

Mitigation and Adaptation Studies

Class 28: Thoughts on Where to Go from Here

Contents:

- Summary: Where are we now?
- Normative and Descriptive Ethics
- A Prosperous Society on a Healthy Planet
- Road to Dignity



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Key Points

Baseline

During the Holocene, climate and sea level were exceptionally stable

The Holocene was a “safe operating space for humanity”

Syndrome

During the last hundred years, humanity has introduced rapid and large changes

The system is outside the “normal range” and in the dynamic transition into the Post-Holocene; we have increasing disequilibrium

Diagnosis

Easy access to seemingly unlimited energy allowed humans to accelerate flows in the Earth’s life-support system and sustain rapid population growth and increasing demands

Humans are the “Anthropogenic Cataclysmic Virus” (ACV) in the Earth’s life-support system

Prognosis

We are heading rapidly into a very different system state (thresholds; Post-Holocene)

Our knowledge is changing rapidly; there is room for surprises; foresight is needed

Therapy

The current mainstream economic model needs to be modified: Economy has to meet the needs of the present while safeguarding the Earth’s life-support support system

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Normative versus Descriptive Ethics

Normative ethics:

- Duty not to contribute to harm - not to contribute to massive, systemic harm
- Duty to justice
- Obligation to our children's future

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Example Migration

Migration Causing Massive Harm

Forced migration: often caused by persecution, development, or exploitation.

- African slave trade: Most devastating forced migration in human history: moved 12 to 30 million Africans from Africa to North America, Latin America, and the Middle East.
- Trail of Tears: Indian Removal Act of 1830 forced tens of thousands of Native Americans living the Southeast to migrate.
- Construction of China's Three Gorges Dam: displaced nearly 1.5 million people and put 13 cities, 140 towns and 1,350 villages underwater.

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Reluctant migration: individuals move because of an unfavorable situation at their current location.

- Hurricane Katrina: many people decided to either move further from the coast or out-of-state.
- Bangladesh: 20 M on the move from river delta into Dhaka
- Syria and African countries: migration to mainly Europe

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By GLOBAL POST / CBS NEWS / September 19, 2010, 3:50 PM

Dhaka, Bangladesh: Fastest Growing City in the World



Raw sewage drains from slum neighborhood directly onto the trash-strewn banks of the Buriganga River in Dhaka, Bangladesh. / GLOBAL POST

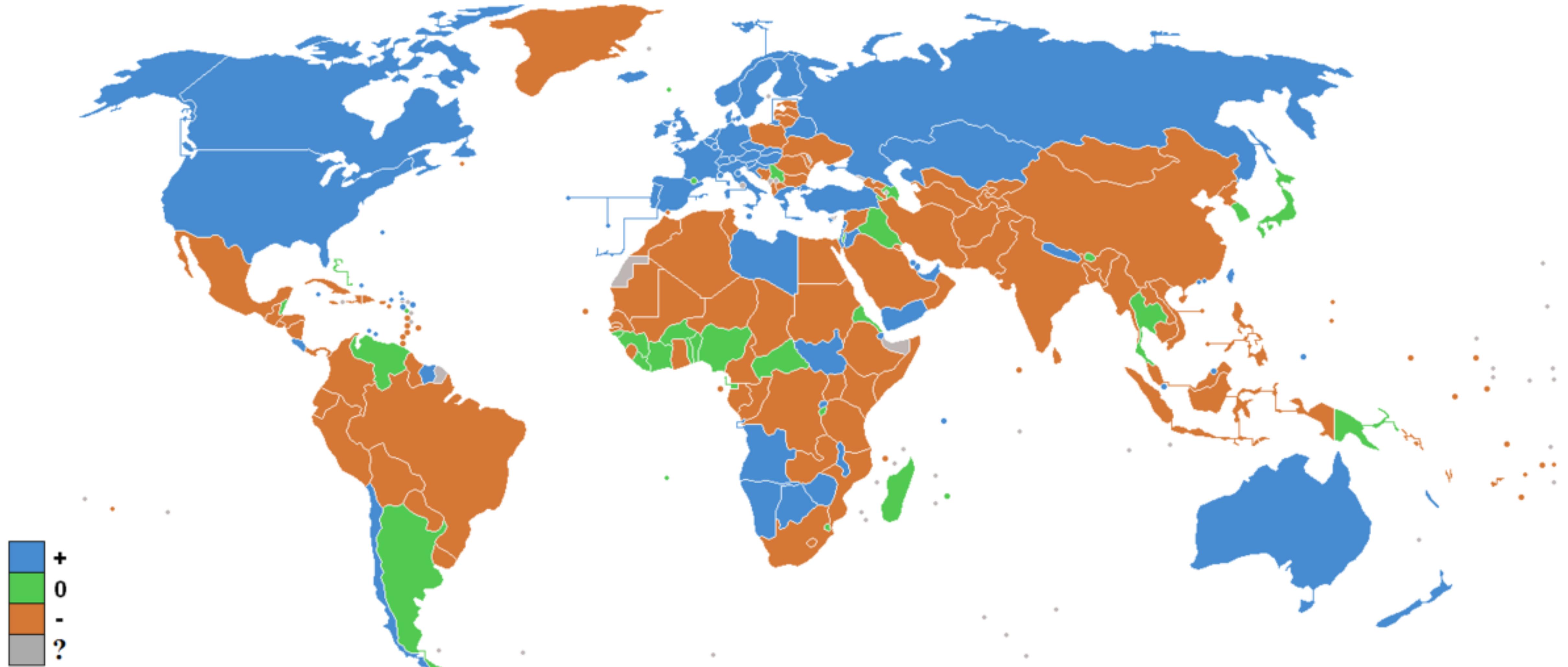
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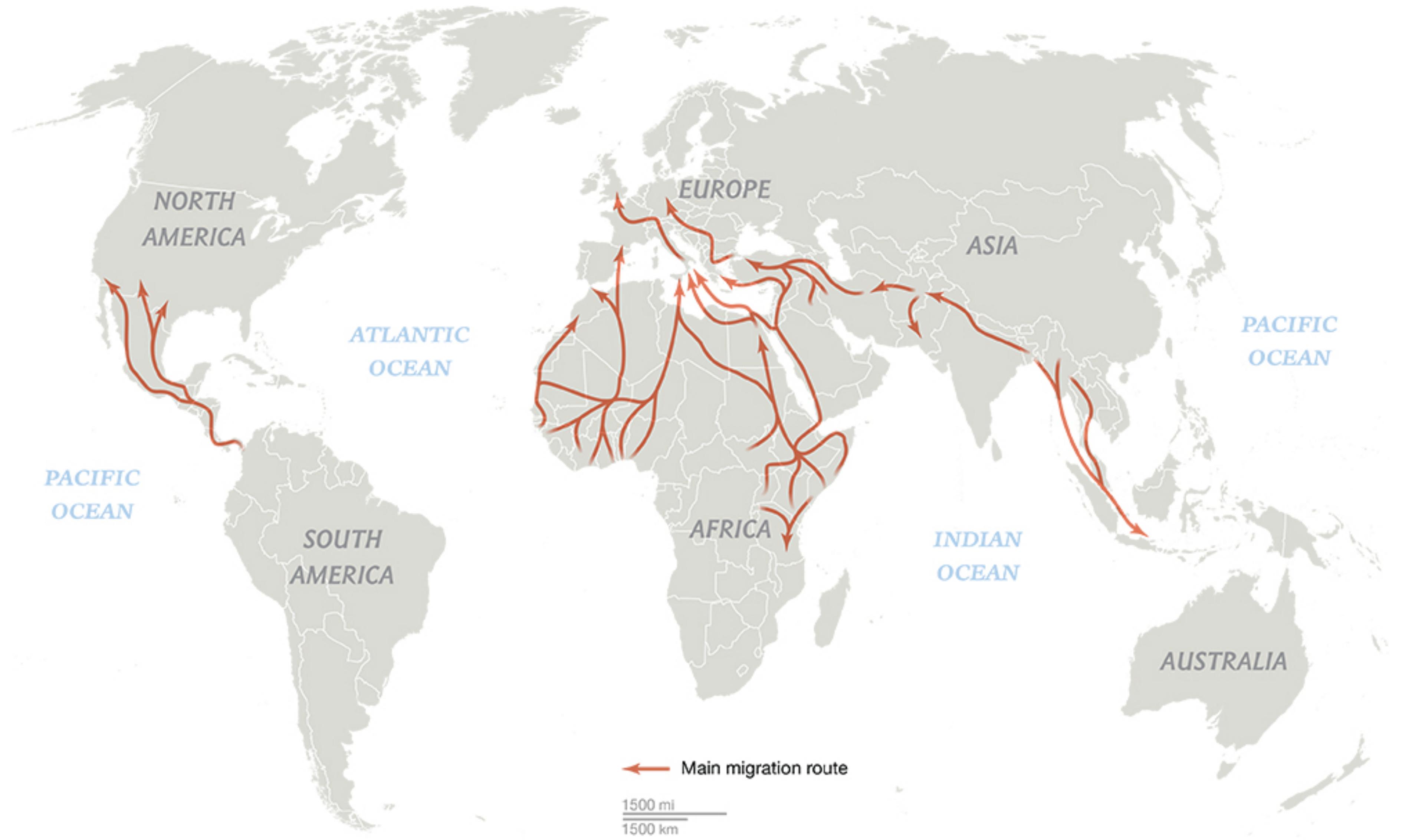
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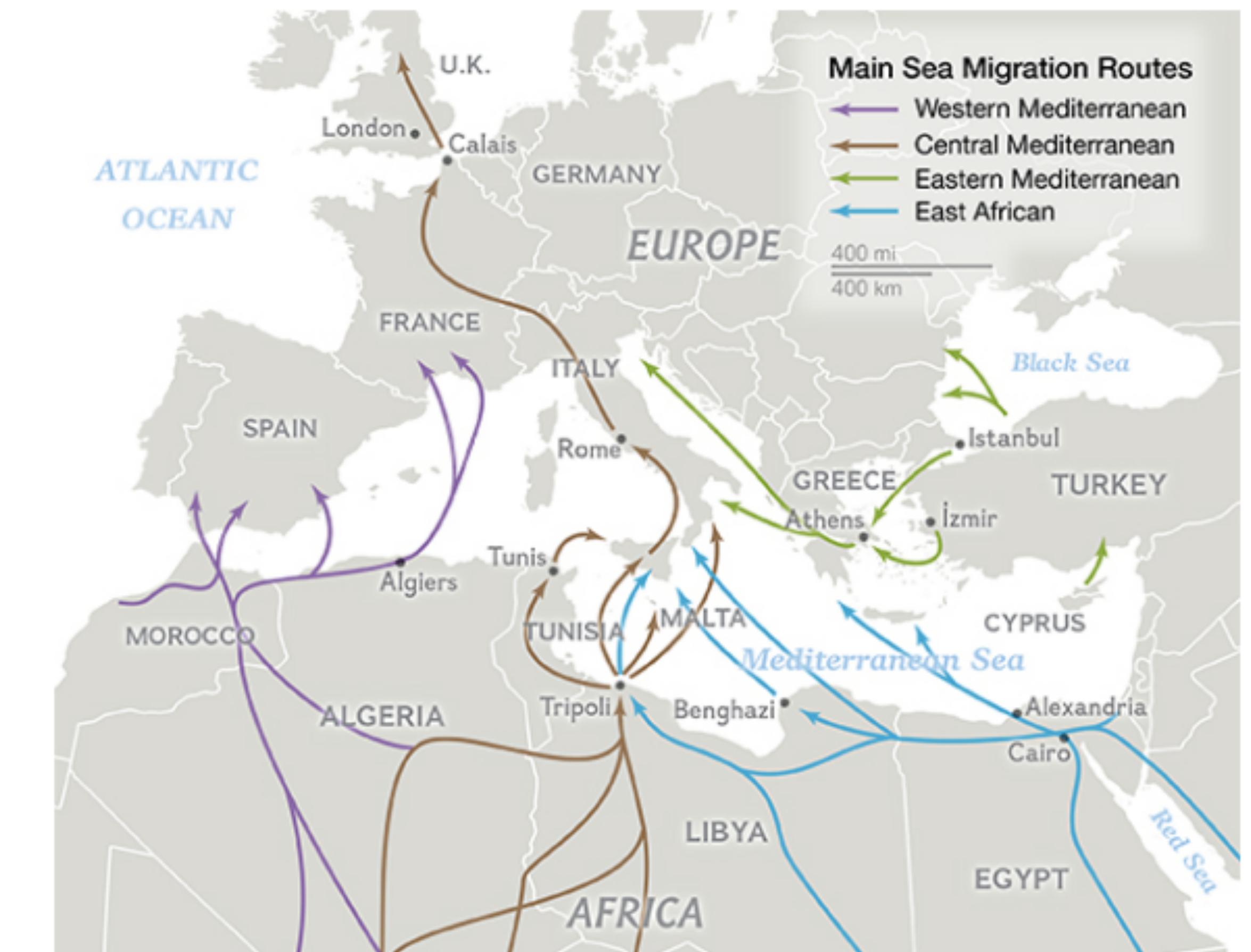


Migration Causing Massive Harm

Eastern Mediterranean Route



Mediterranean Sea Route



NG STAFF

SOURCES: MISSING MIGRANTS PROJECT; INTERNATIONAL ORGANIZATION FOR MIGRATION; UNHCR; I-MAP; REGIONAL MIXED MIGRATION SECRETARIAT

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Migration Causing Massive Harm

Eastern Mediterranean Route



Migrants landed on Lesbos from Turkey this month after battling rough seas. Aid groups say the chaotic nature of human traffic has left them without a full picture of the people reaching Europe.

Mediterranean Sea Route



IT, INTERNATIONAL ORGANIZATION FOR MIGRATION; UNHCR; I-MAP;
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Tyler Hicks/The New York Times

Migration Causing Massive Harm

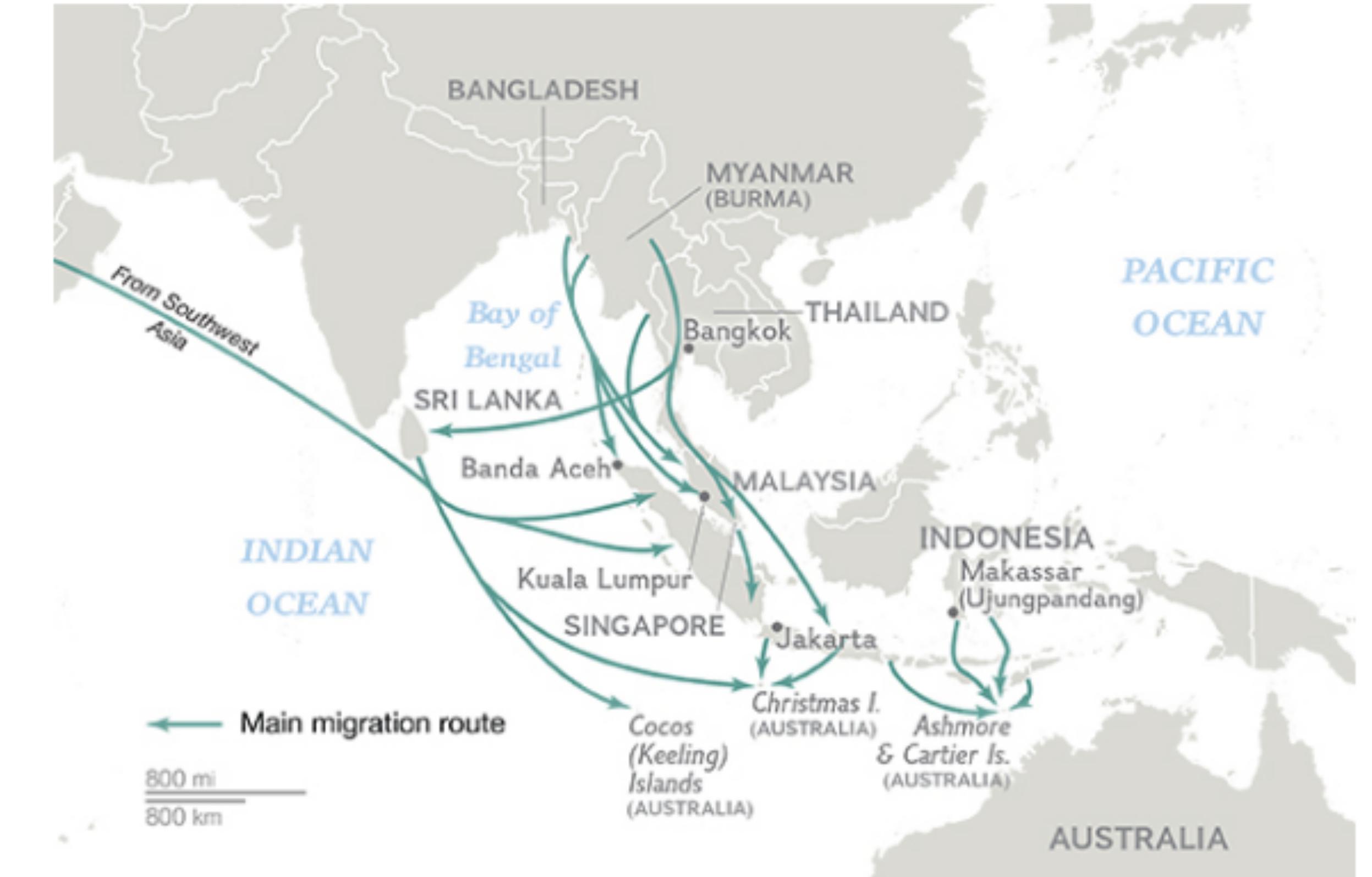
Central American Route



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SOURCE: MISSING MIGRANTS PROJECT, INTERNATIONAL ORGANIZATION FOR MIGRATION

Southeast Asian Route



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INTERNATIONAL ORGANIZATION FOR MIGRATION

Rohingya refugees on a boat off the coast of Indonesia in May.
Januar/Agence France-Presse — Getty Images

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Example Migration

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Today's global governance and structure is causing massive harm

Normative versus Descriptive Ethics

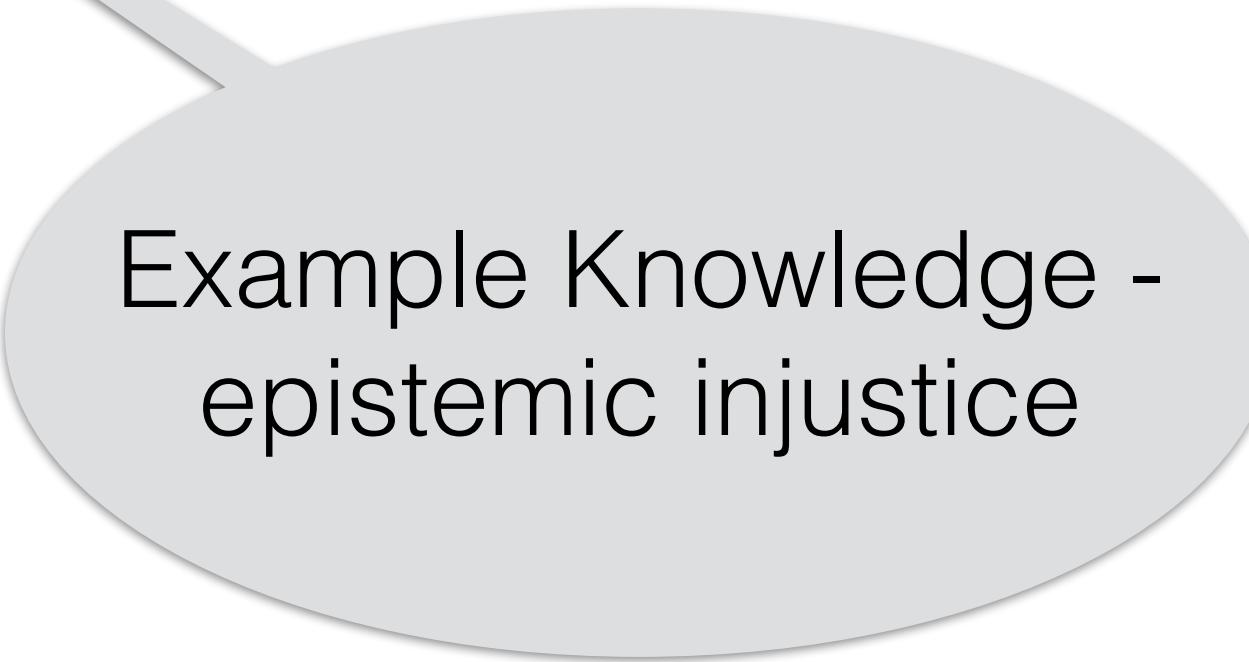
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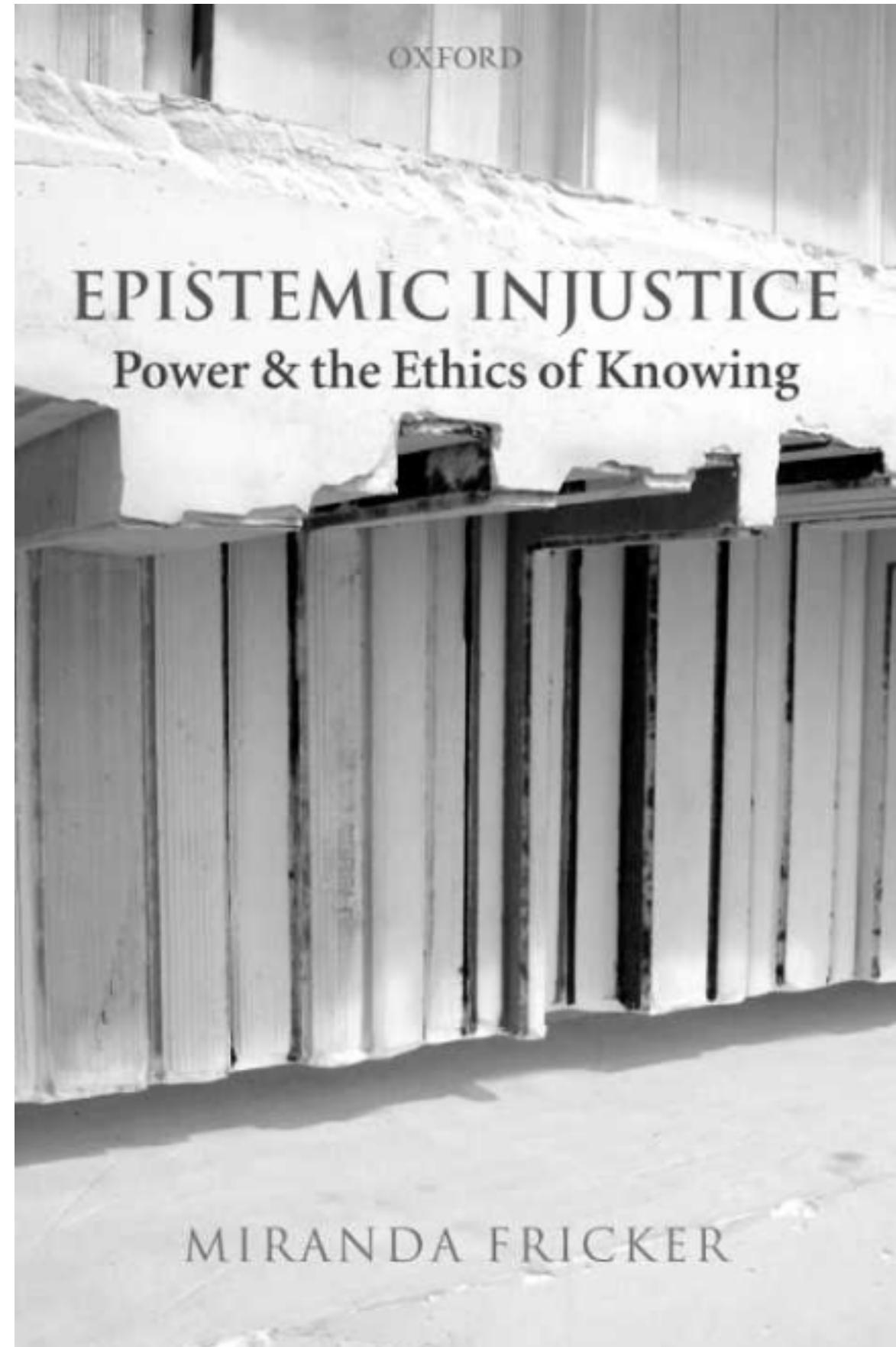
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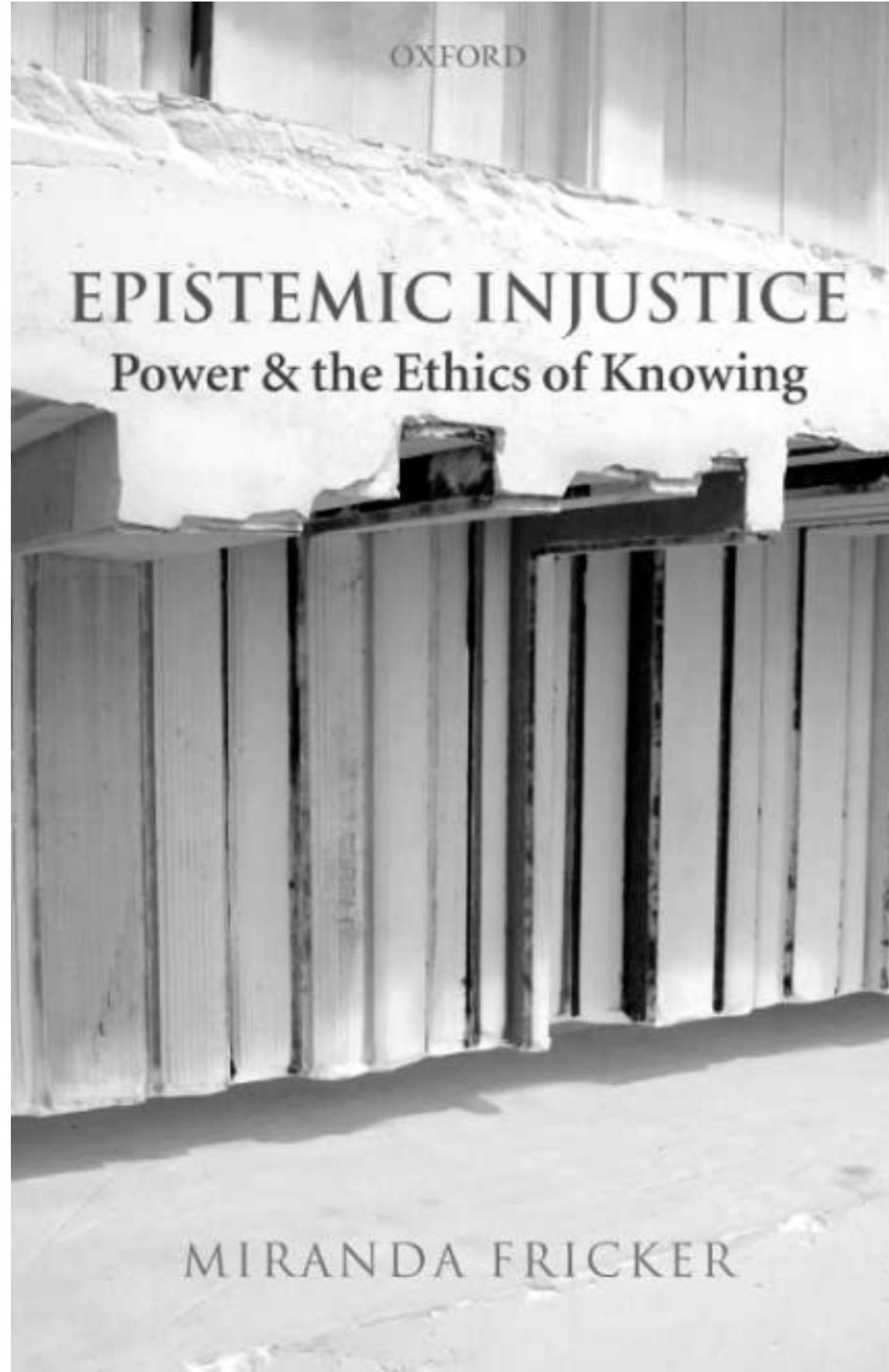
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Example Knowledge -
epistemic injustice

A just world

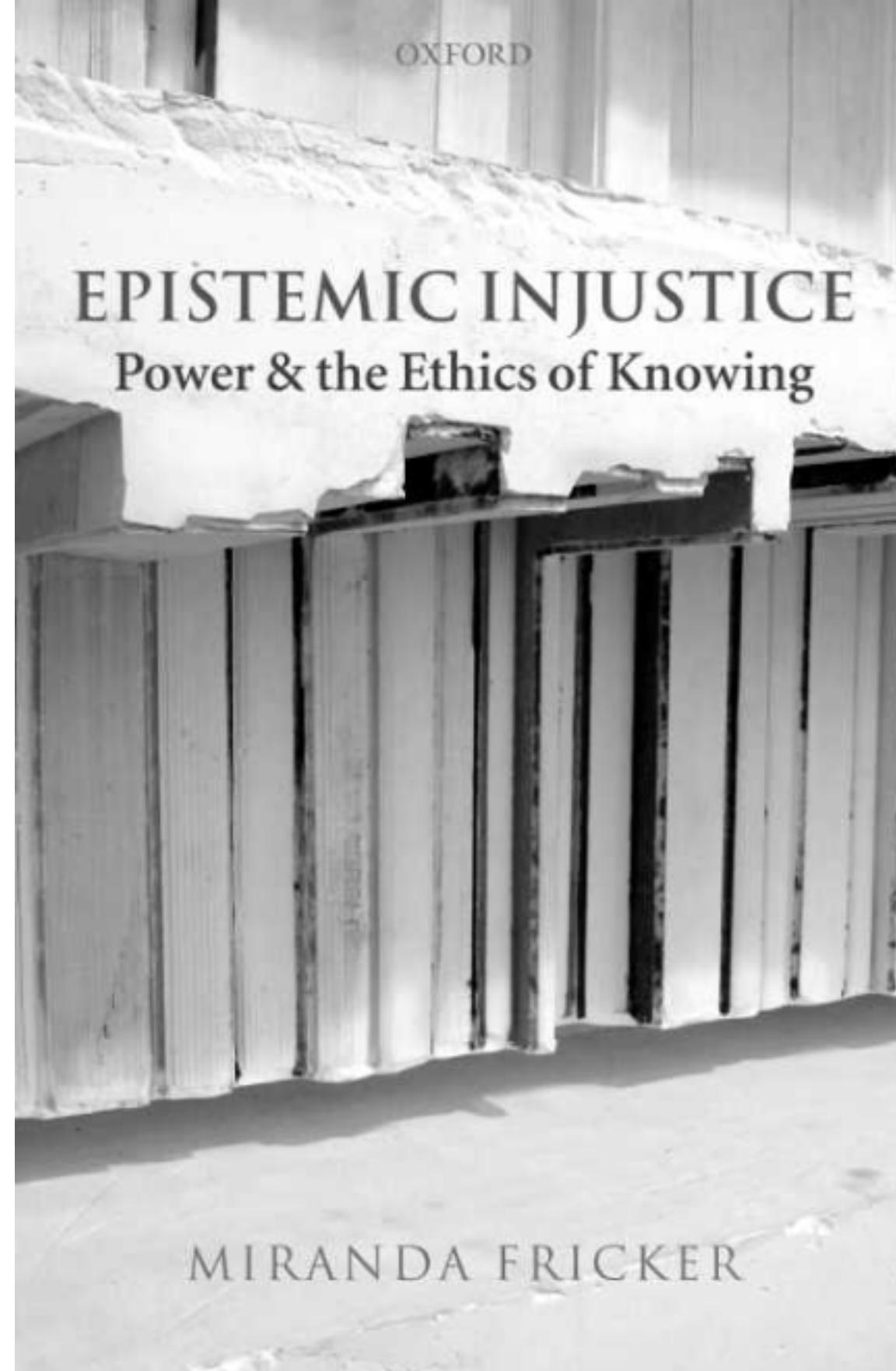




I call them testimonial injustice and hermeneutical injustice. Testimonial injustice occurs when prejudice causes a hearer to give a deflated level of credibility to a speaker's word; hermeneutical injustice occurs at a prior stage, when a gap in collective interpretive resources puts someone at an unfair disadvantage when it comes to making sense of their social experiences. An example of the first might be that the police do not believe you because you are black; an example of the second might be that you suffer sexual harassment in a culture that still lacks that critical concept. We might say that testimonial injustice is caused by prejudice in the economy of credibility; and that hermeneutical injustice is caused by structural prejudice in the economy of collective hermeneutical resources.

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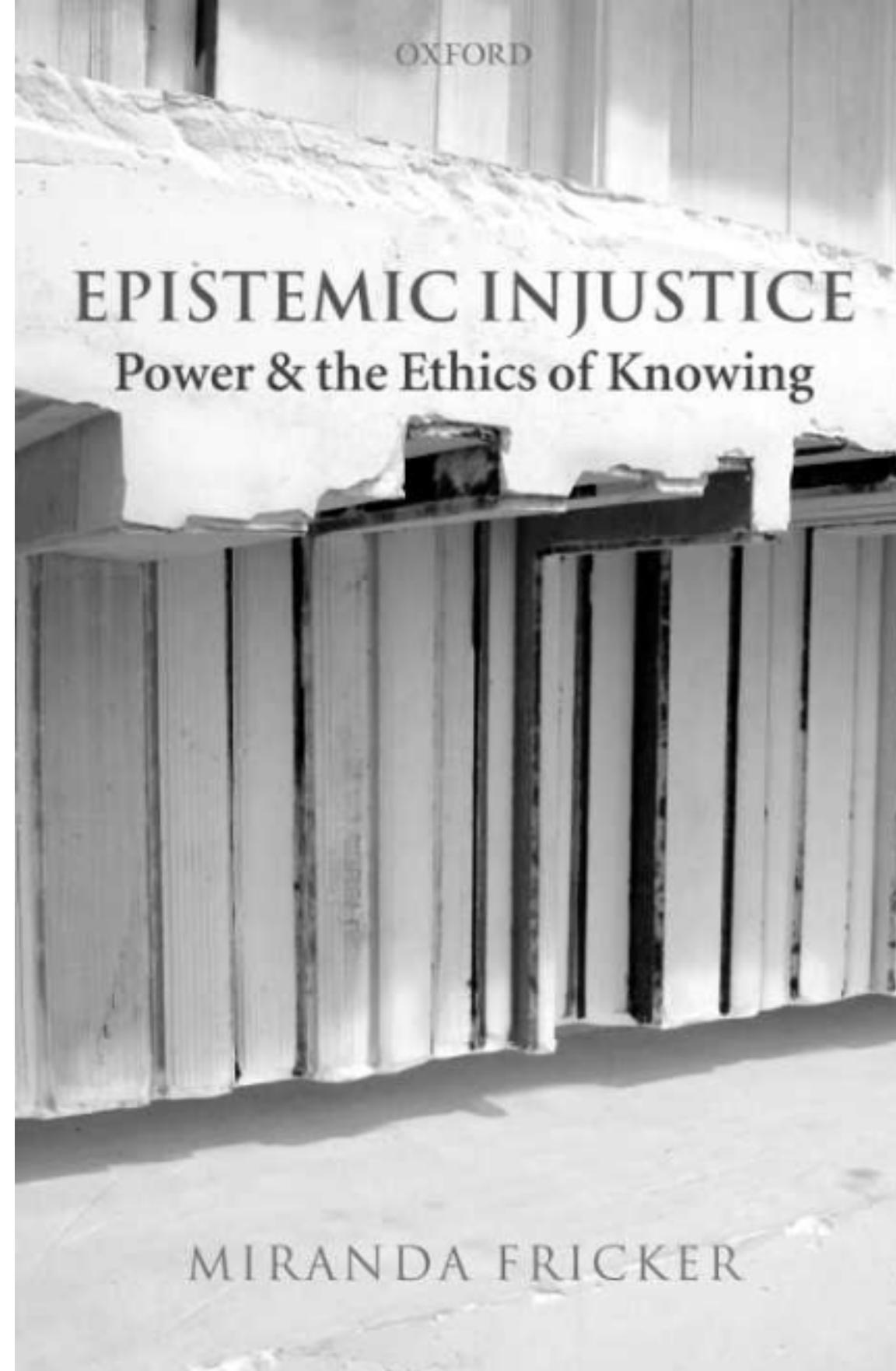
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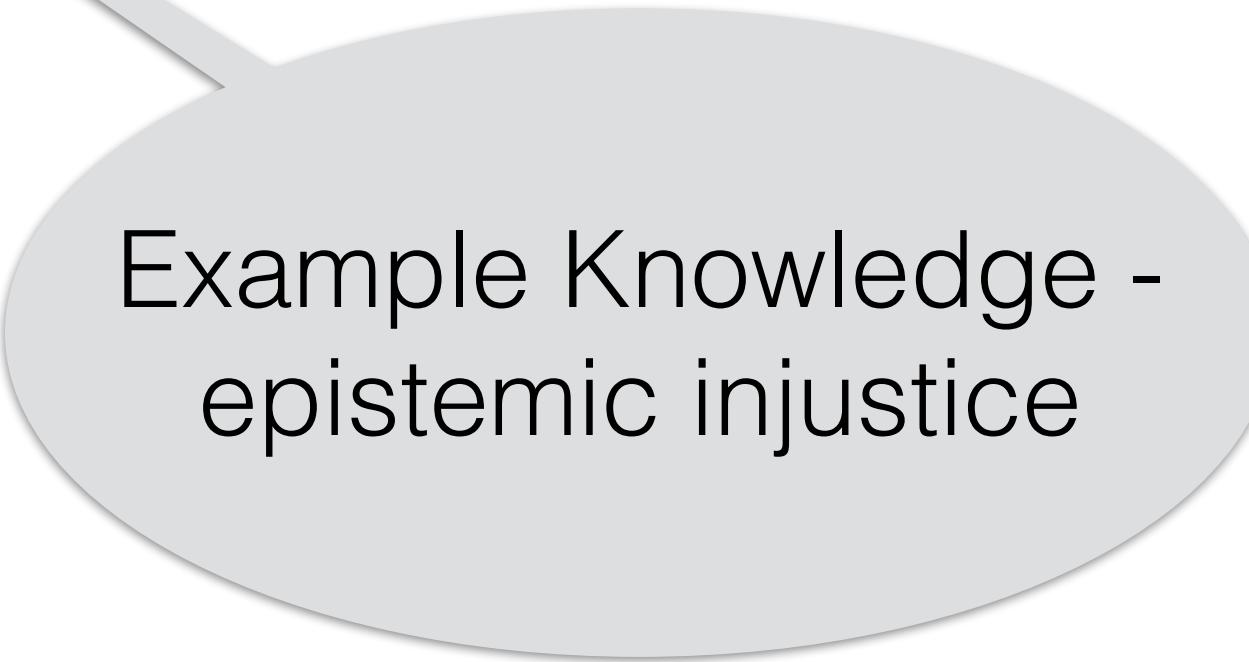
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Example Knowledge -
epistemic injustice

There is testimonial injustice in
acceptance of scientific knowledge and hermeneutical
injustice in creating knowledge about the role of economy
for sustainability

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Example Wealth:
Look at the global wealth
reports ...

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Today's economy is increasing inequality ...

Example Wealth:
Look at the global wealth reports ...

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Vision: A
prosperous society on a
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A Prosperous Society on a Healthy Planet

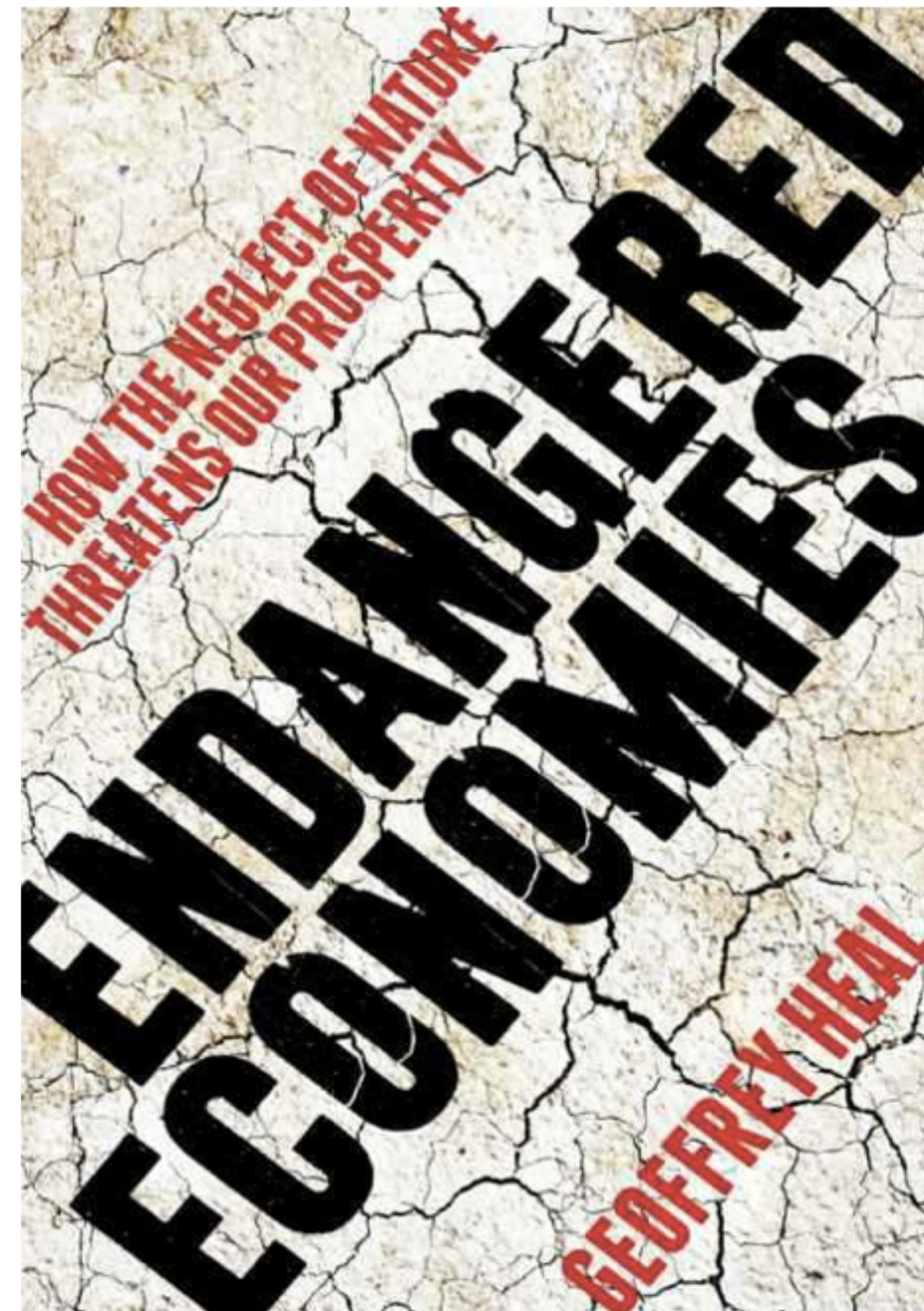


Therapy:

- Short-term:
 - addressing urgent (local) problems: symptoms like climate change, sea-level rise, pollution, ecosystem degradation, extinction, ...
- Long-term:
 - preparing for possible future, including worse/the worst case
 - making fundamental changes to address the causes/sickness

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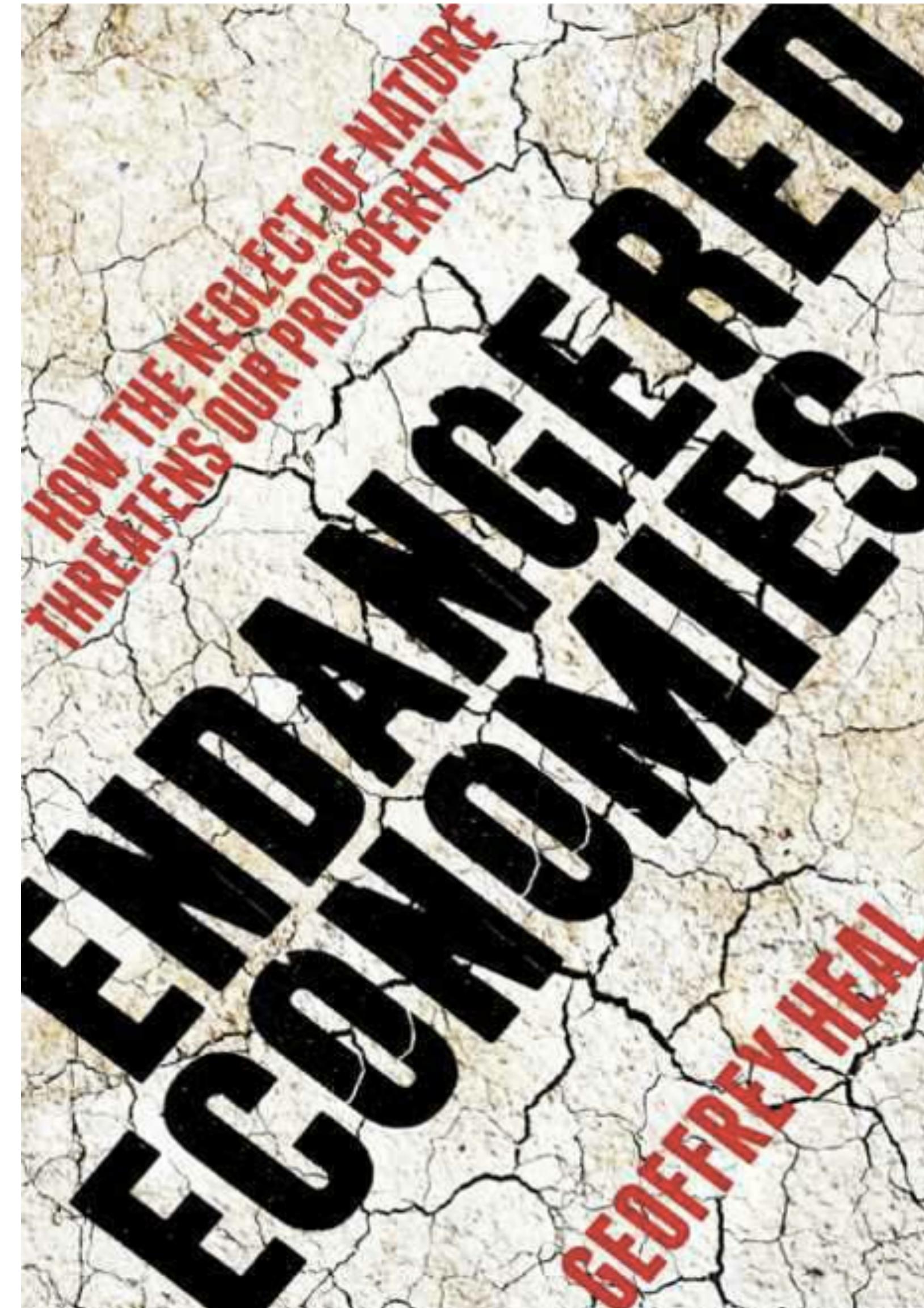
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I love the natural world, and I love the fruits of economic and technological progress. There are those who say that I can't have both: that economic progress comes at the expense of the natural world and conservation at the expense of progress. Fortunately, this is wrong: not only can they go together, but in the long run, they must go together. We cannot have sustainable prosperity without the natural world: it provides infrastructure essential to our well-being. Why is conventional wisdom so wrong? Because historically there has been a conflict between economic progress and nature, with the former coming at the expense of the latter. But this is a historical coincidence stemming from the way in which we have organized our economic activity and not in any way a logical necessity. We—humanity—can certainly have progress without the destruction of nature: it is a matter of organizing our economic activity more thoughtfully.

Heal, Geoffrey. *Endangered Economies: How the Neglect of Nature Threatens Our Prosperity*. Columbia University Press. Kindle Edition.

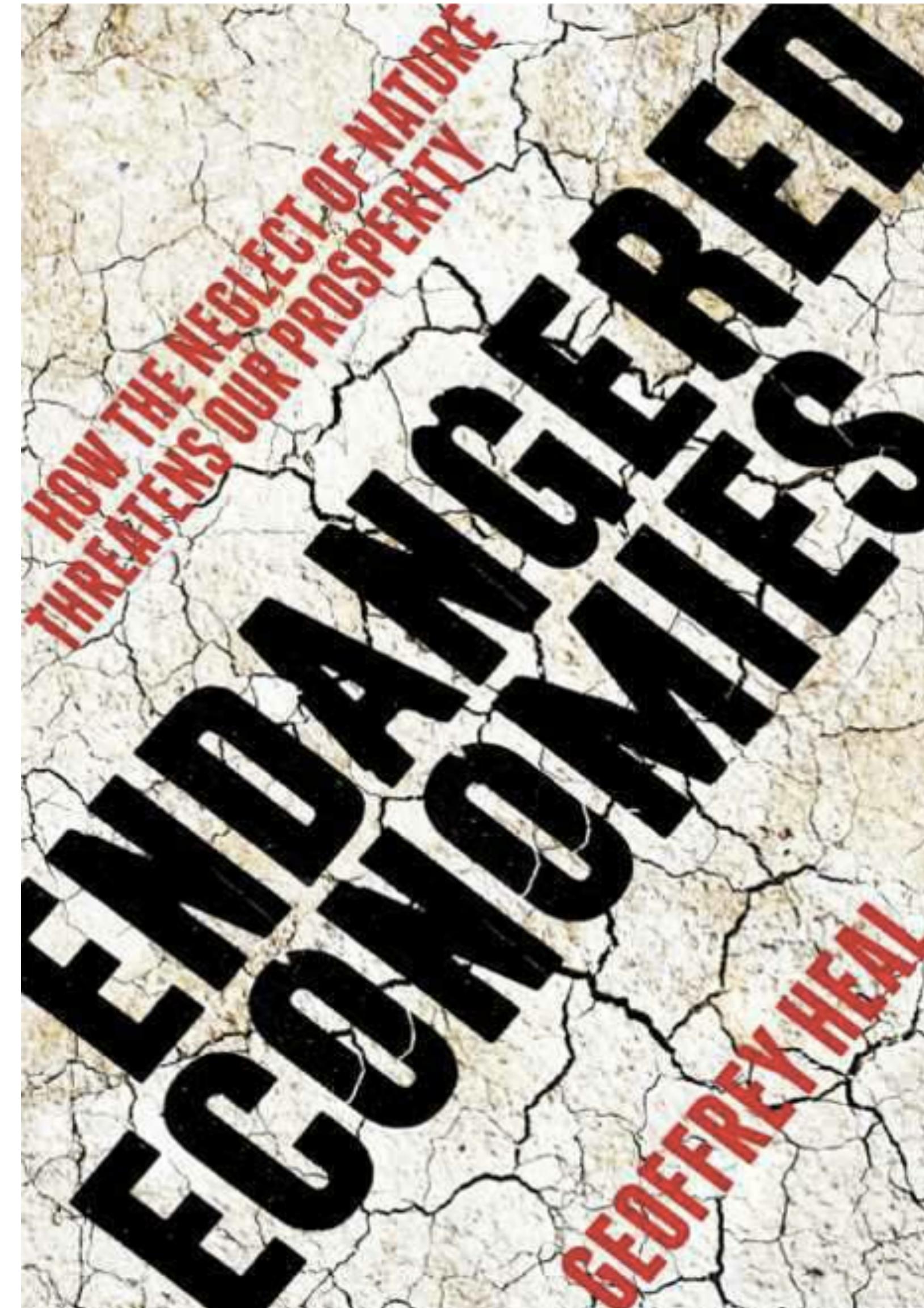
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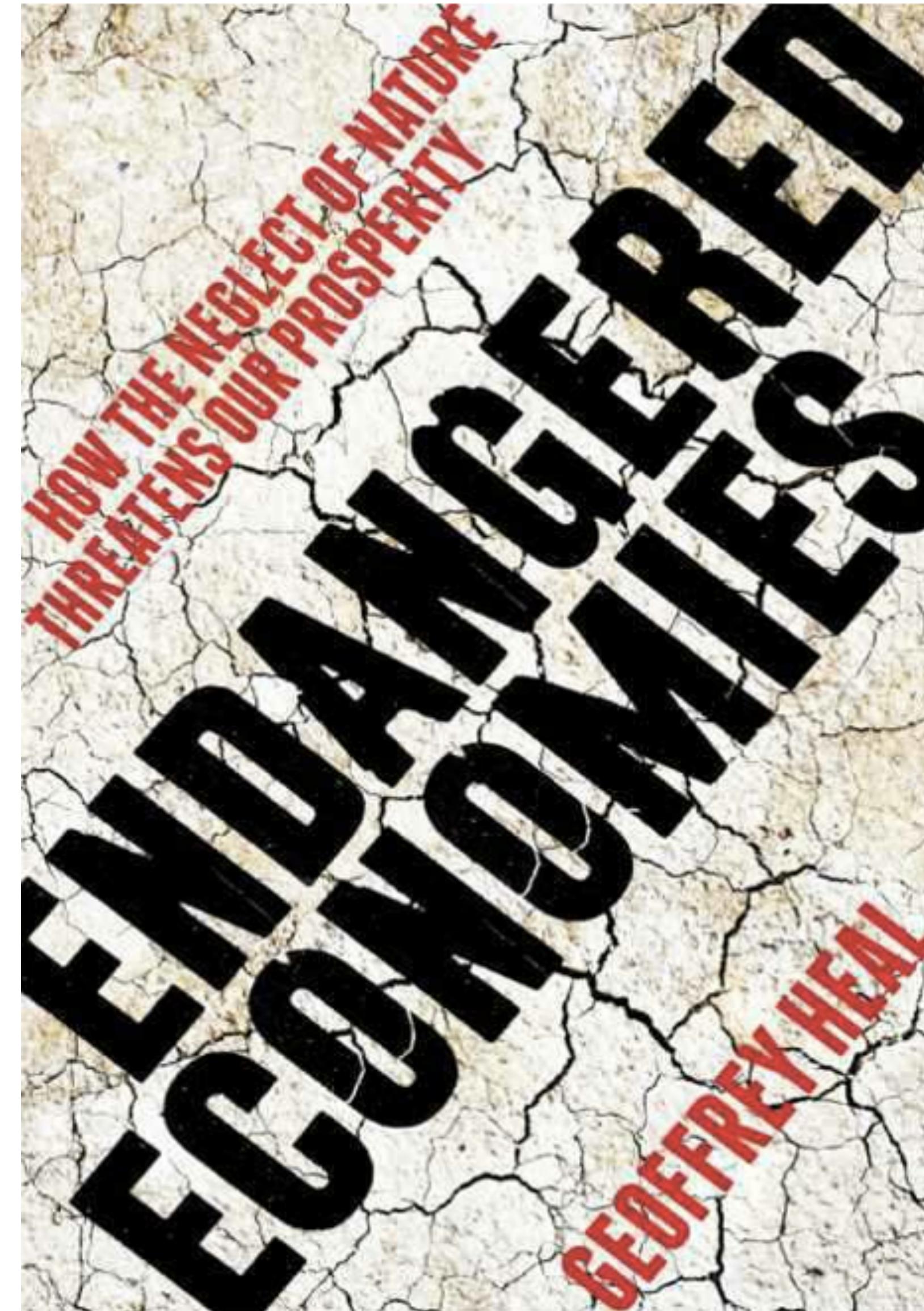
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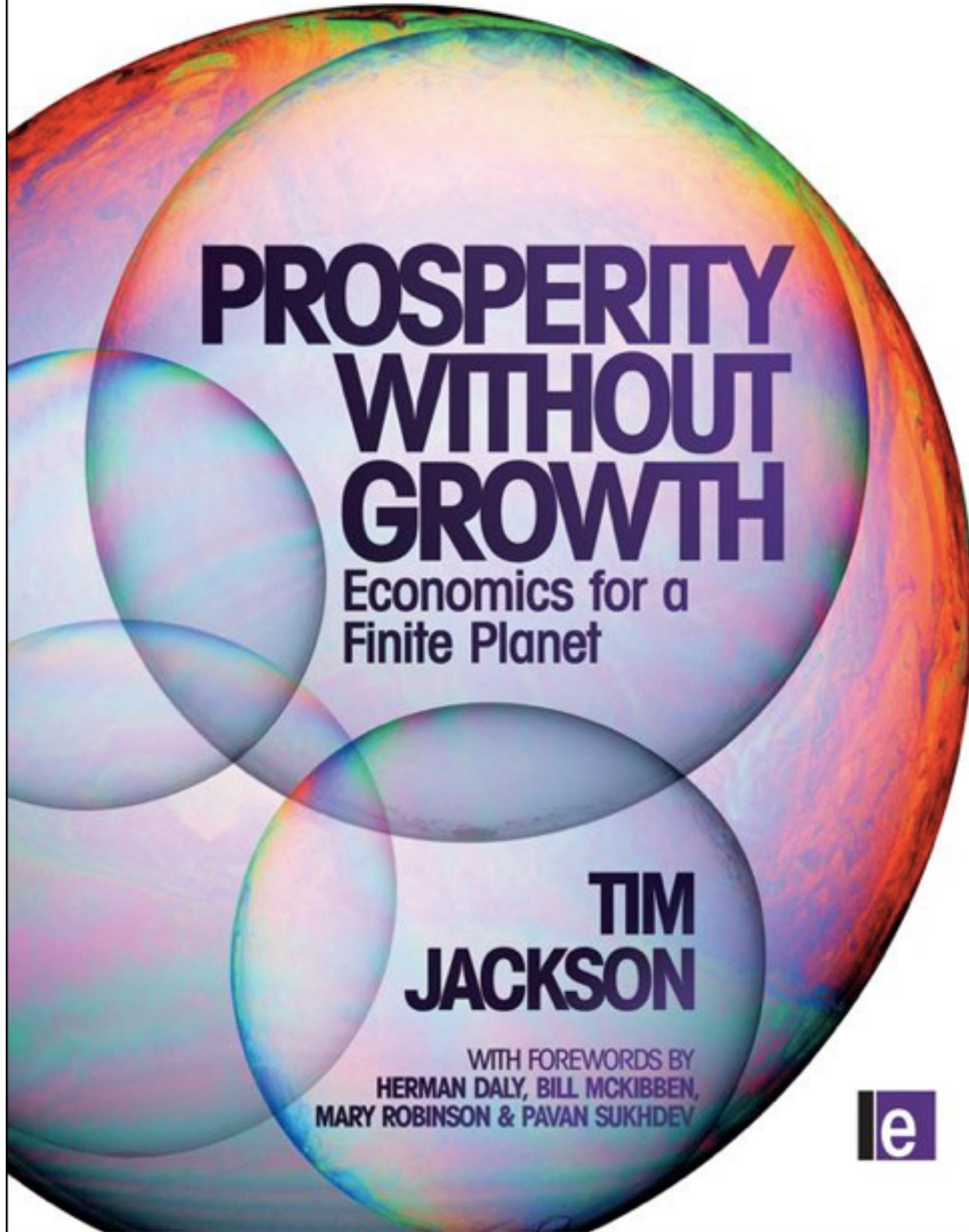


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'Business as usual is not an option.'

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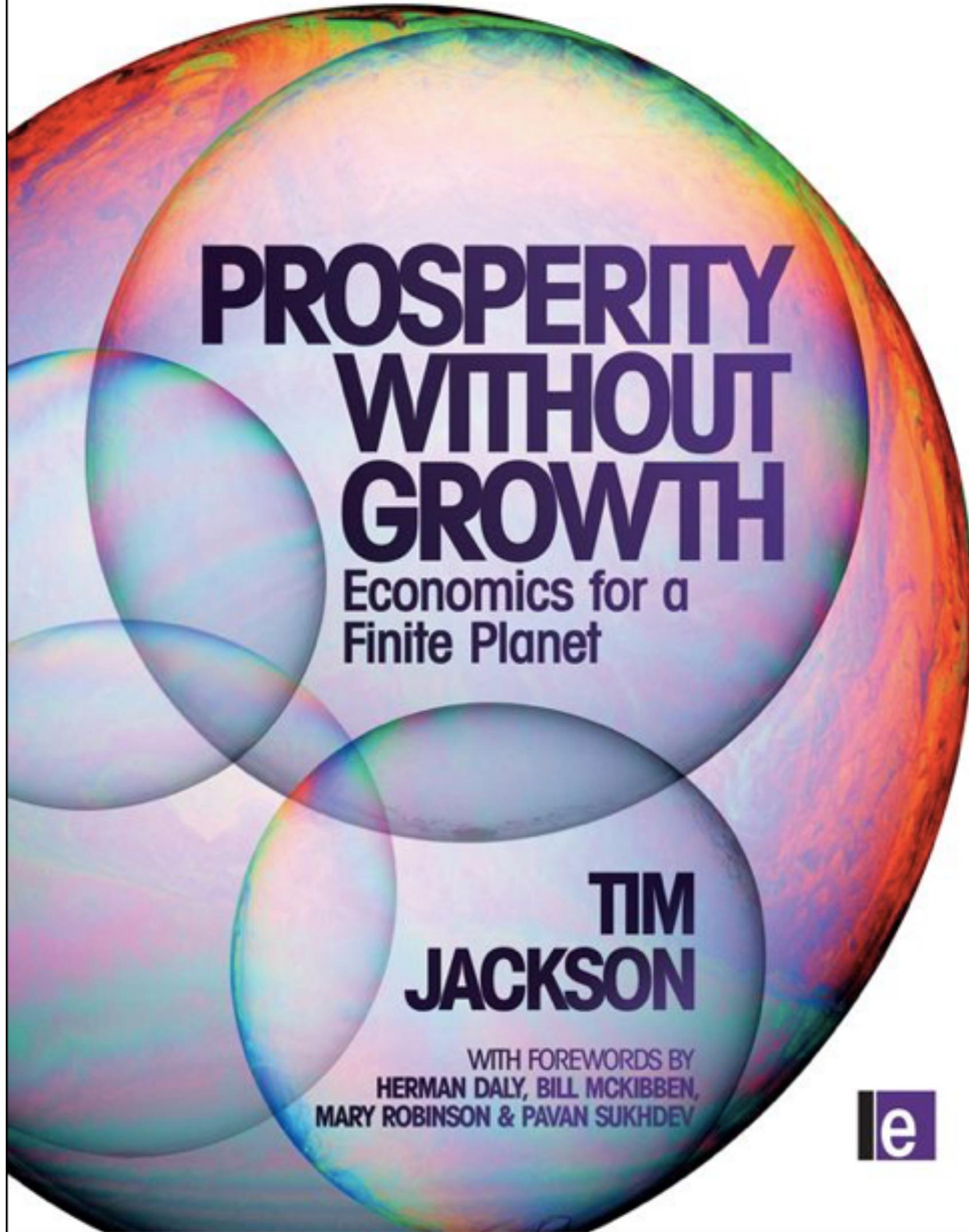
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One of the key messages of this book is that we're failing in that task. Our technologies, our economy and our social aspirations are all mis-aligned with any meaningful expression of prosperity. ... In pursuit of the good life today, we are systematically eroding the basis for well-being tomorrow. We stand in real danger of losing any prospect of a shared and lasting prosperity.

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HALF-EARTH



*Our Planet's
Fight for Life*

EDWARD O.
WILSON

WINNER OF THE PULITZER PRIZE

For the first time in history a conviction has developed among those who can actually think more than a decade ahead that we are playing a global endgame. Humanity's grasp on the planet is not strong. It is growing weaker. Our population is too large for safety and comfort.

...

Meanwhile, we thrash about, appallingly led, with no particular goal in mind other than economic growth, unfettered consumption, good health, and personal happiness. The impact on the rest of the biosphere is everywhere negative, the environment becoming unstable and less pleasant, our long-term future less certain.

Wilson, Edward O.. Half-Earth: Our Planet's Fight for Life .
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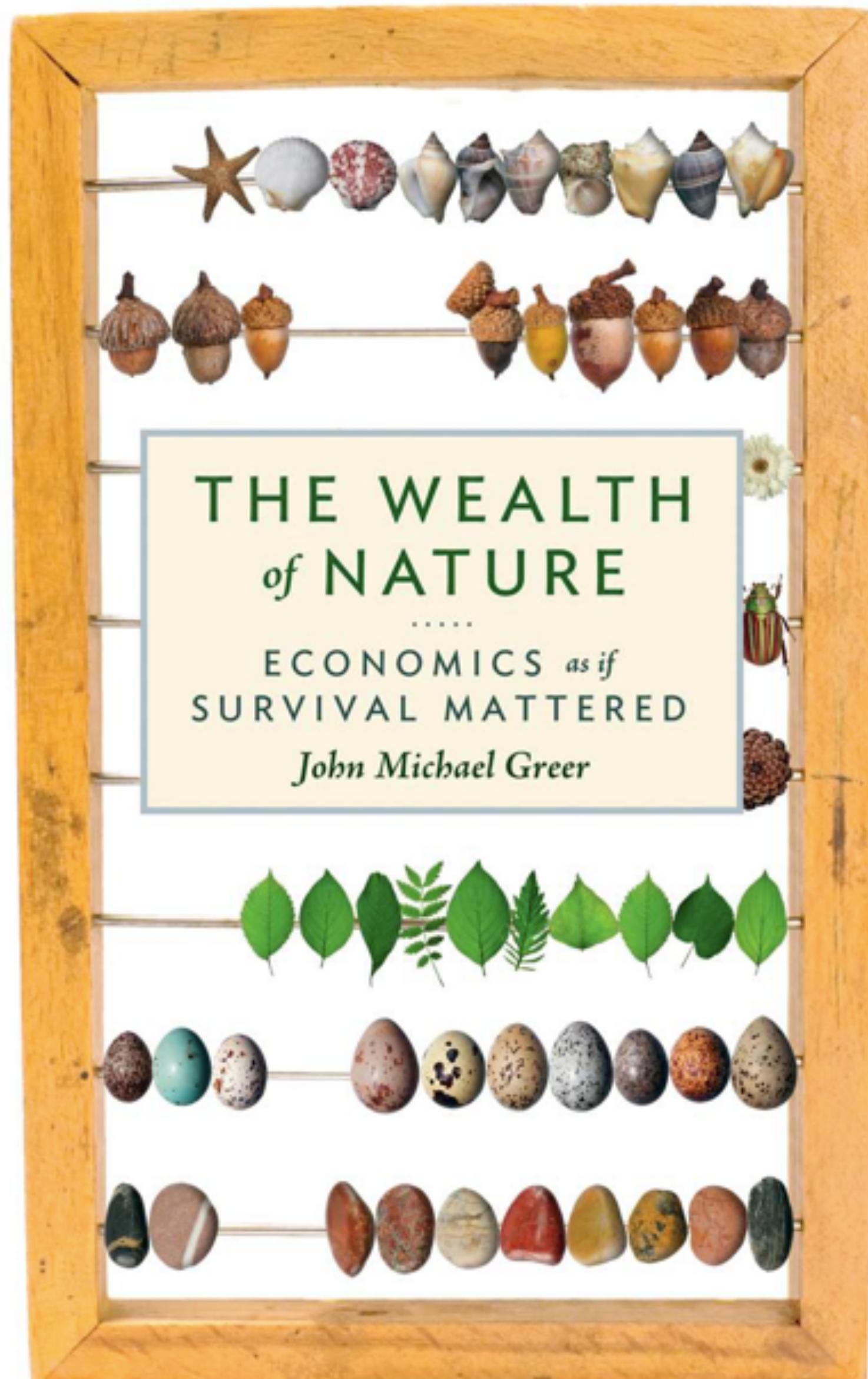
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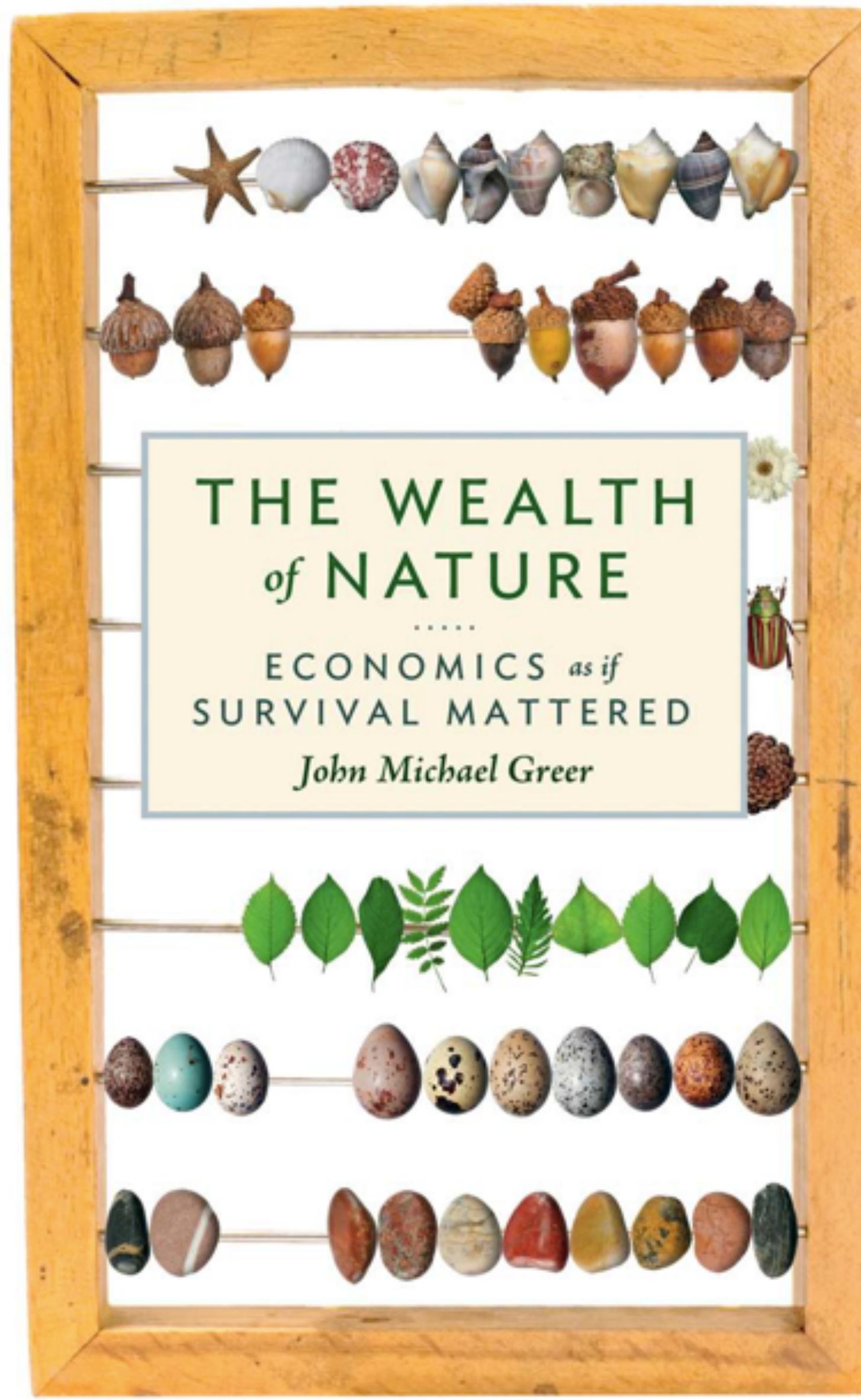
A Prosperous Society on a Healthy Planet



More than two centuries have passed since Adam Smith, a Scots philosopher with a clergyman's training and a previous reputation mostly as a moralist, launched the modern science of economics with a book entitled *The Wealth of Nations*. The first widely accepted analysis of how markets guide economic behavior, Smith's book quickly took on the status of a classic. Its approach to the subject of economics has dominated the field ever since; just as Bertrand Russell famously defined all of Western philosophy as "footnotes to Plato," it would be by no means inappropriate to define all of modern economic thought as footnotes to Smith.

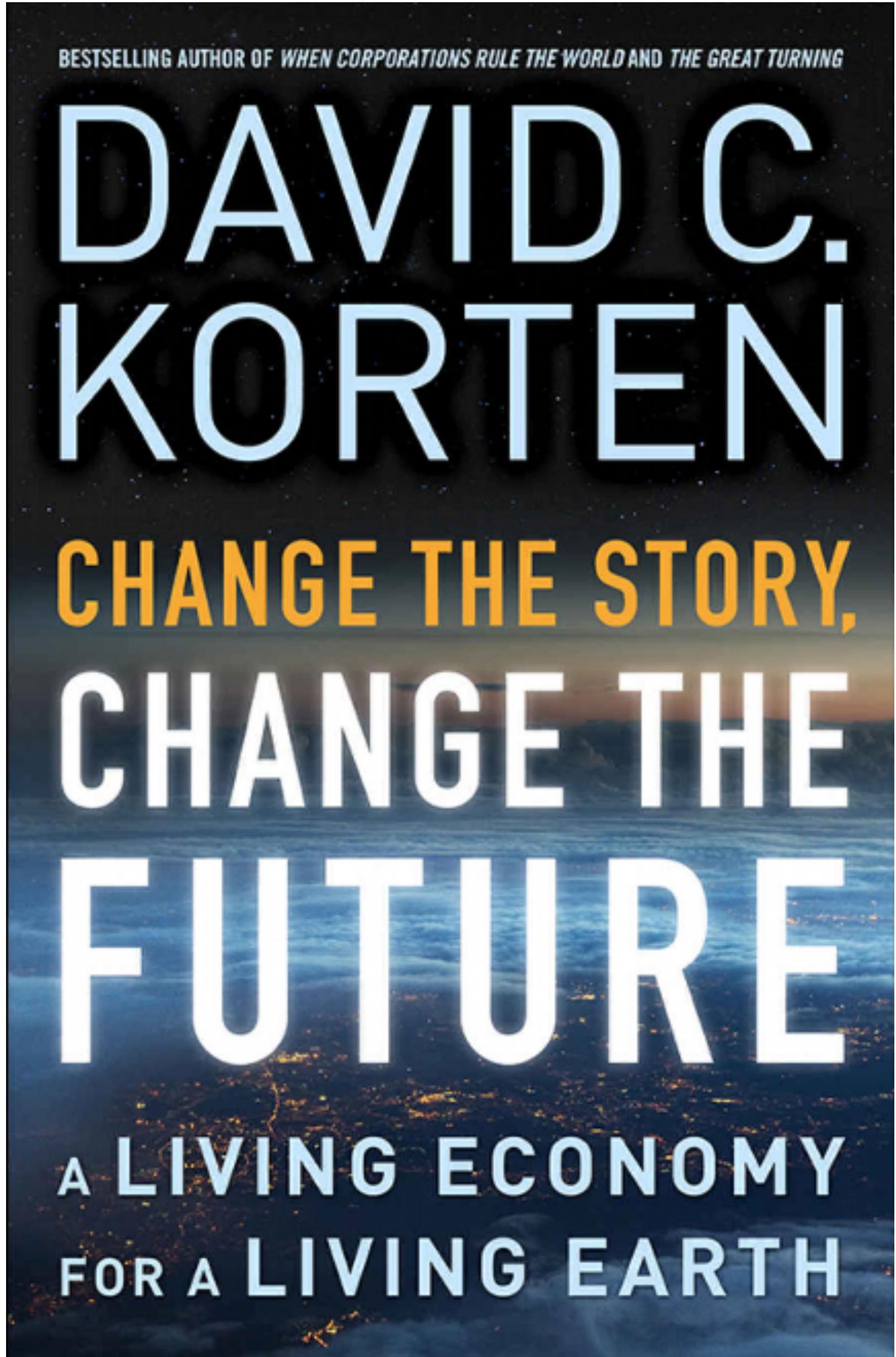
Greer, John Michael. *The Wealth of Nature: Economics as if Survival Mattered* (p. 1). New Society Publishers. Kindle Edition.

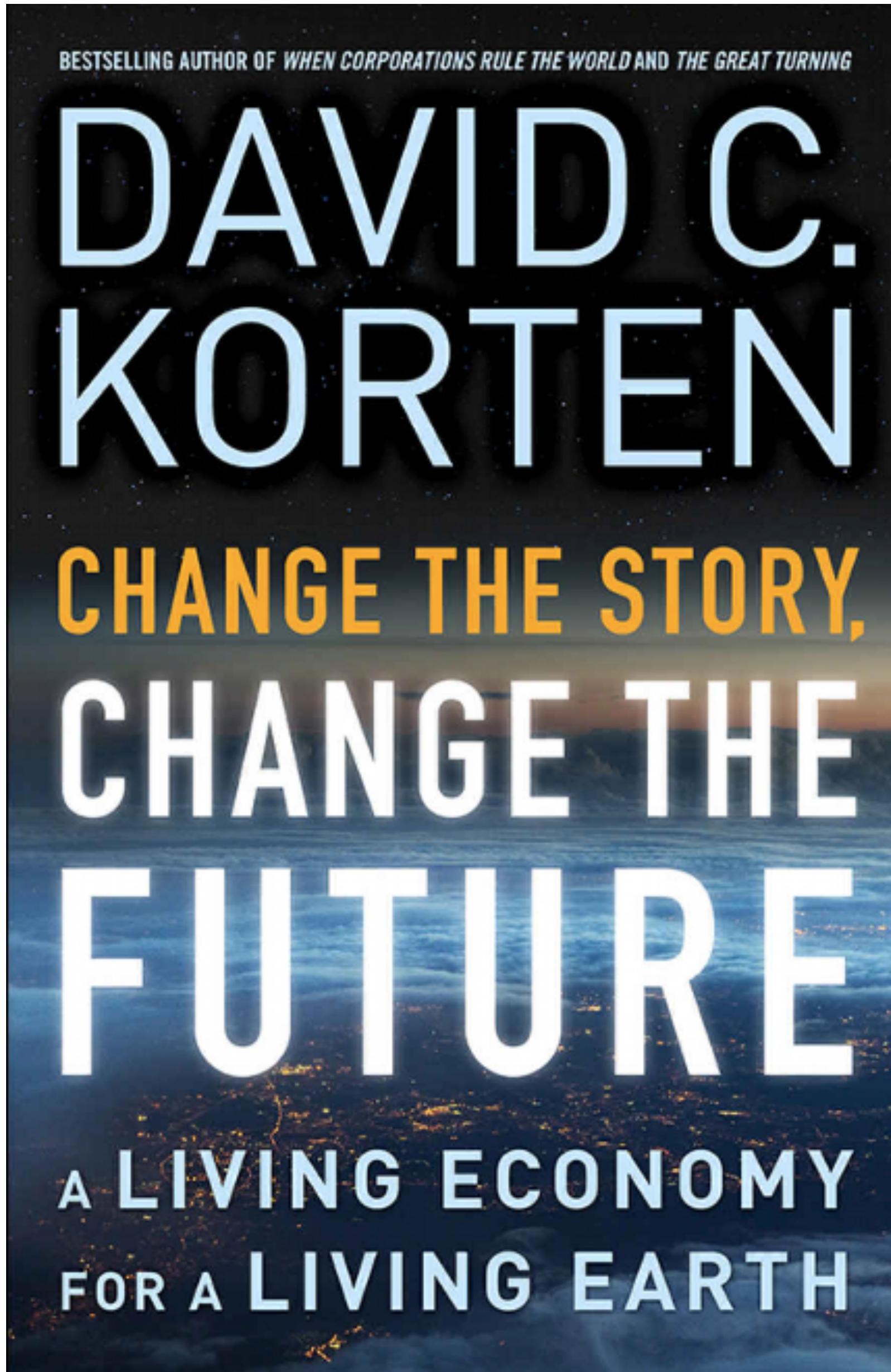
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MANY PEOPLE nowadays assume that the collapse of the current economic order in the industrial world must lead to mass death and a descent into savagery. This hardly follows. Most of the world's nations have undergone political and social collapse at least once in the course of the last century; the process can certainly be traumatic, but it isn't the end of the world. Whatever crises drive today's industrial order to its end, and whatever national or international traumas supervene until some degree of stability returns, there will be a place for new policies when the future governments of today's industrial nations, or the governments of the new political units that emerge from the wreckage, get to work picking up the pieces.

Greer, John Michael. The Wealth of Nature: Economics as if Survival Mattered (p. 191). New Society Publishers. Kindle Edition.

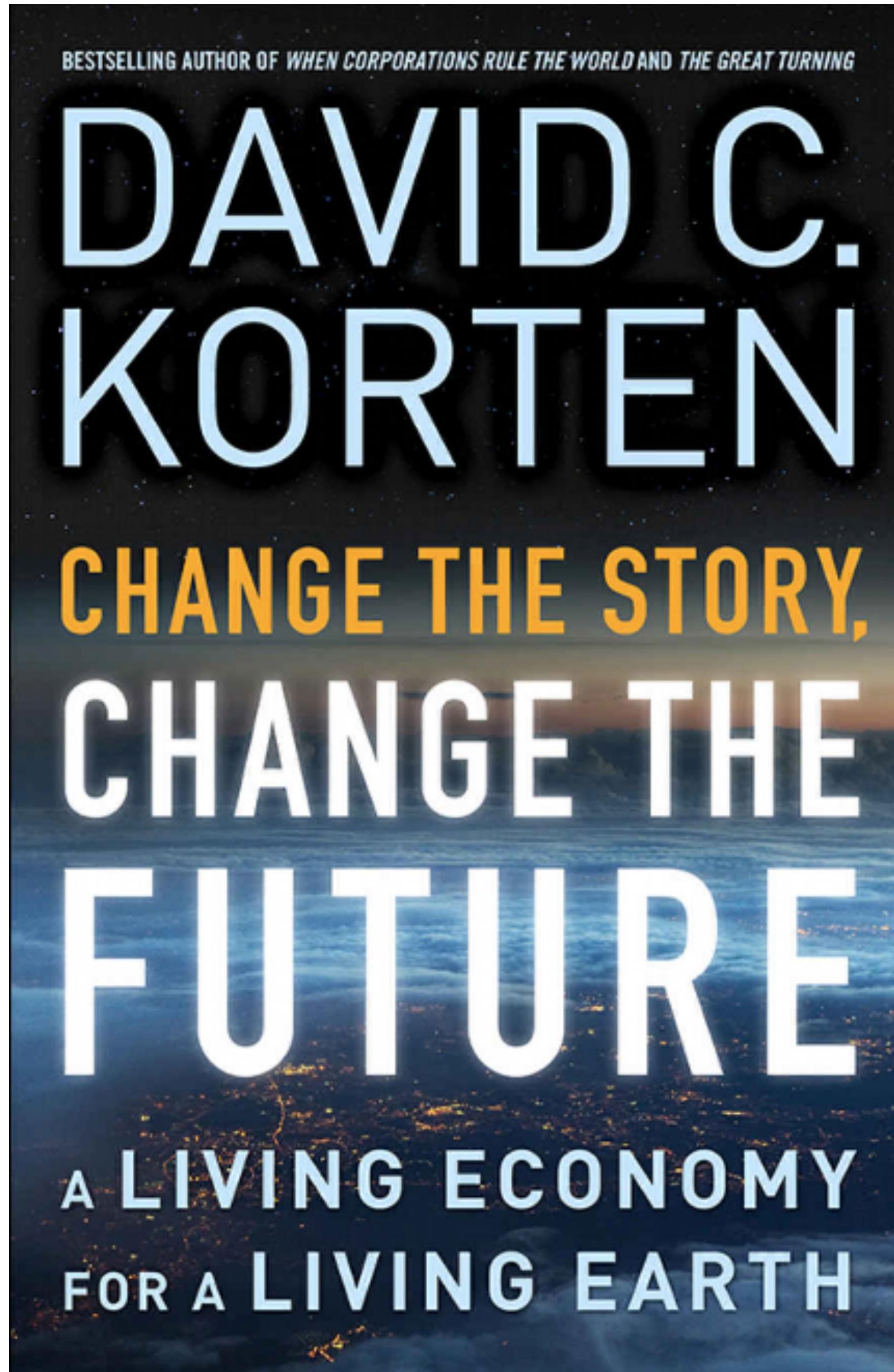




The only valid purpose of an economy is to serve life. To align the human economy with this purpose, we must learn to live as nature lives, organize as nature organizes, and learn as nature learns guided by a reality-based, life-centered, intellectually sound economics that embraces the values and insights of the Sacred Life and Living Earth story.

The quest for a new economics begins with a simple question for which the answer should be obvious: Is the purpose of the economy to maximize the profits of money-seeking corporate robots or the health and well-being of living households?

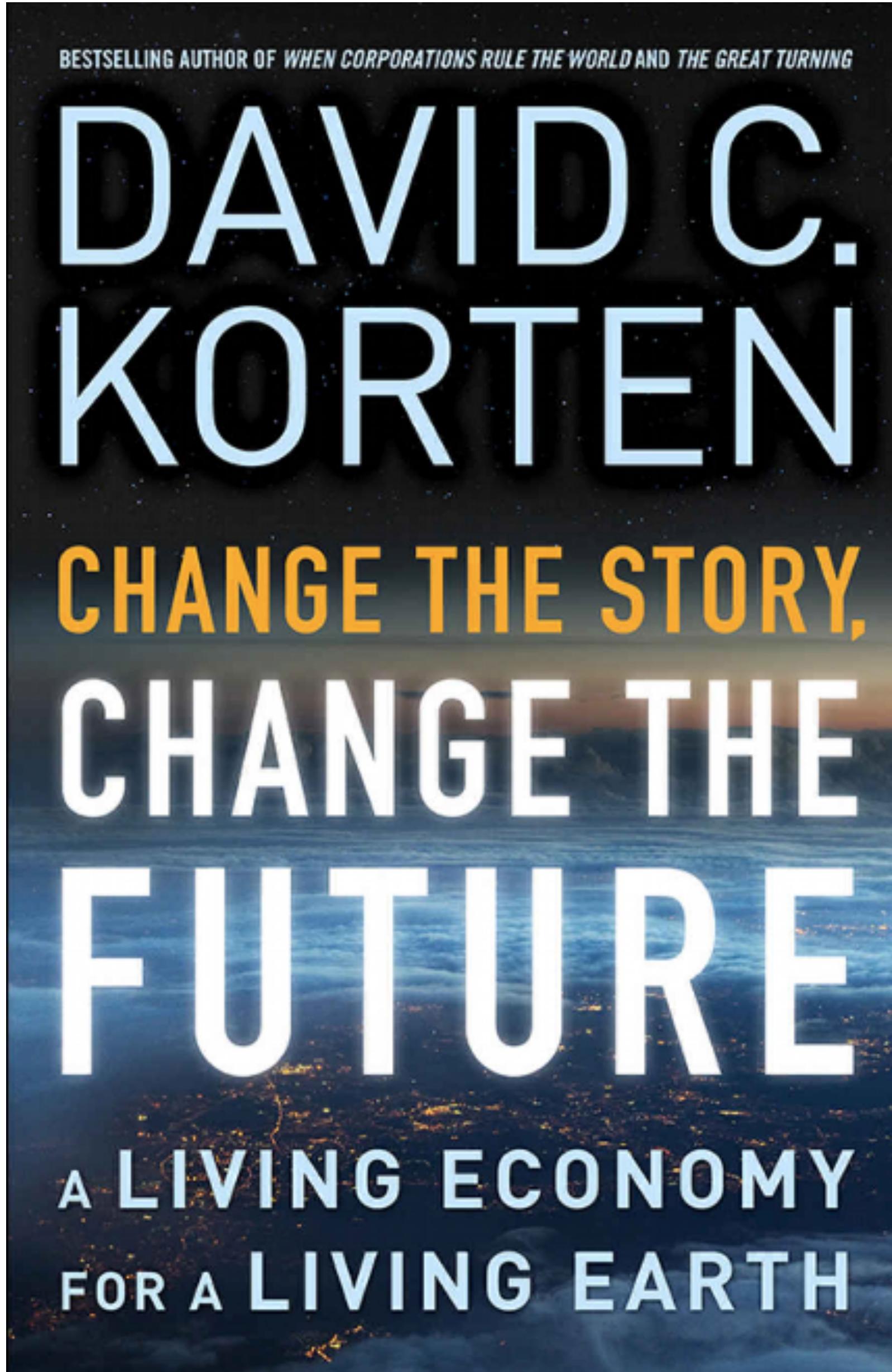
Korten, David C.. Change the Story, Change the Future: A Living Economy for a Living Earth (p. 99). Berrett-Koehler Publishers. Kindle Edition.



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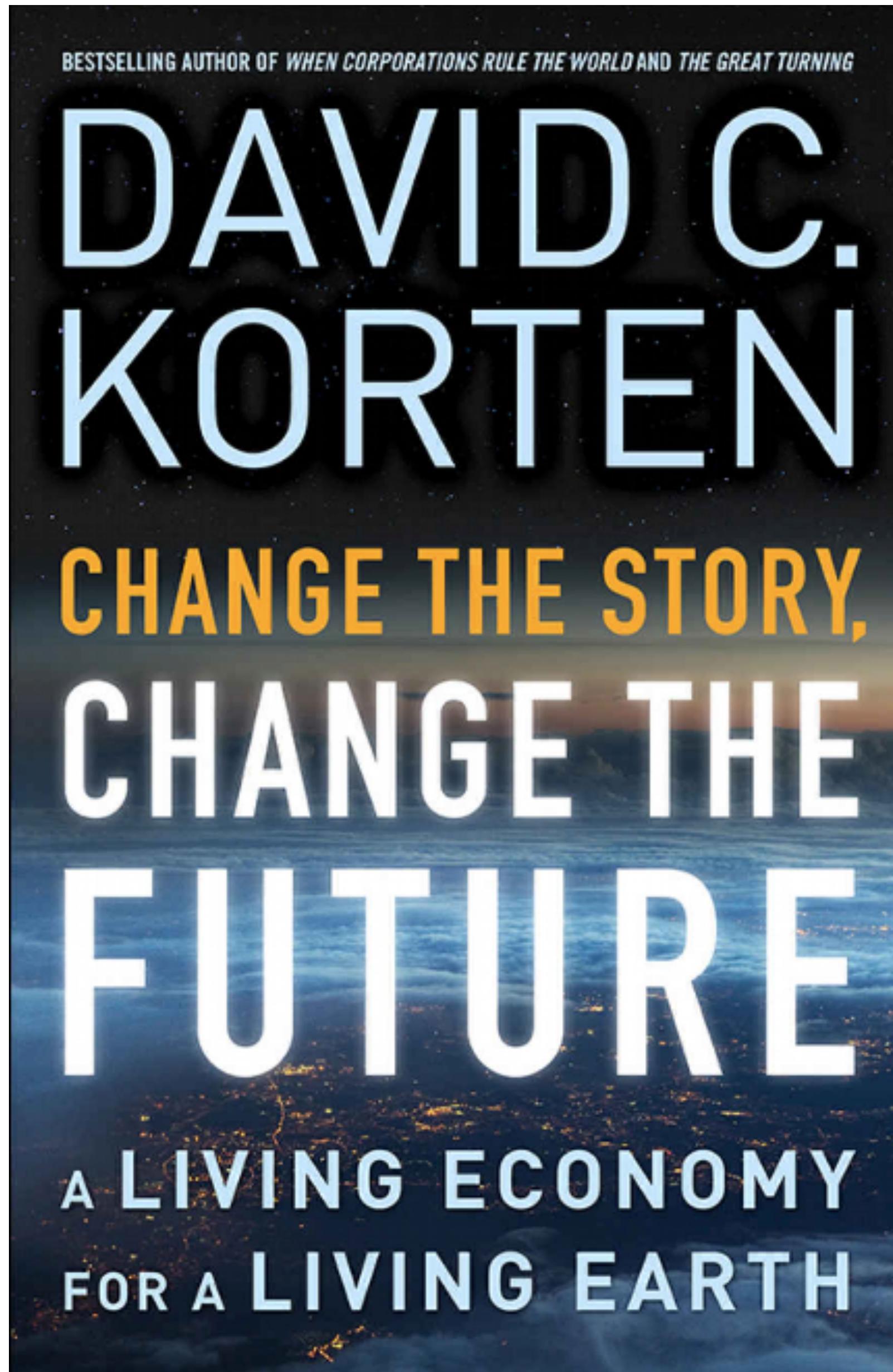
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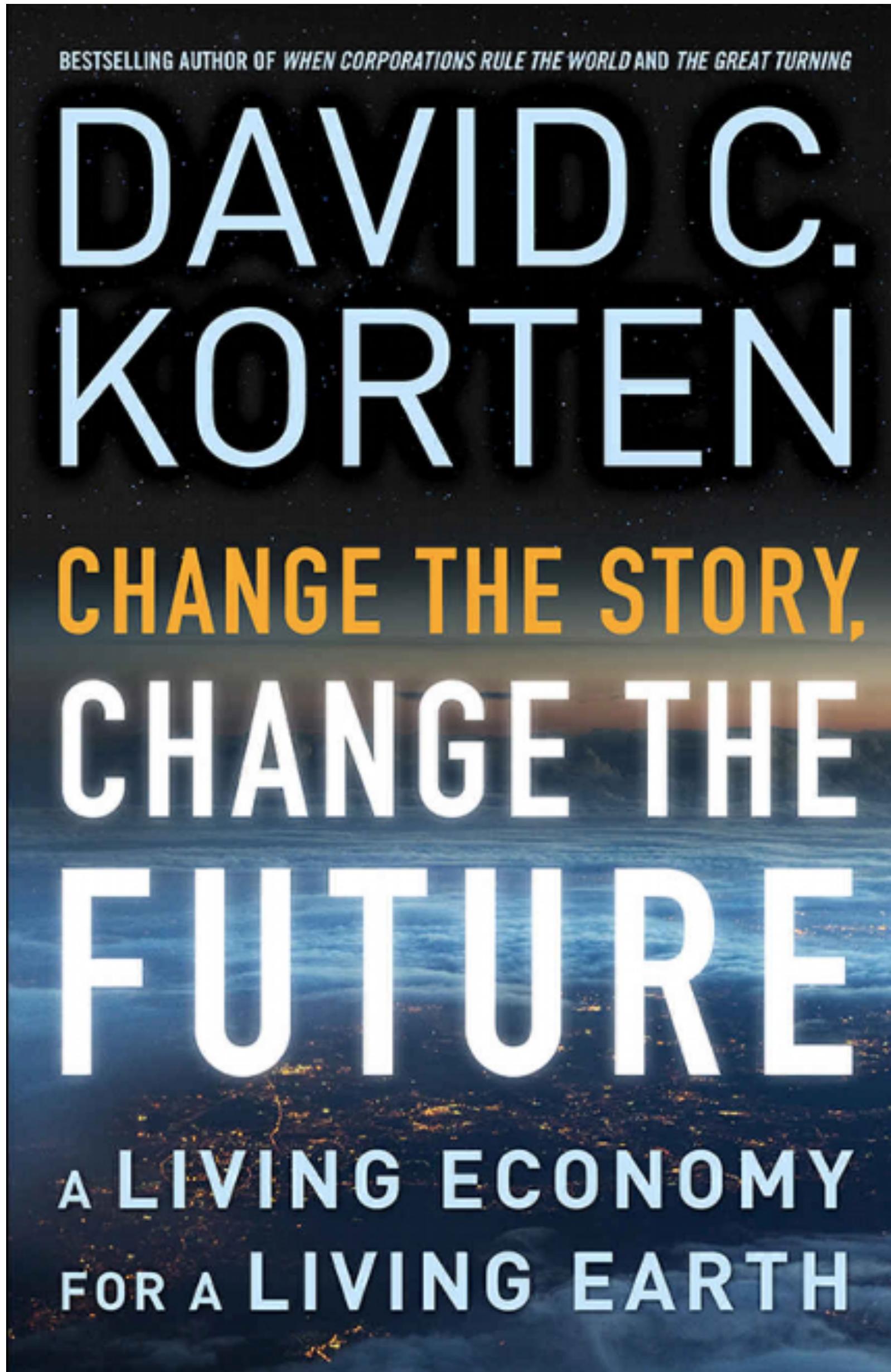
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The only valid purpose of an economy is to serve life. To align the human economy with this purpose, we must learn to live as nature lives, organize as nature organizes, and learn as nature learns guided by a reality-based, life-centered, intellectually sound economics that embraces the values and insights of the Sacred Life and Living Earth story.

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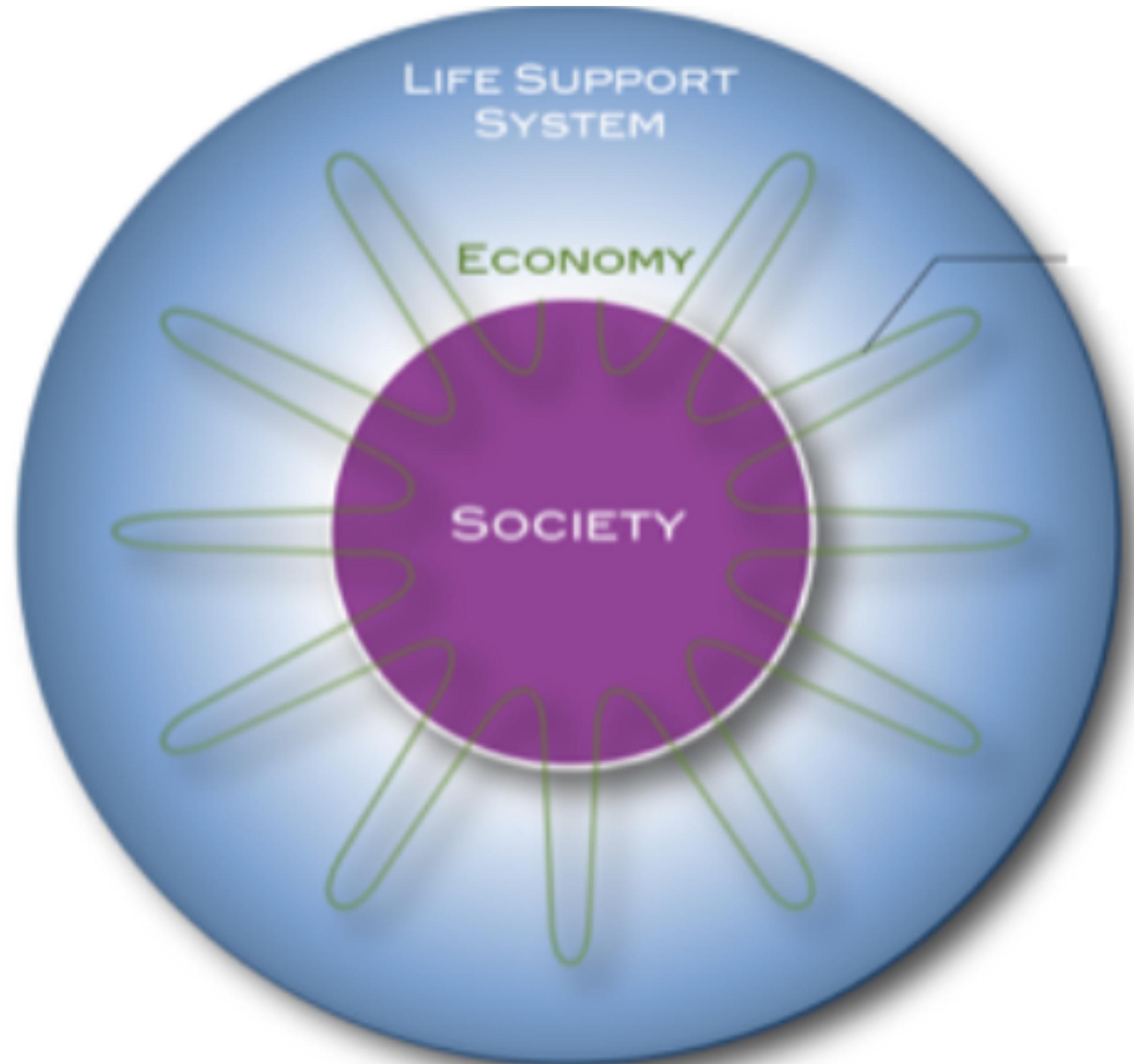


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A Prosperous Society on a Healthy Planet

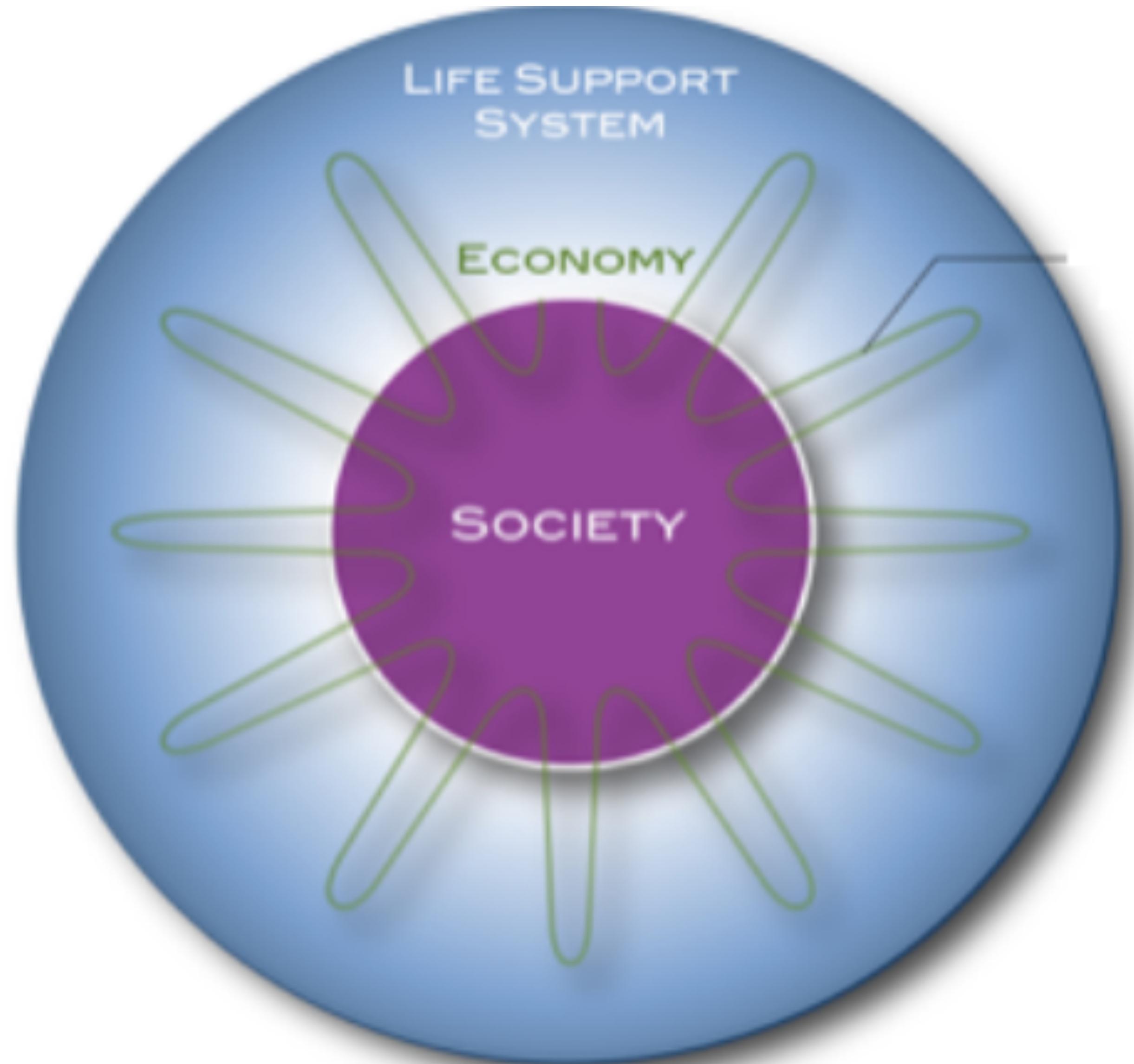


Redefining the purpose of economy:
To meet the needs of the present while
safeguarding Earth's life support systems, on
which the welfare of current and future
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Rationale:
Economy is the link between humanity and
Earth's life-support system.
Ethical, social and economic rules regulate
the flows.
Measure wealth creation and distribution by
accounting for natural, social, and economic
wealth.

A Prosperous Society on a Healthy Planet

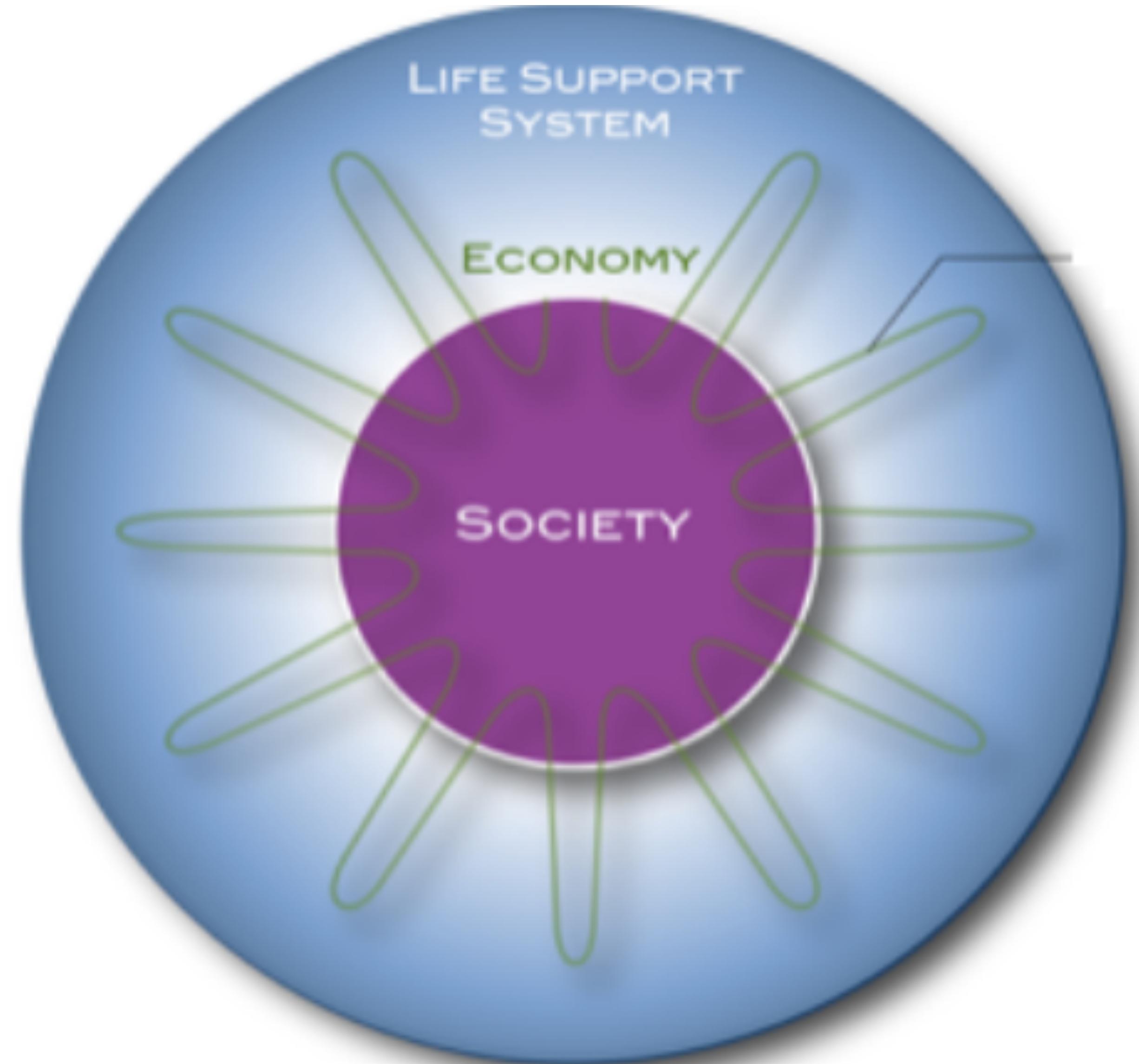


A Prosperous Society on a Healthy Planet

Core question:

How can we safeguard the Earth's life-support system?

What does this mean: safeguarding the Earth's life-support system?



Mitigation and Adaptation Studies

Class 28: Thoughts on Where to Go from Here

Contents:

- Summary: Where are we now?
- Normative and Descriptive Ethics
- A Prosperous Society on a Healthy Planet
- Road to Dignity



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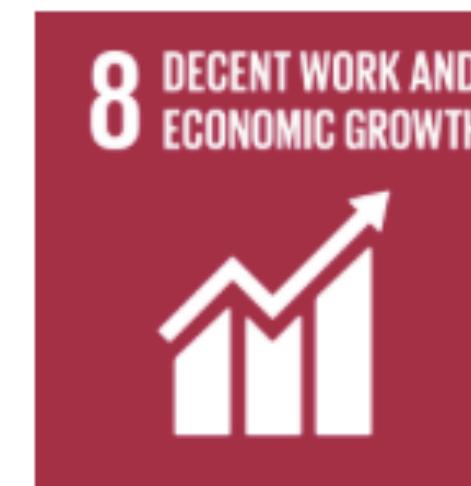
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Agenda 2030: “The Road to Dignity”

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SUSTAINABLE DEVELOPMENT GOALS



Agenda 2030: “The Road to Dignity”



SUSTAINABLE DEVELOPMENT GOALS

SDGs and the Agenda 2030 are intended as our “Road to Dignity,” and we are on this road together.



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and we are on this road together.

1 NO

2 ZERO

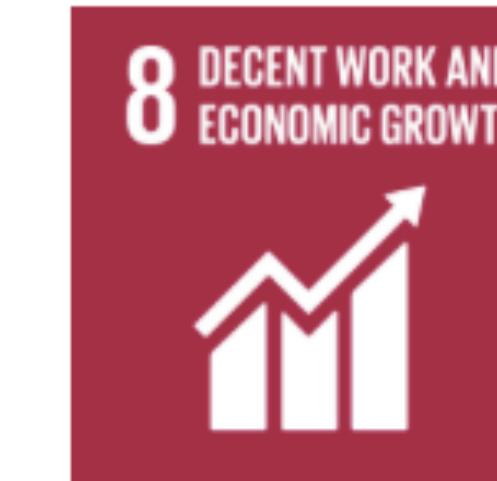
3 GOOD HEALTH

4 QUALITY

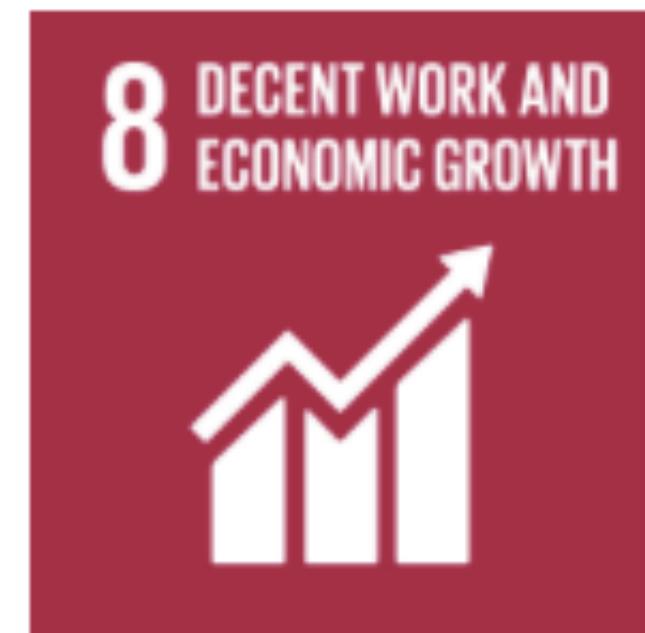
5 GENDER

6 CLEAN WATER

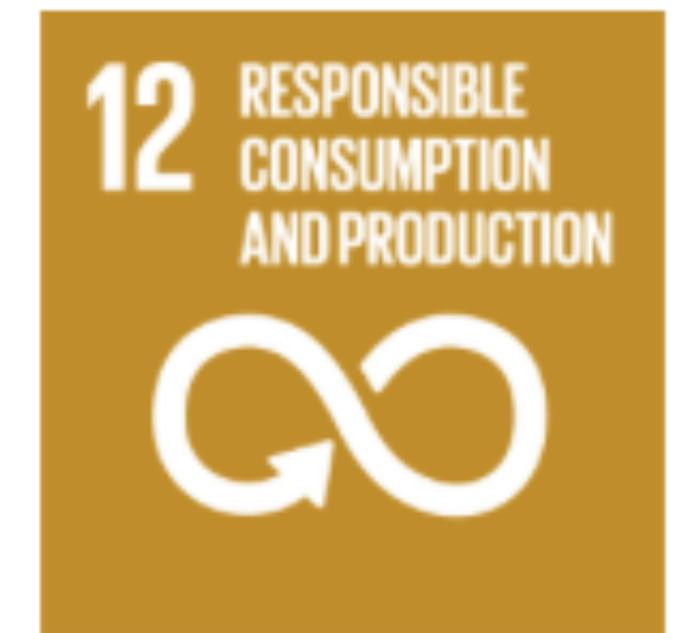
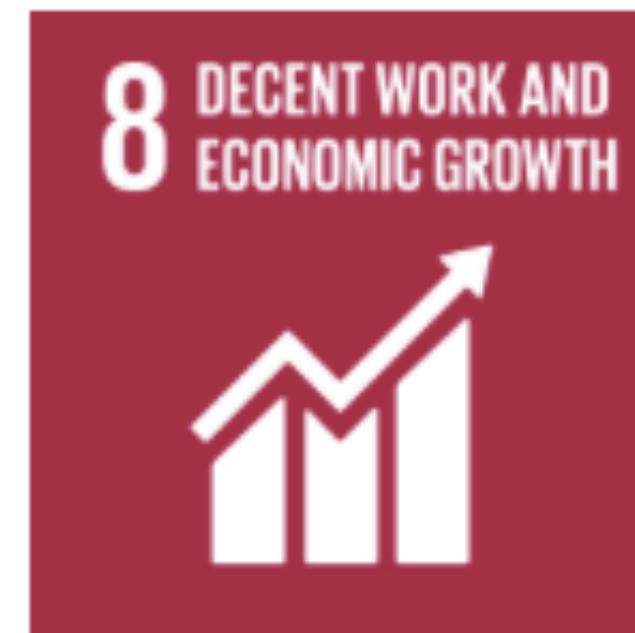
Instead of being technology and science-driven, the Earth observation and science communities need to be problem-driven and part of the process.



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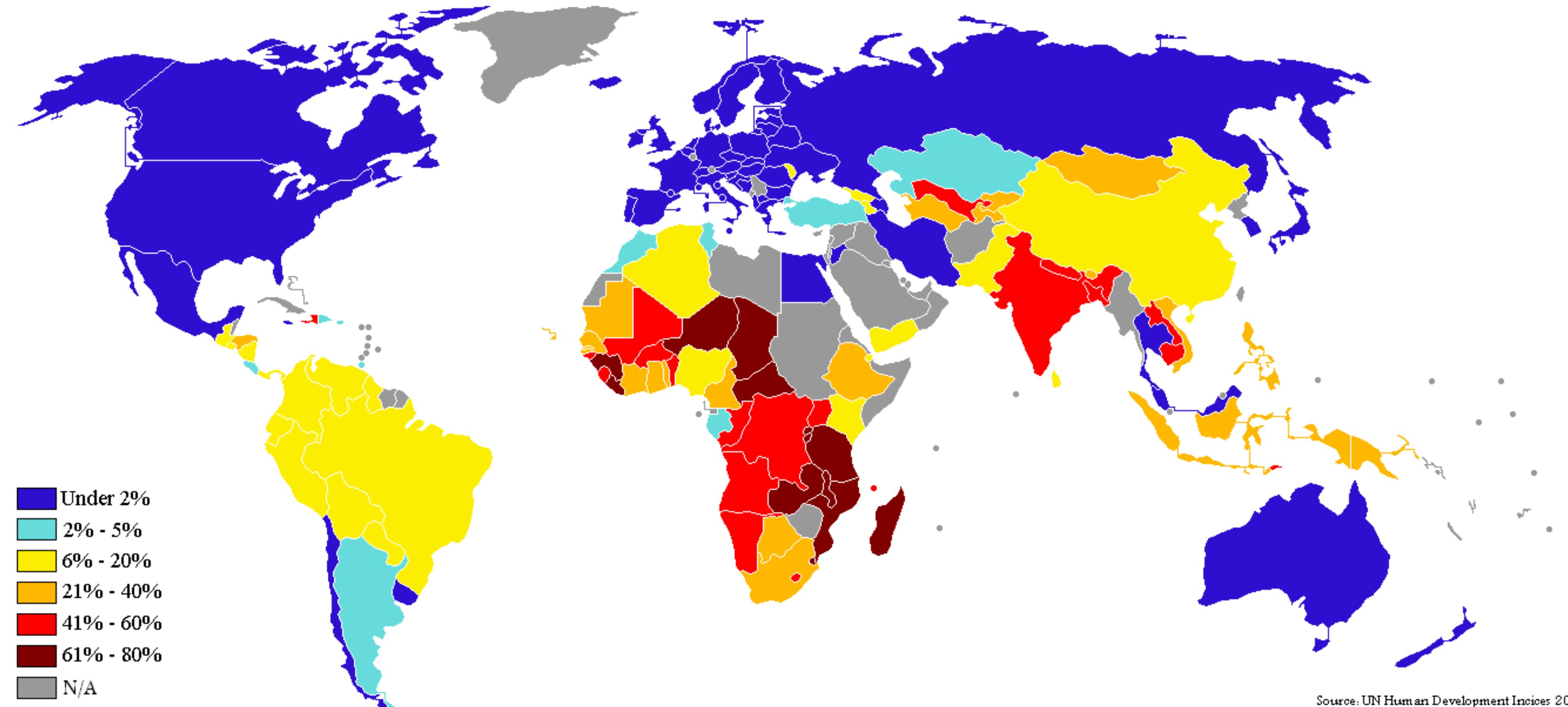


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The SDGs are about real-world problems, about people suffering, ...

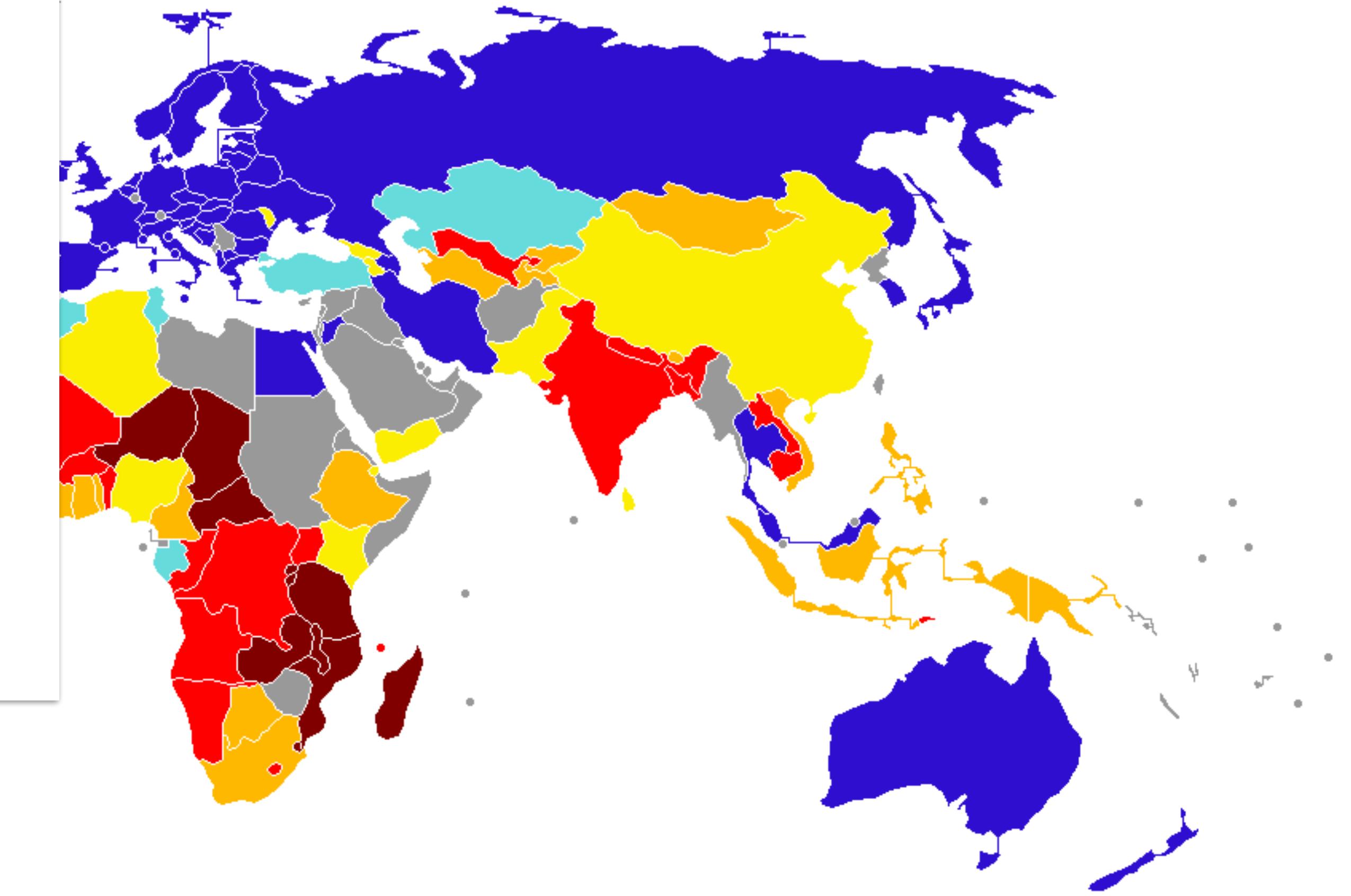
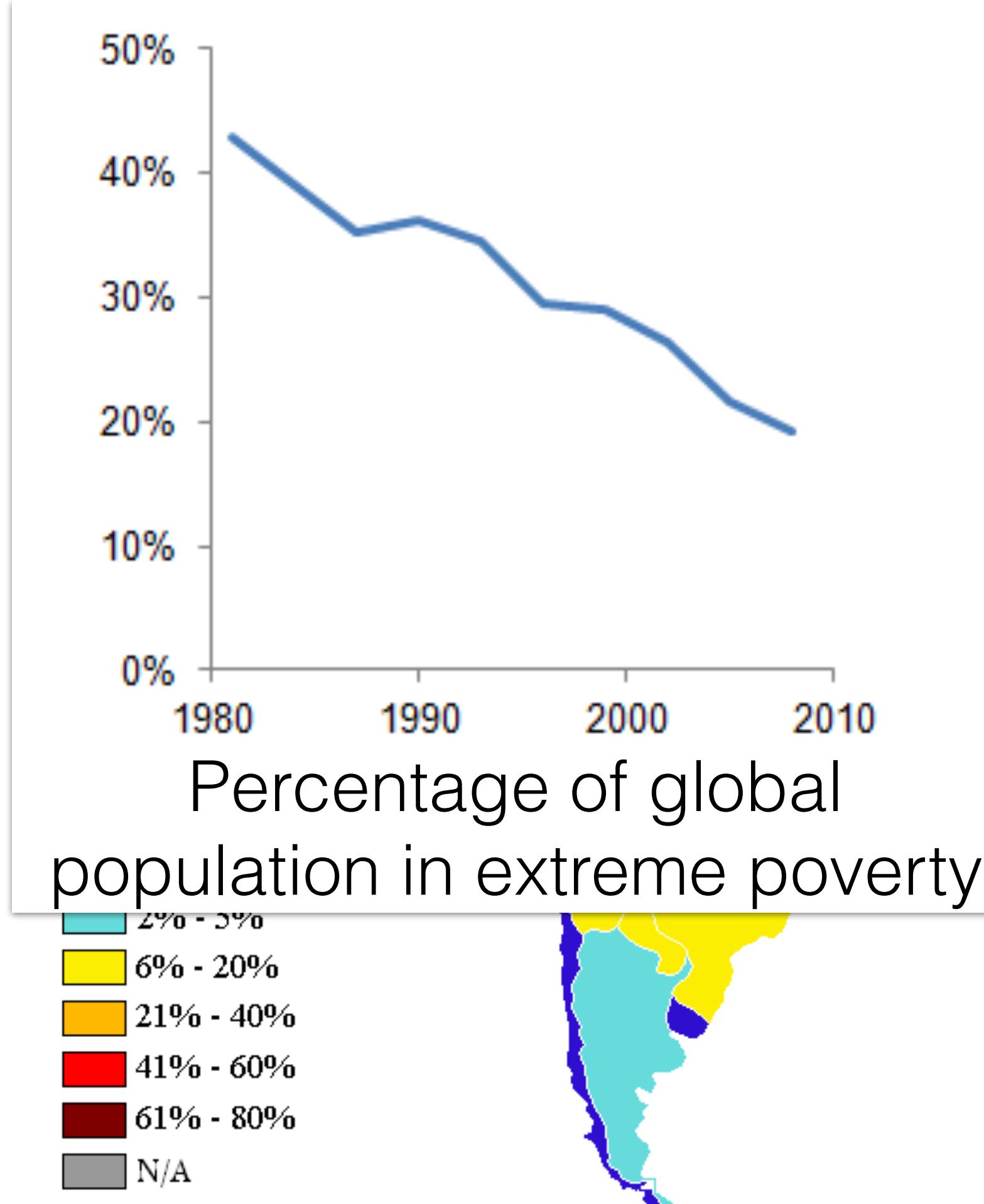
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Percentage of population living on less than \$1 a day (2008-2009), UN Human Development Index, 2008

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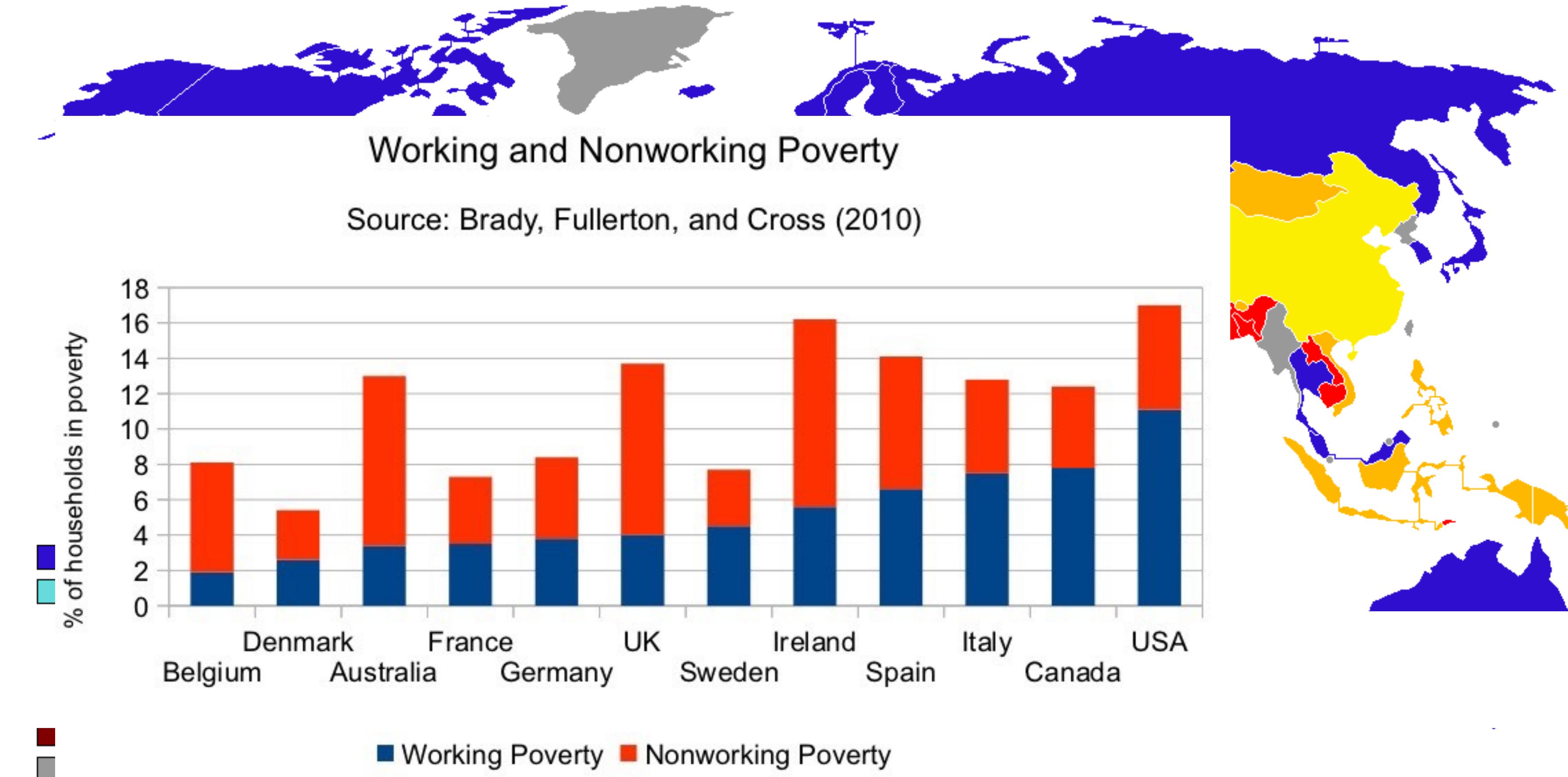
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Source: UN Human Development Indices 2008

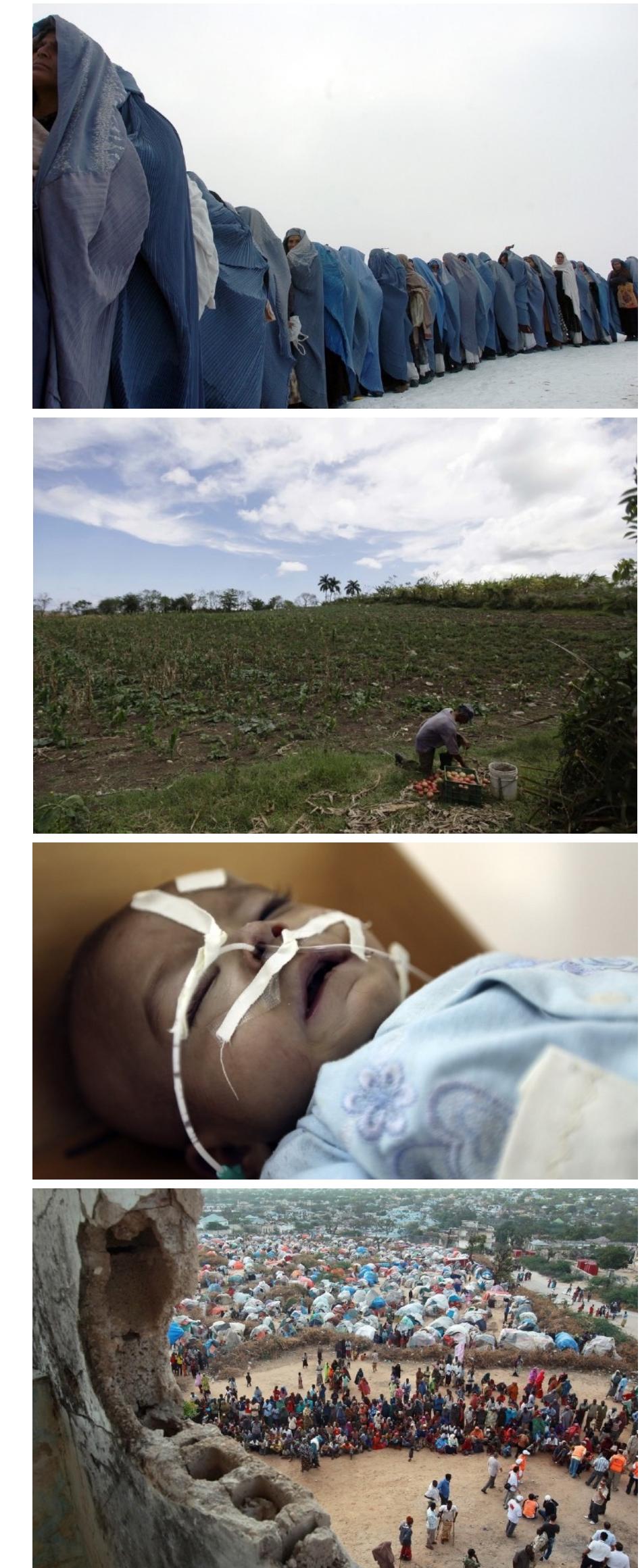
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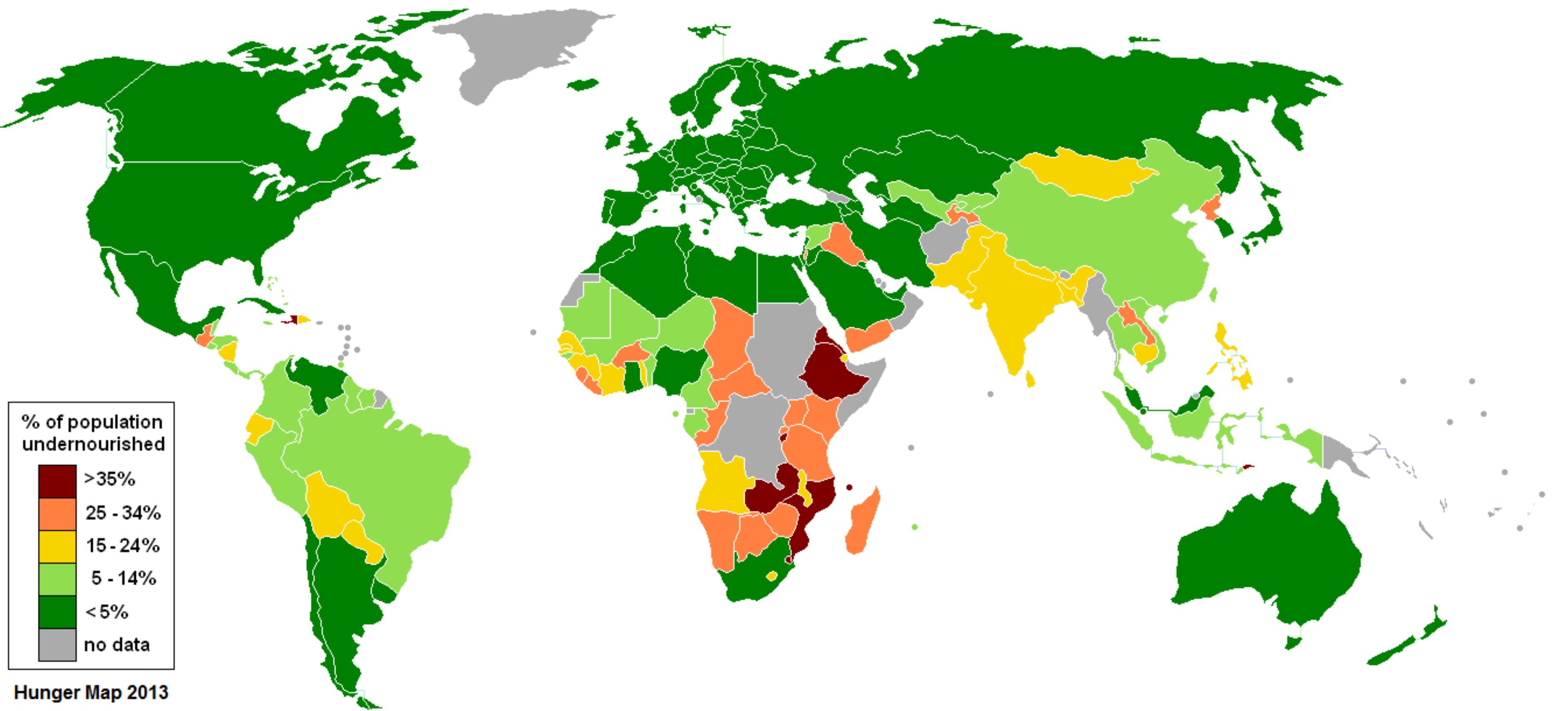
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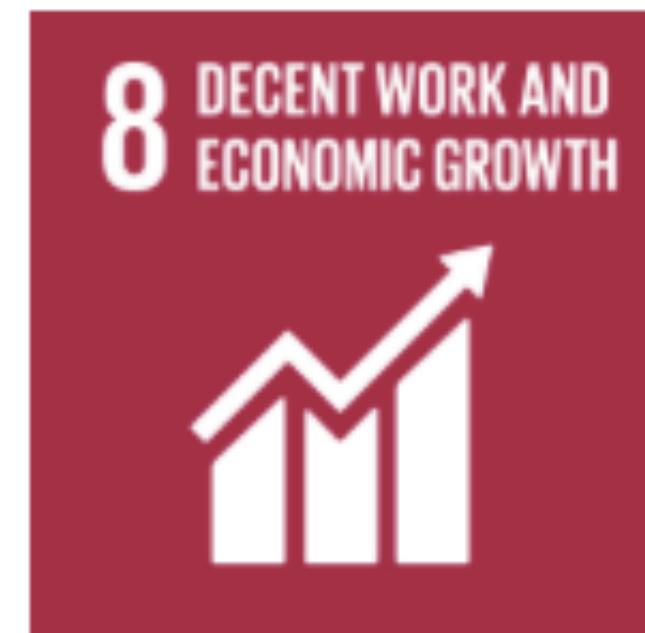
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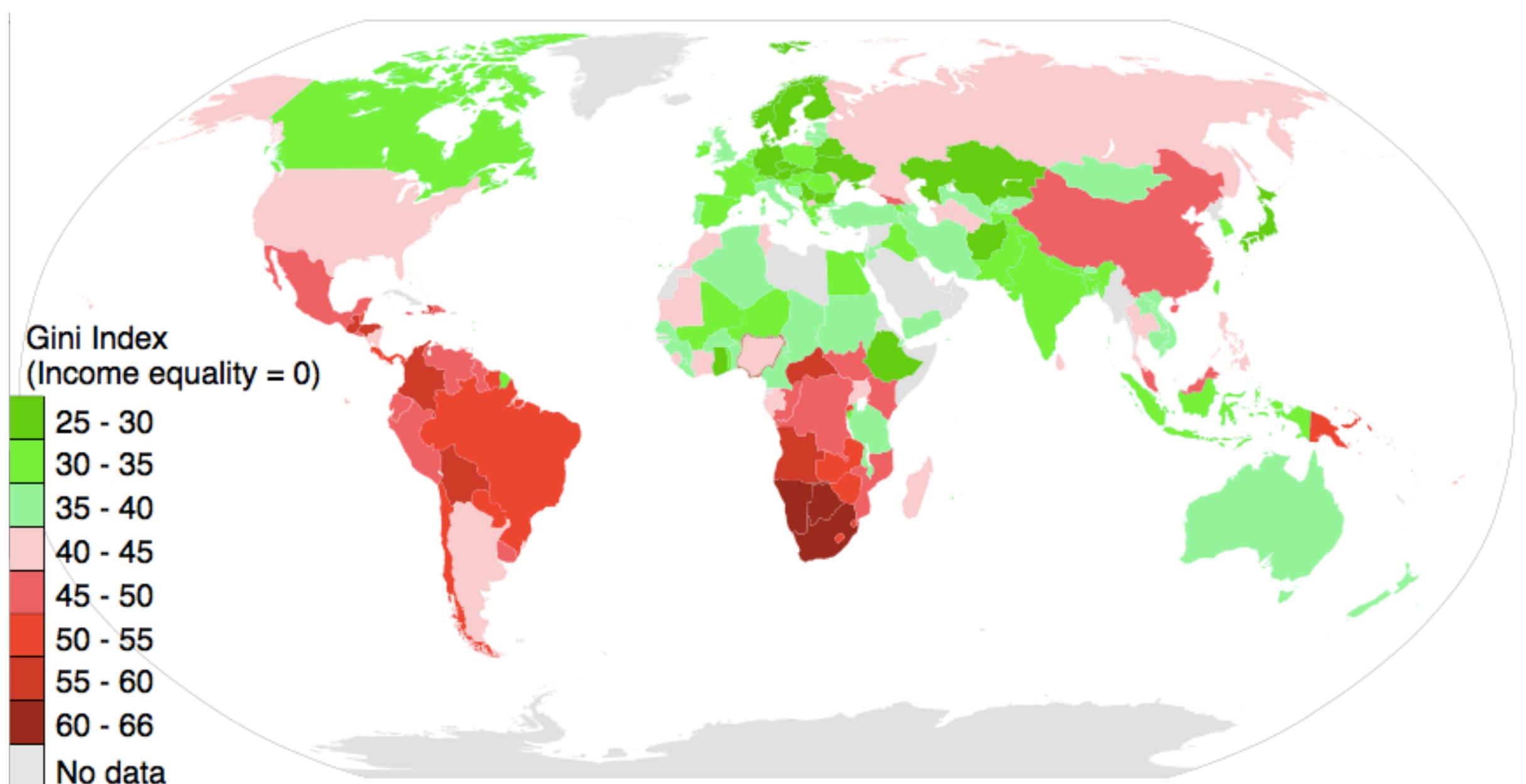
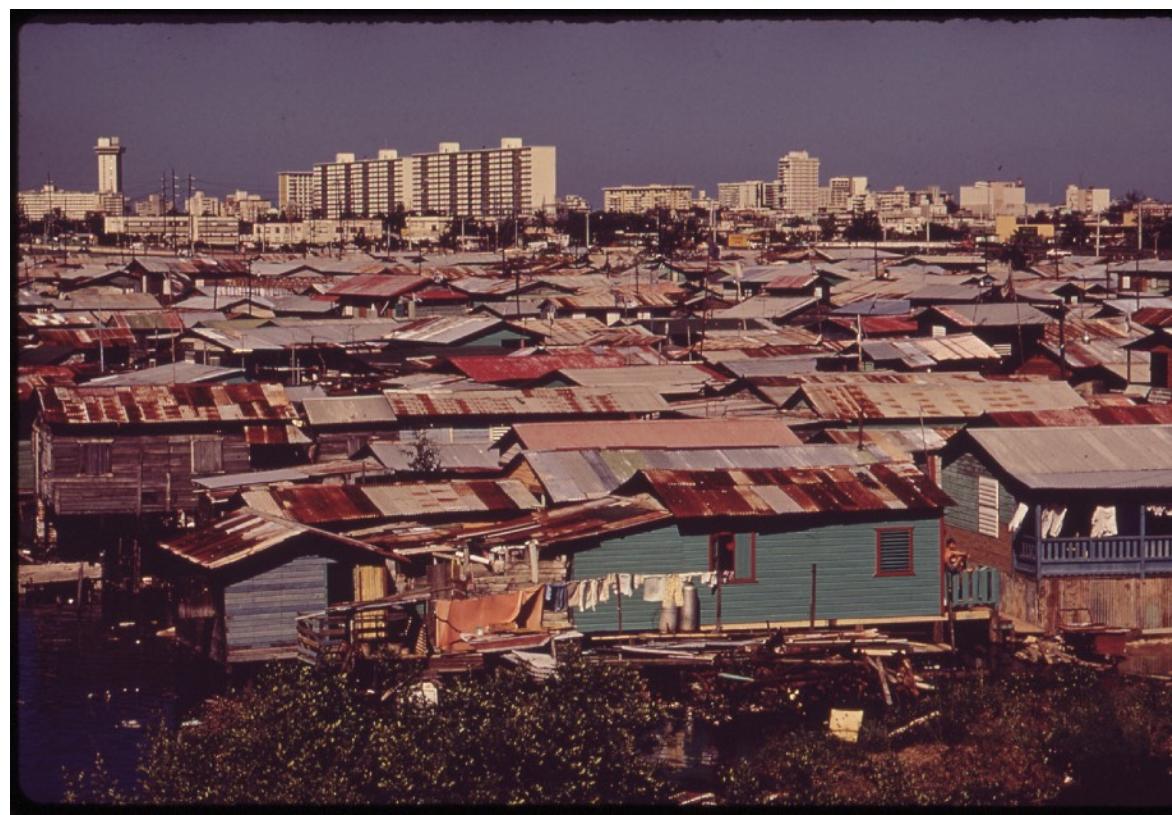
Percentage of population undernourished



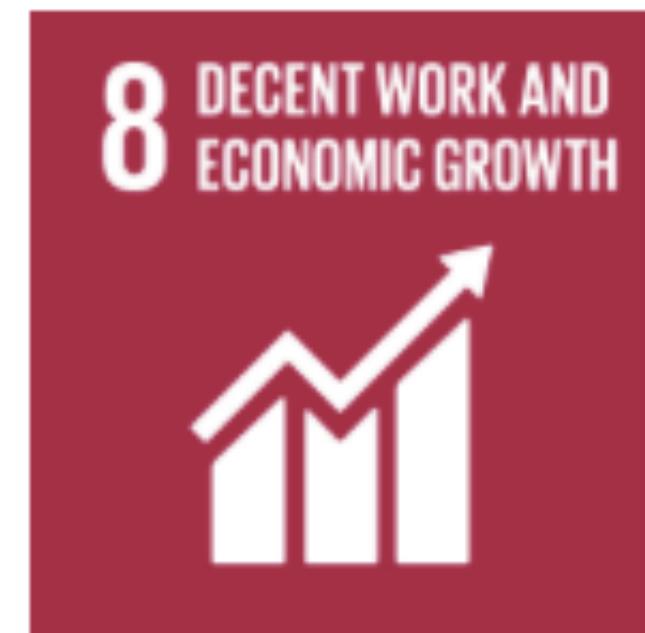
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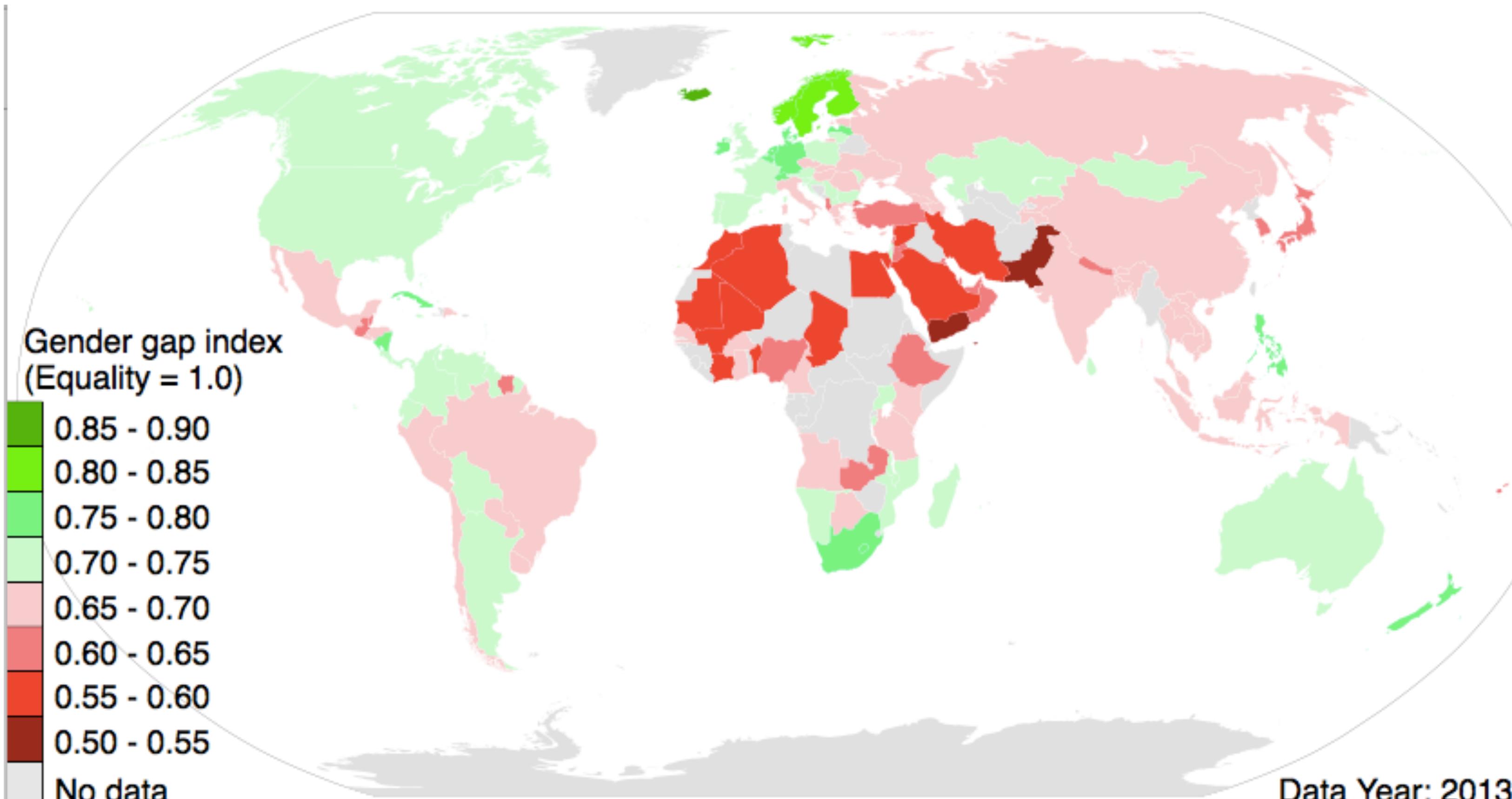
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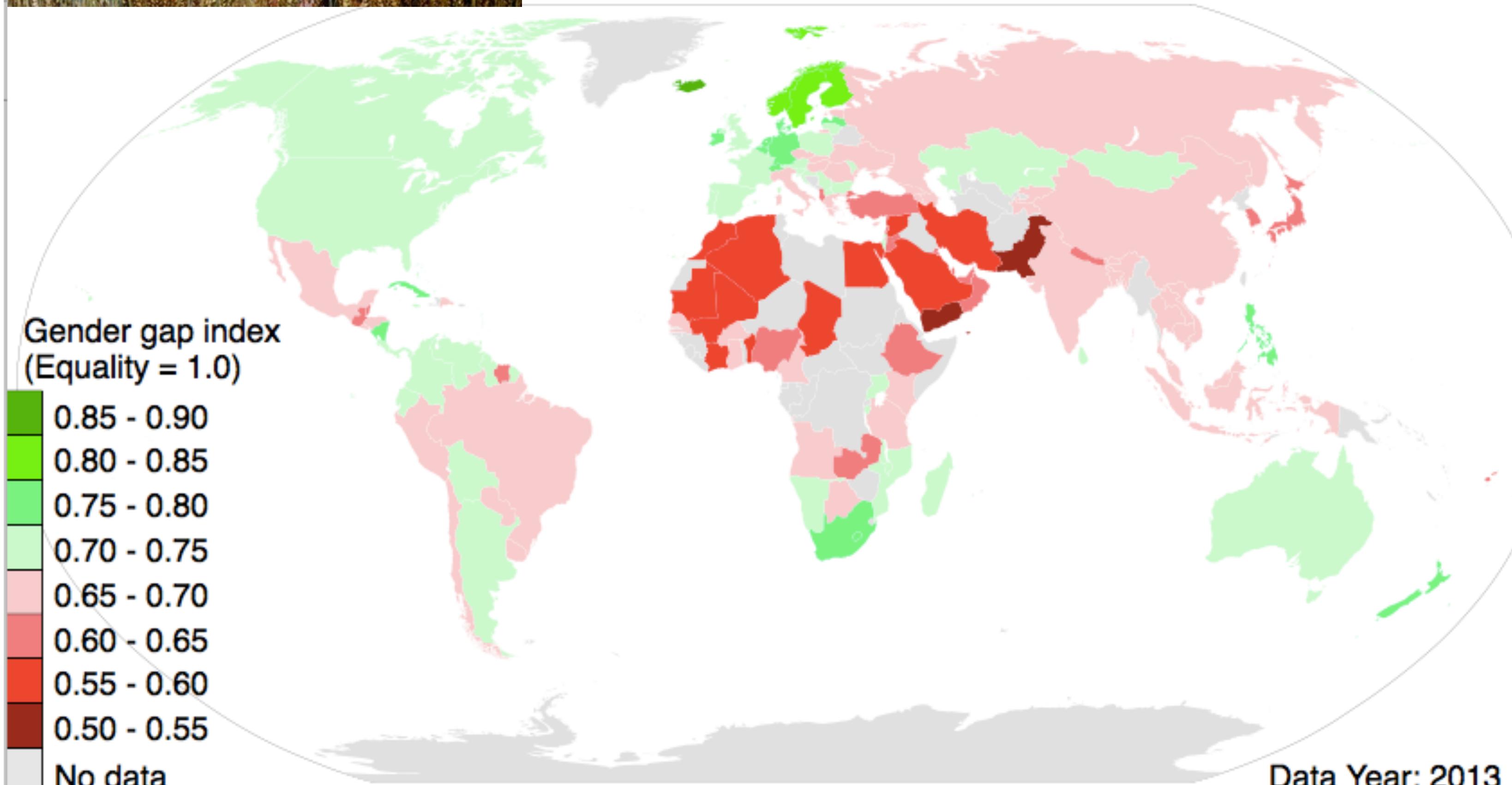


Women carry out 70% of the global work hours but they only earn 10% of the global salary

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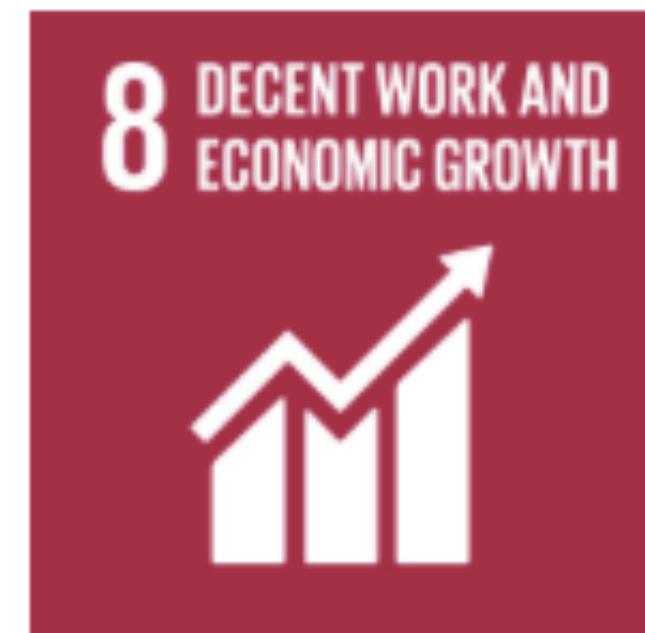


Women make major contributions to crop production.
 Women have the least access to the means for increasing yields and moving from subsistence crops to market-oriented production



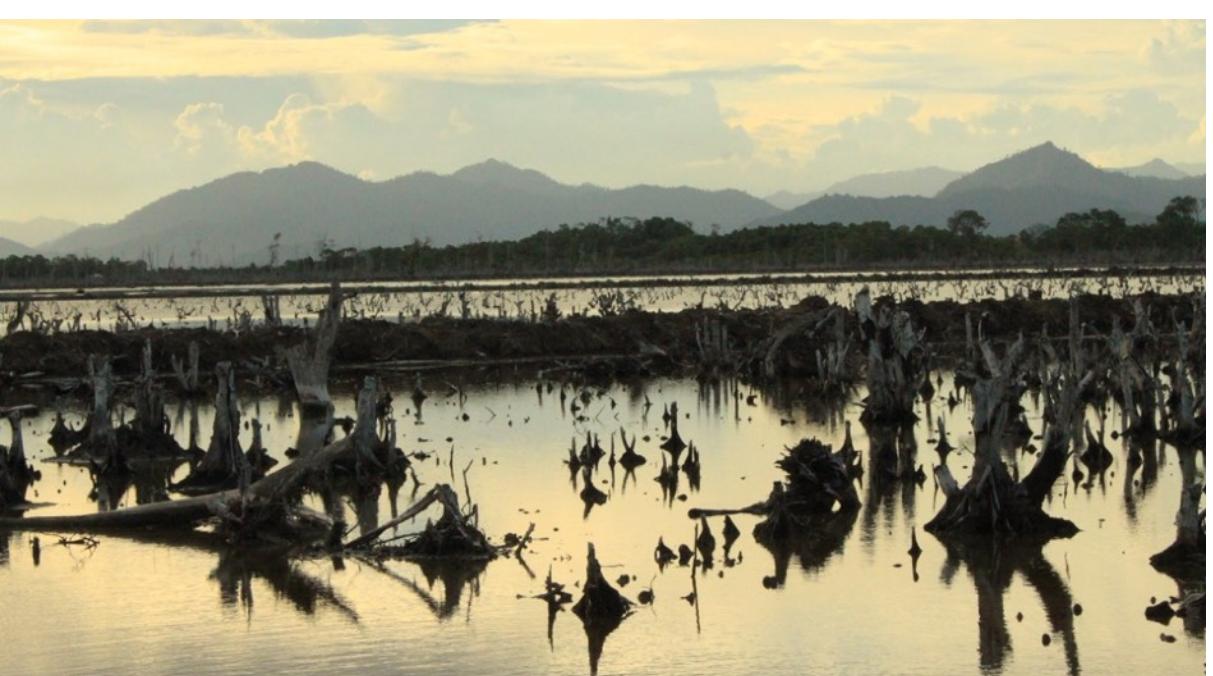
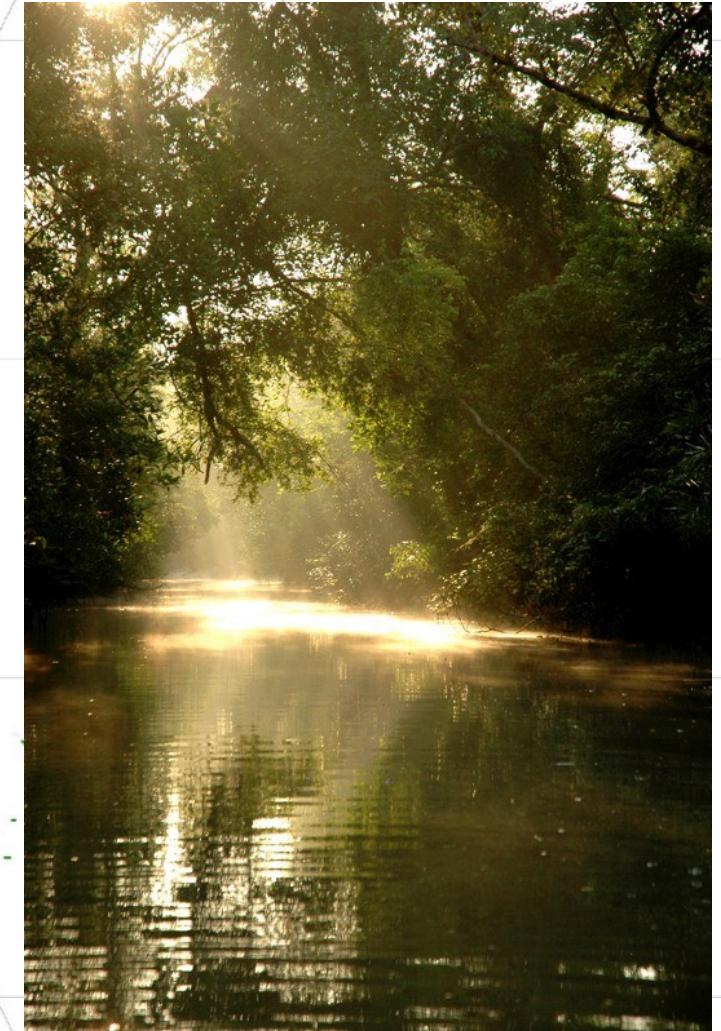
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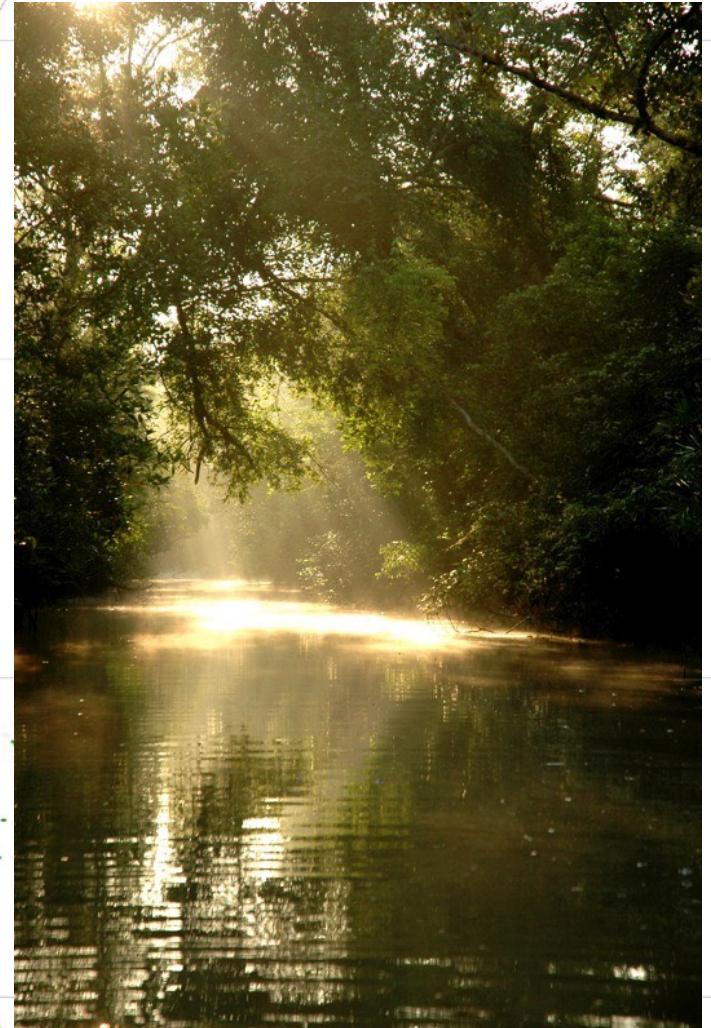
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Mangroves



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Mangroves



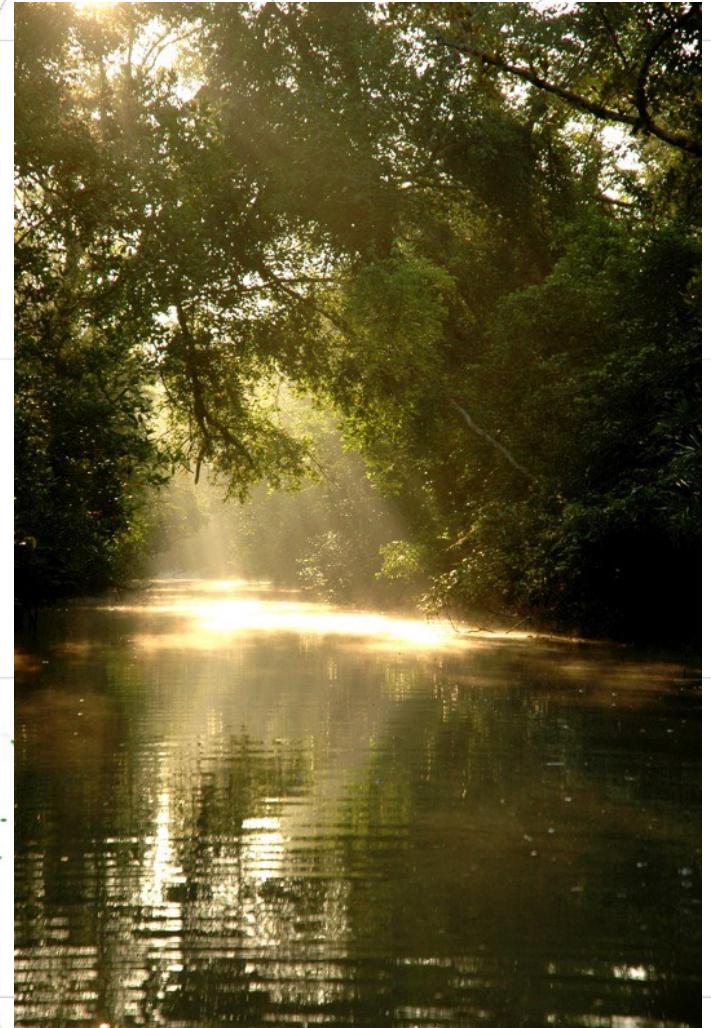
About half of mangrove loss has occurred in the last 50 years, mostly in the last two decades, due to:

- shrimp farming
- tourism
- urbanization
- agriculture expansion
- roadways
- marinas, and
- other intrusive developments.



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Mangroves

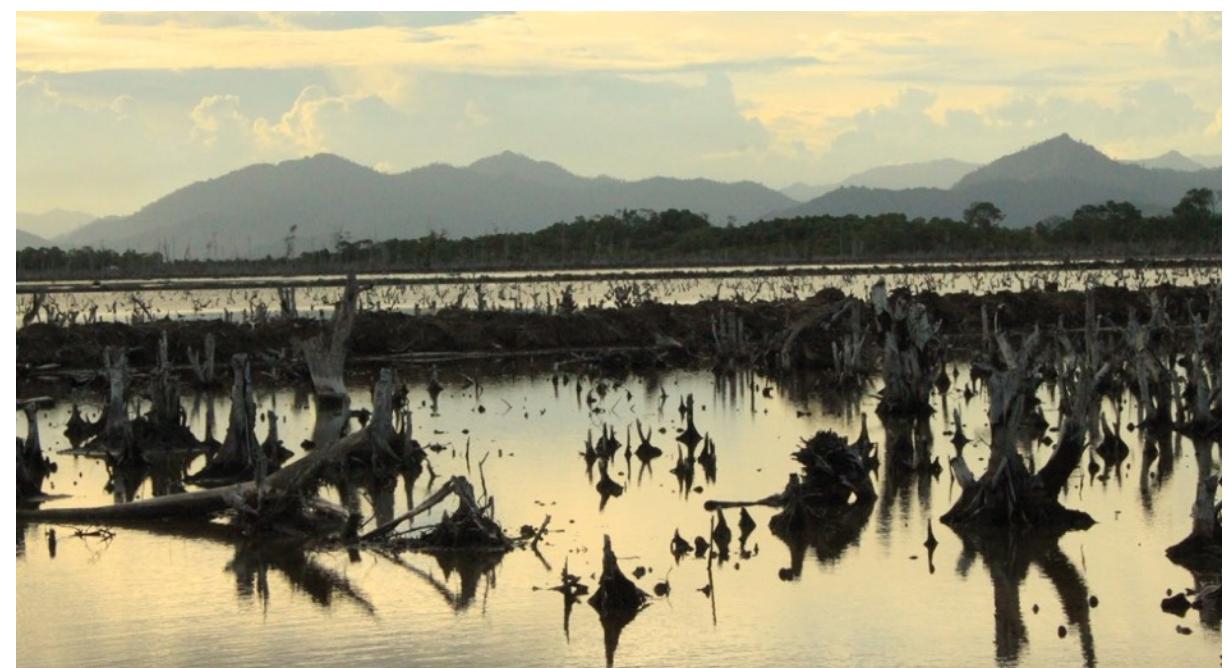


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- other intrusive developments.



A Tragedy for our Oceans
 Continuing heavy loss of mangrove forests represents a real tragedy for our oceans and the extensive life-support systems mangroves engender.



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Mangroves link many of the SDGs ...

