned thinking acquires a physical presence in the brain.**
- Subsequently, people seek out *compatible* experiences and, “**when faced with information that does not agree with their [preformed] internal structures, they deny, discredit, reinterpret or forget that information**” (Wexler, 2006).

Result: A World in Denial

- “The masses have never thirsted after truth. They turn aside from evidence that is not to their taste, preferring to deify error...”
(Gustave le Bon 1896).
- “For us to maintain our way of living, we must... tell lies to each other, and especially to ourselves... [the lies] are necessary because without them many deplorable acts would become impossibilities” (Jensen 2000).
- *To make matters worse, this is the new age of unreason, the deliberate social construction of misinformation and ‘false news’.*

The problem is universal and persistent (i.e., it's part of fundamental human nature)



- “Not truth, but error has always been the chief factor in the evolution of nations...” (*Le Bon 1895*).
- “Wooden-headedness, the source of self deception ...plays a remarkably large role in government. It consists in assessing a situation in terms of preconceived fixed notions [i.e., ideology] while ignoring any contrary signs. It is acting according to wish while not allowing oneself to be deflected by the facts” (Tuchman 1984).

Thus the need to (re)imagine a new cultural narrative that:

- Acknowledges that *H. sapiens* is part of nature;
- Recognizes limits to material growth;
- Satisfies the human need for love, spiritual fulfilment, community and ecological-with-economic security.
- I.e., we must transcend techno-modernism and catalyze a ***personal-to-civilizational change, transition, transformation*** to a way of being on Earth in which humans live spiritually satisfying lives more equitably within the biophysical means of nature.