

Sacred Knowledge and Sustainability: An Anthropological Perspective on the Central Challenge of the 21st Century

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What kind of crisis is this?

Today's Sustainability Crisis is NOT an ecological problem calling for a technical solution:

It is a societal problem calling for a cultural solution

Cause: Modern ways of life and laissez-faire capitalism are -
Ecologically Unsustainable + Socially Unsustainable

Solution: All human ecologies are cultural artifacts,
we create them, we can change them.

Main Obstacle:

Contemporary worldview marked by spiritual disorientation
(key elements: scientific materialism, modernism, liberal individual
humanism, capitalism, reckless technological innovation, industrialisation)

Who Sustains Whom?

Fundamental Principles of Life:

- Life forms are interdependent & evolve together, sustained in a state of dynamic mutuality as parts of a single system.
- But for humans, systemic interdependence has...
 1. an immediate social dimension +
 2. a much wider, ecological dimension

False Principles of Modernity

- Christian Theology & Scientific Humanism falsely assumed humans compete against and must dominate other species
- Naïve Darwinism falsely assumes that economic interactions are based on ruthless competition between human individuals maximising their own profit
- This is destructive!! NOT how society or nature normally works

Is Destructive Competition Natural? NO

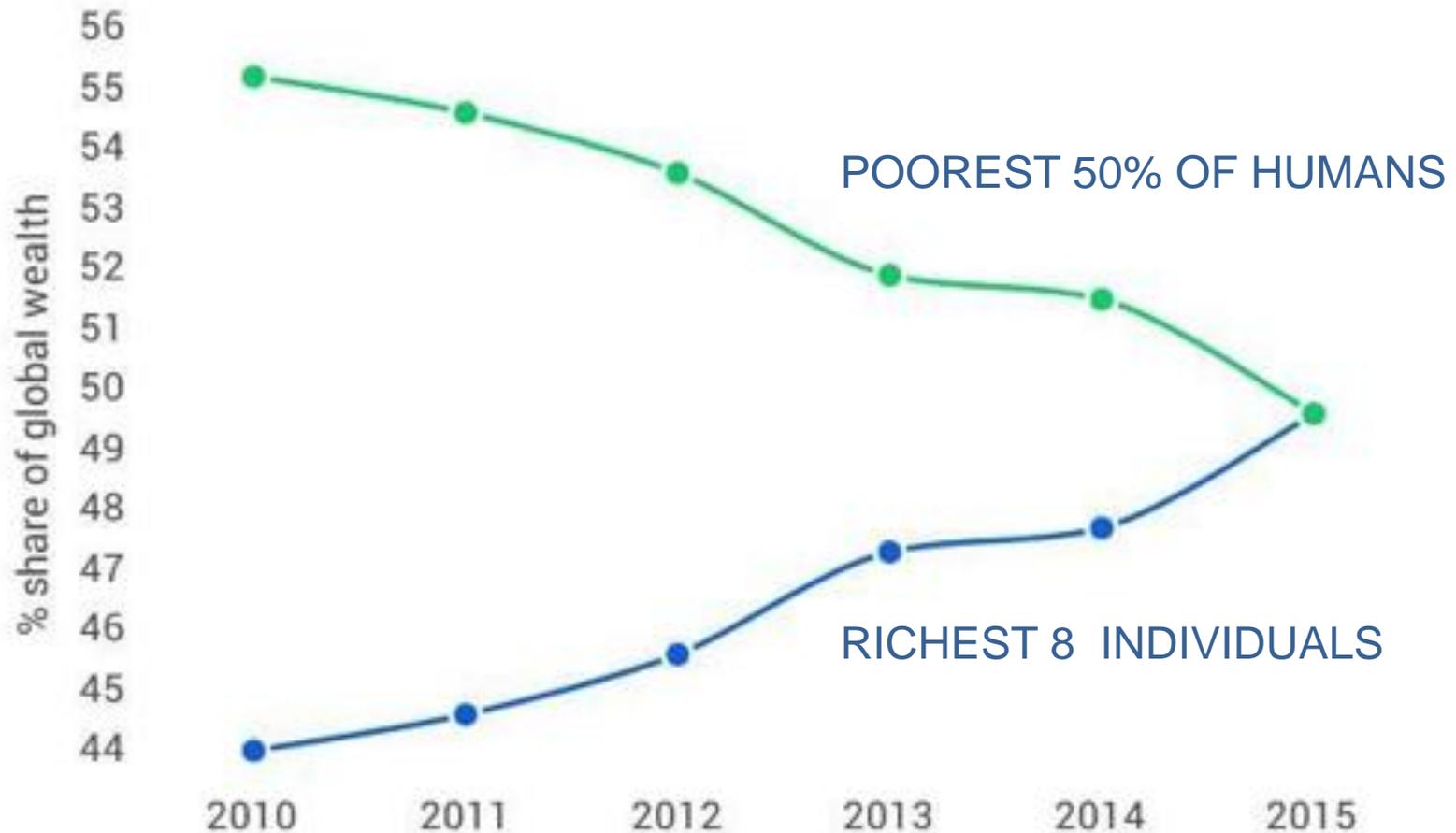
History shows: The success of humans as a species has been based on our unprecedented capacity for cooperation within evolving, rules-based socio-cultural systems that resemble natural ecosystems. Competition exists but generally competition is resolved by diversification.

In society: competition drives division of labour, trade based on competitive advantage

In nature: competition drives evolutionary diversification (Gause's law)

Why then is contemporary society so destructive?

The Global Capitalist Economy: SOCIALLY UNSUSTAINABLE

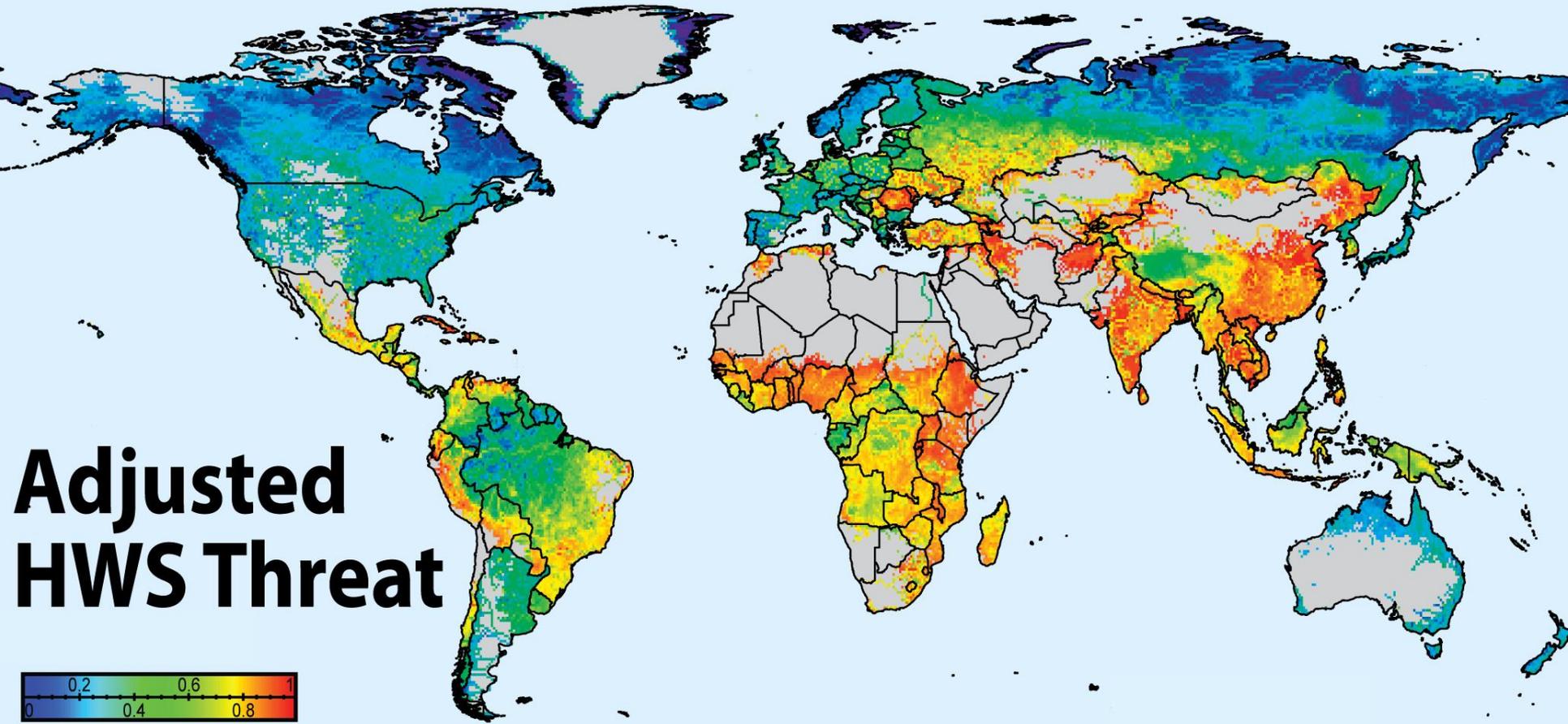


Today “eight men possess the same wealth as half the world’s people...” (Oxfam 2016). Calculations based on *Forbes Billionaires List* and *Credit Suisse Global Wealth Databook*

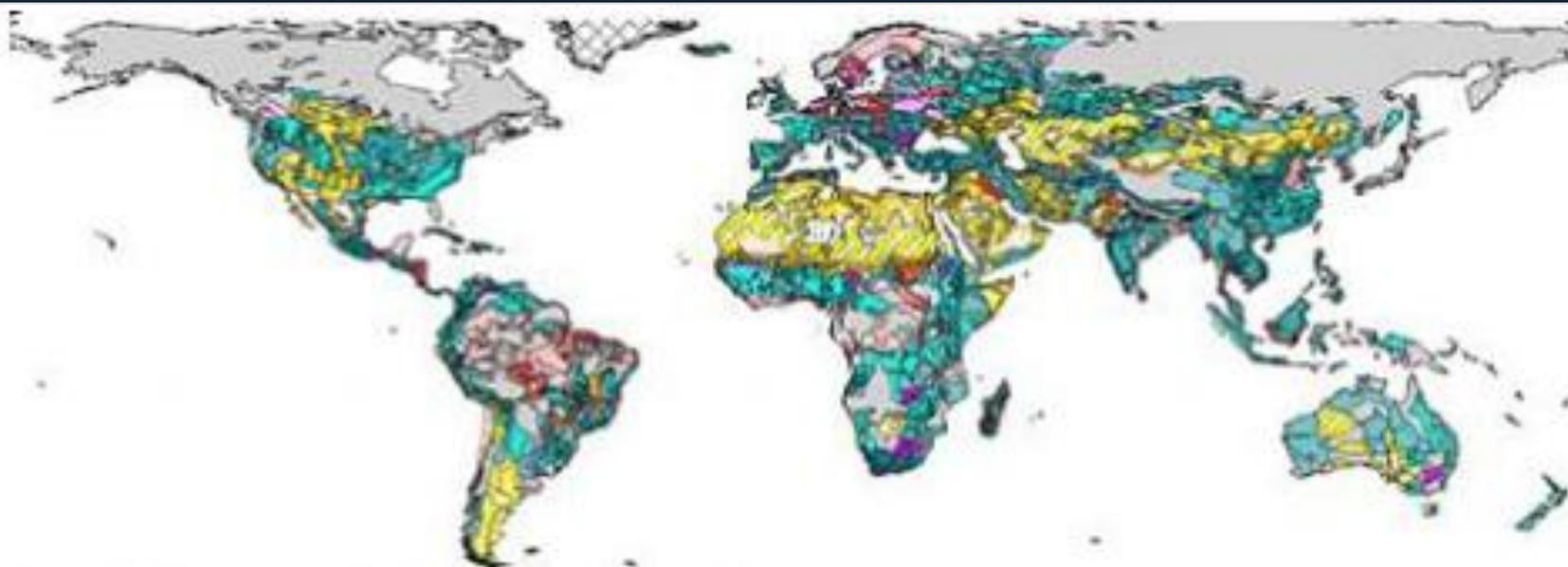
The World Inequality Crisis

	Rank	Name	Net Worth	Age	Source	Country of Citizenship
	#1	Bill Gates	\$75 B	61	Microsoft	United States
	#2	Amancio Ortega	\$67 B	80	Zara	Spain
	#3	Warren Buffett	\$60.8 B	86	Berkshire Hathaway	United States
	#4	Carlos Slim Helu	\$50 B	76	telecom	Mexico
	#5	Jeff Bezos	\$45.2 B	53	Amazon.com	United States
	#6	Mark Zuckerberg	\$44.6 B	32	Facebook	United States
	#7	Larry Ellison	\$43.6 B	72	Oracle	United States
	#8	Michael Bloomberg	\$40 B	74	Bloomberg LP	United States
	#9	Charles Koch	\$39.6 B	81	diversified	United States
	#9	David Koch	\$39.6 B	76	diversified	United States

World Water Security Crisis



Degradation and loss of topsoil around the world



Degradation severity (extent + degree)

Chemical deterioration severity



Physical deterioration severity



Others



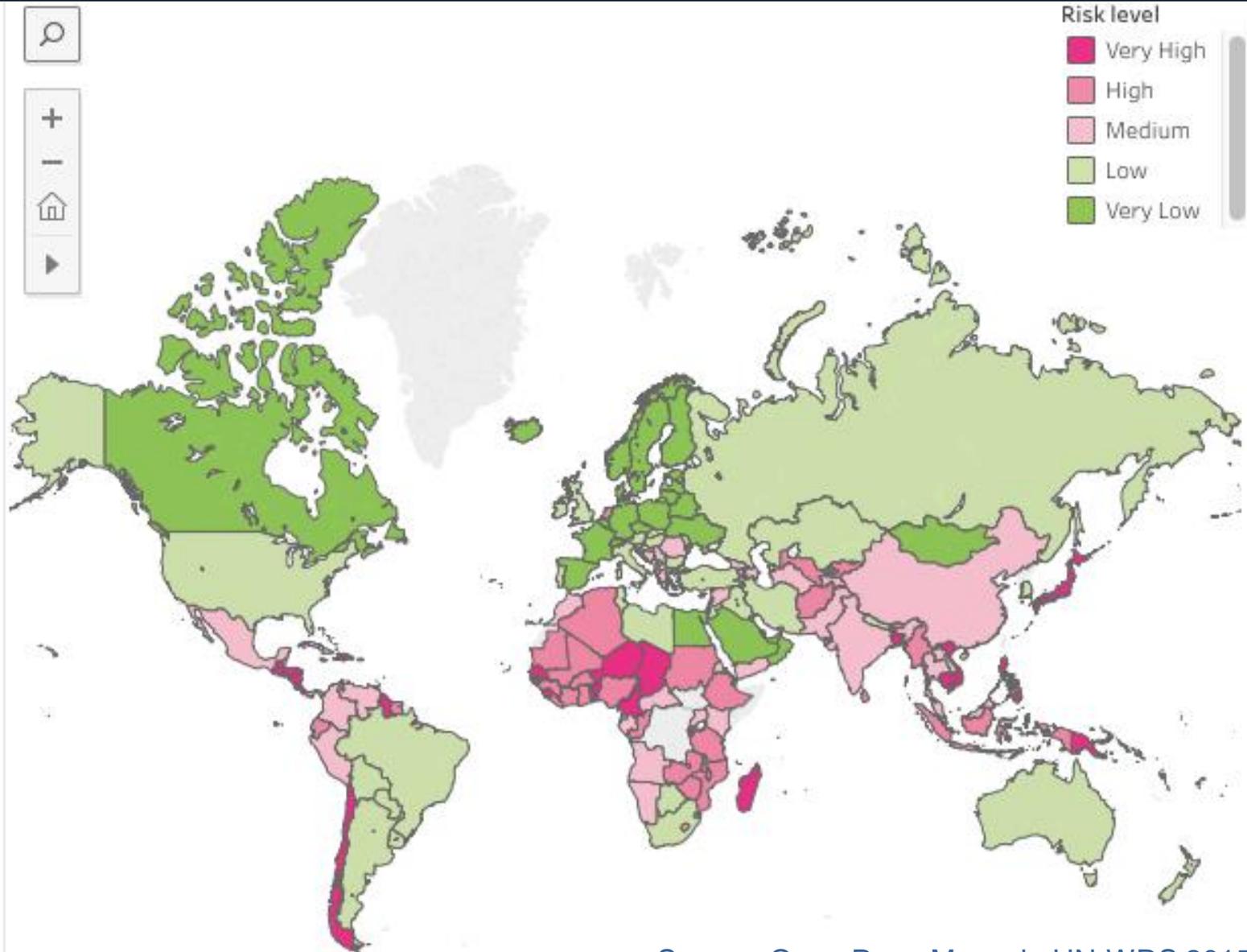
Wind erosion severity



Water erosion severity



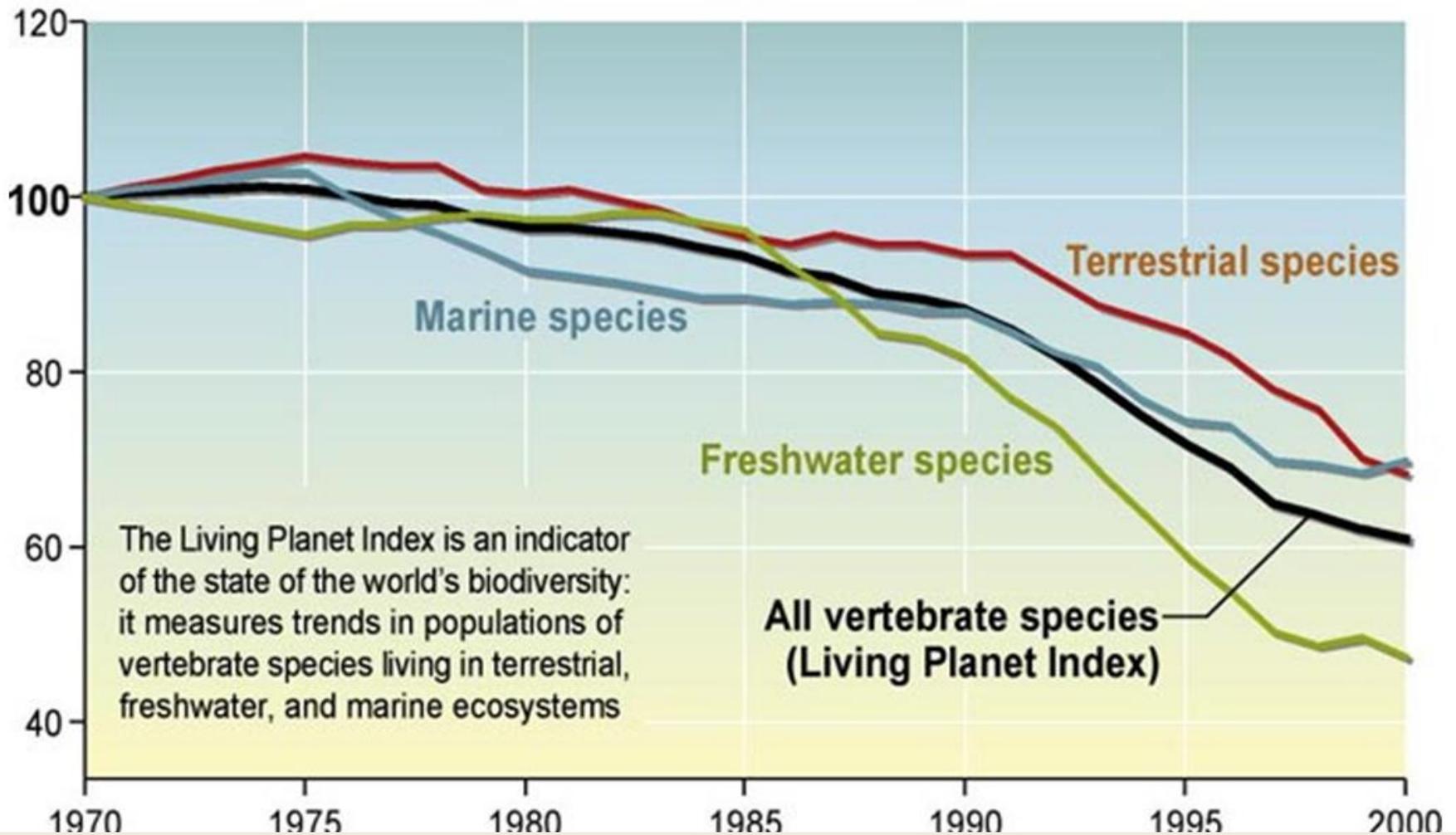
World Food Risk Levels 2015



Source: Open Page Maps, in UN-WRS 2015

BIODIVERSITY LOSS

Population Index = 100 in 1970



Major Dimensions of Ecological Crisis

Human Use Exceeds the Renewal Rate of Renewable Resources

deforestation, habitat and biodiversity loss, water and food availability, and countless other, less recognized 'ecosystem service' crises (such as top soil loss)

Biosphere Destruction

Peaking of Non-renewable Resource Extraction (peak oil, lithium...)

global warming, ocean acidification, sea level rise (carbon) and effects of other pollution (nitrate, plastic, radioactivity, lead, Nano materials etc) or mechanical destruction (cities, roads, industrial farms)

Growing World Population

Growing Per Capita Consumption (Asia; but aged US, EU is peaking)

The Global Capitalist Economy: ECOLOGICALLY UNSUSTAINABLE

The "Anthropocene", named by climatologist and chemist Paul Crutzen, is the "geological age that man created."

- Can be traced to the Neolithic Revolution ~9000 years ago in Mesopotamia, which brought sedentary farming, and which in turn was made possible by climatic change during the Holocene interglacial period.
- The real beginning was the Industrial Revolution of the 18th and 19th century, and most dramatically, the Post-WW2 rise of a global mass consumer society.

Is there a precedent in NATURE of one antisocial species destroying all other life?

**Meet Cyano bacteria –
Architects of Earths' First Mass Extinction (GOE)**



Meet Homo sapiens – Architects of the next mass extinction?



<< One Million Years ago

progress since then... >>

Source: Mankind The Story of
All of Us: Fire | History – YouTube
Right: sciencetopia.net



Transformation to Sustainability

Sure. SO WHY IS IT NOT HAPPENING? >Greta Thunberg

The usual suspect is the complexity of “system change”

1. Material Complexity

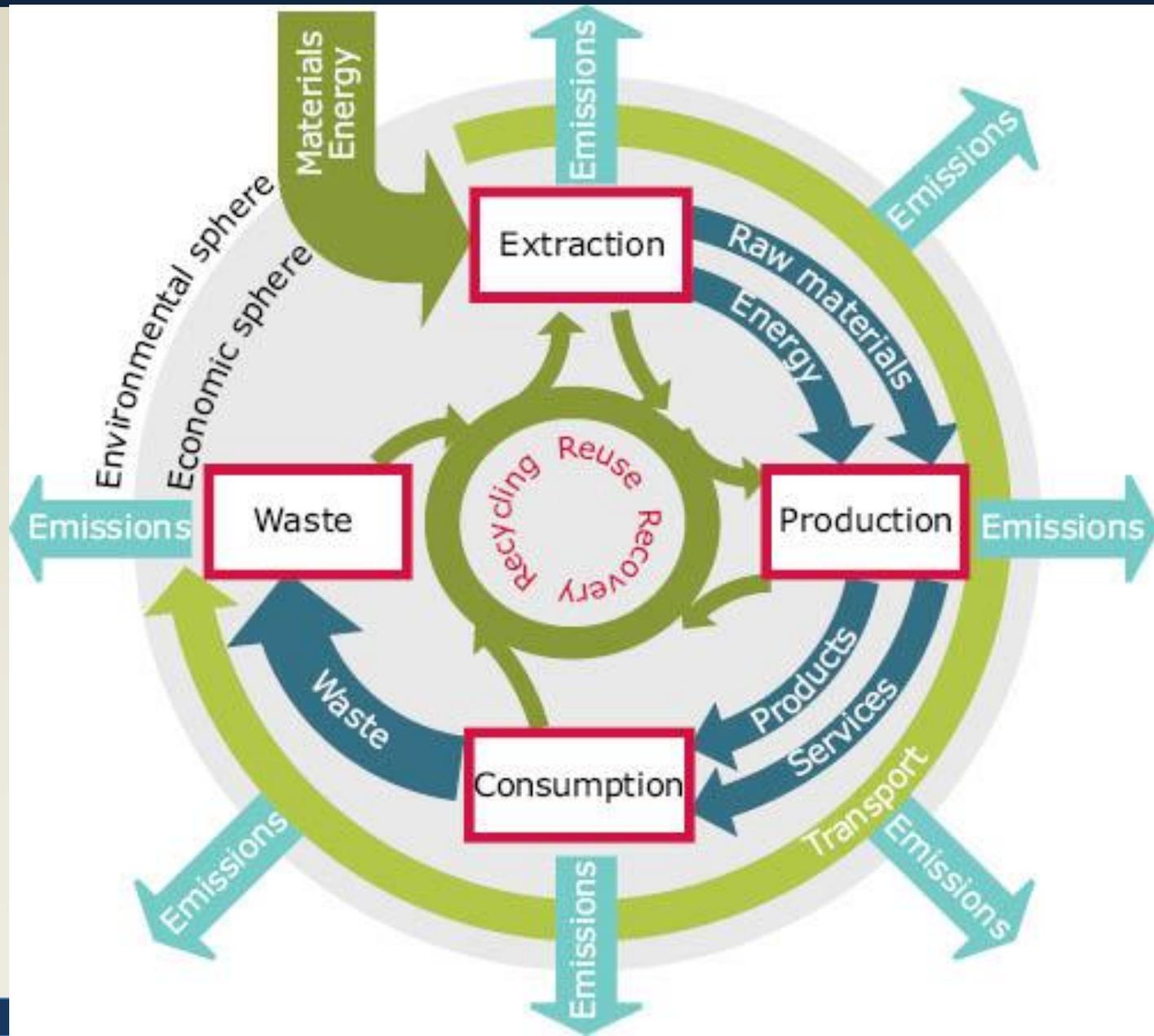
- interconnected nature of the material challenges:
cf. ICSU draft SDG interactions
- local specificity of responses to diverse material challenges

2. Social Complexity

- Perceptions of shared and diverging interests based on diverse identities and associated spheres of cooperation and conflict
(complex social, cultural, political and historical realities)

Sustainable Consumption and Production

The Usual Idea
for a Solution



SCP:
The Product
Lifecycle

Source:
European
Environment
Agency

Sustainable Economics: The 6th Wave of Innovation?

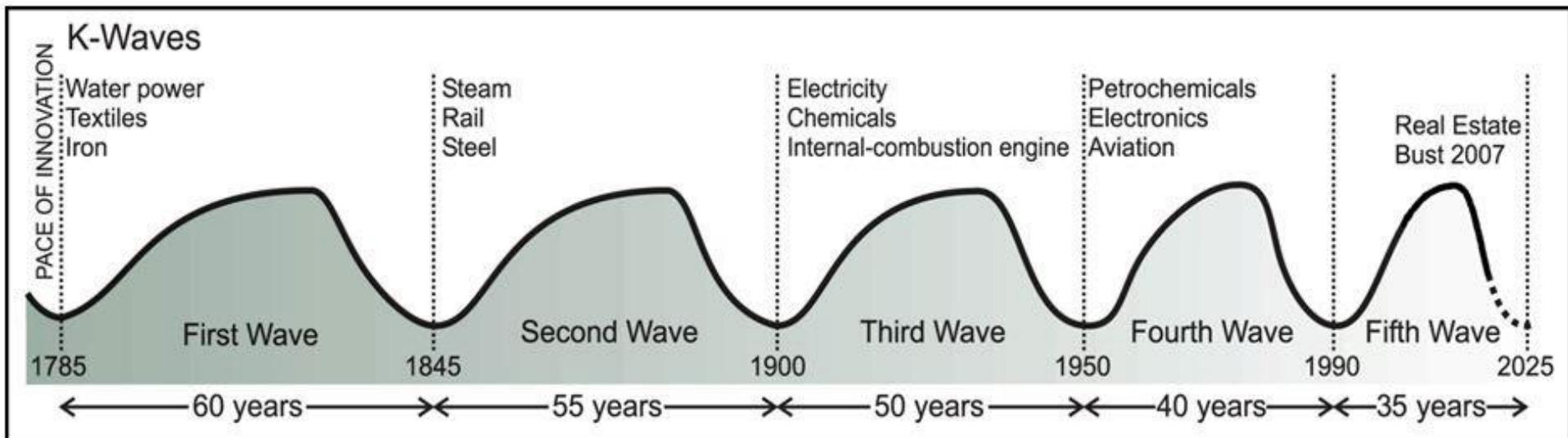
Nikolai Kondratiev's seminal ideas on economic epochs (*The Major Economic Cycles*, 1925) were developed and popularised by Joseph Schumpeter (*Theory of Economic Development*, 1970).

The 5 'Kondratiev waves' are successive economic and societal revolutions triggered by major technological breakthroughs.

A restricted perspective on the broader, cyclical societal changes which historians refer to instead as episteme- (M. Foucault) or paradigm shifts (T. Kuhn).

Sustainable Economics: The 6th Wave?

The five K-Waves of innovation and economic change



Source: moneyandmarkets.com

Technological or Alternative Futures?

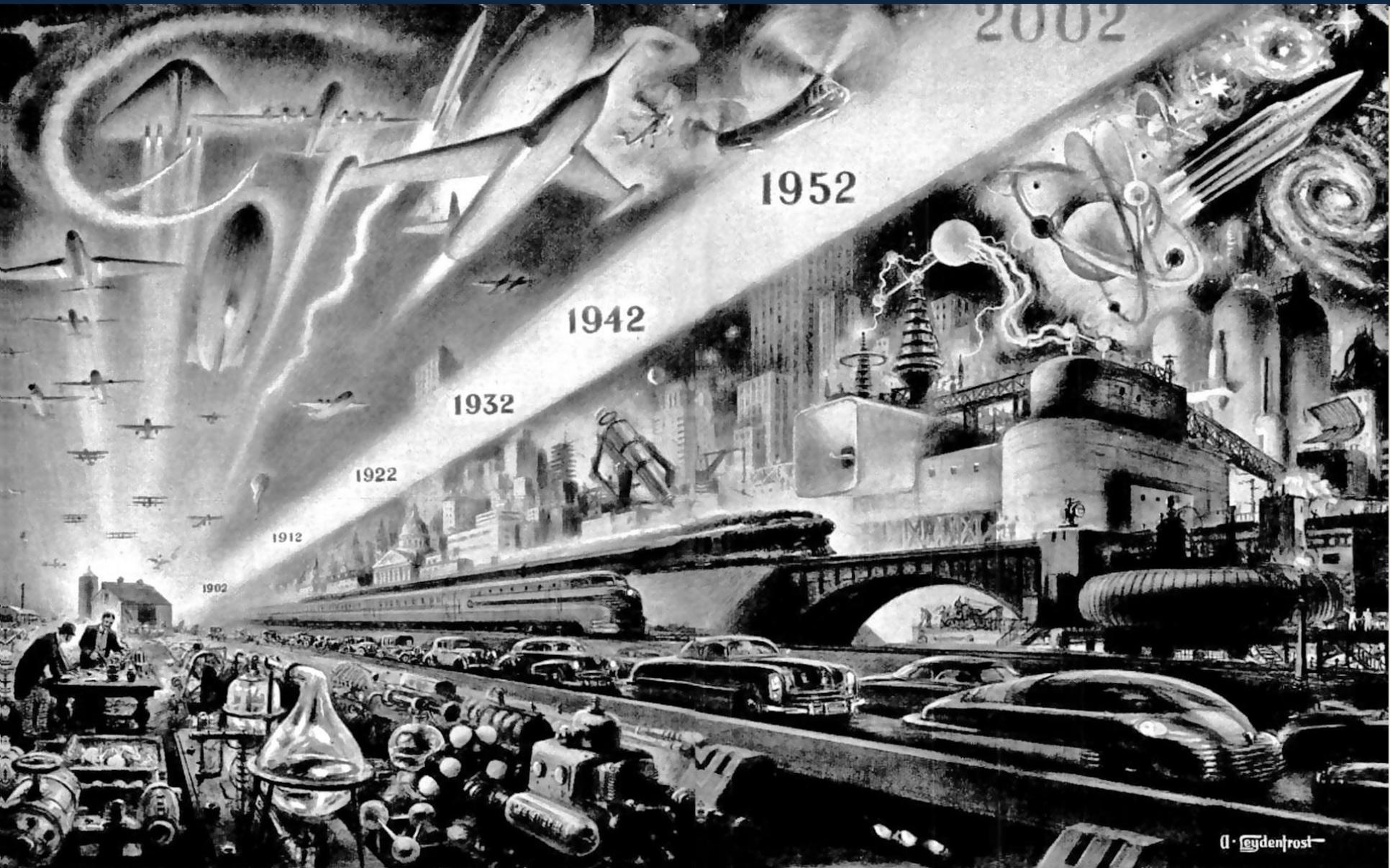
Technocrats hope for a great leap forward on the assumption that investors, experiencing diminishing returns at this economic fin de siècle, will be driven to innovate by sheer greed.

When it comes to sustainability, however, technology in the service of greed has not been the solution but the very root of the problem.

- A. Einstein: You can't solve a problem with the same mode of thinking that created it, therefore...

Beware of the false promise of technological Wonderlands!

Technological Wonderlands



Technological Wonderlands or Alternative Futures?

In Schumpeter and Co.'s history of human civilisation the
ALREADY SUSTAINABLE ECONOMIES
of local and indigenous peoples that
prevailed universally for over 99% of human history
are not even mentioned

The skills for sustainable living that all of humanity
once already had developed are now fast disappearing

What is left of them is found largely in pockets of
“underdevelopment” threatened by technocratic interventions
from the global aid and development industry.

Technological Wonderlands or Alternative Futures?

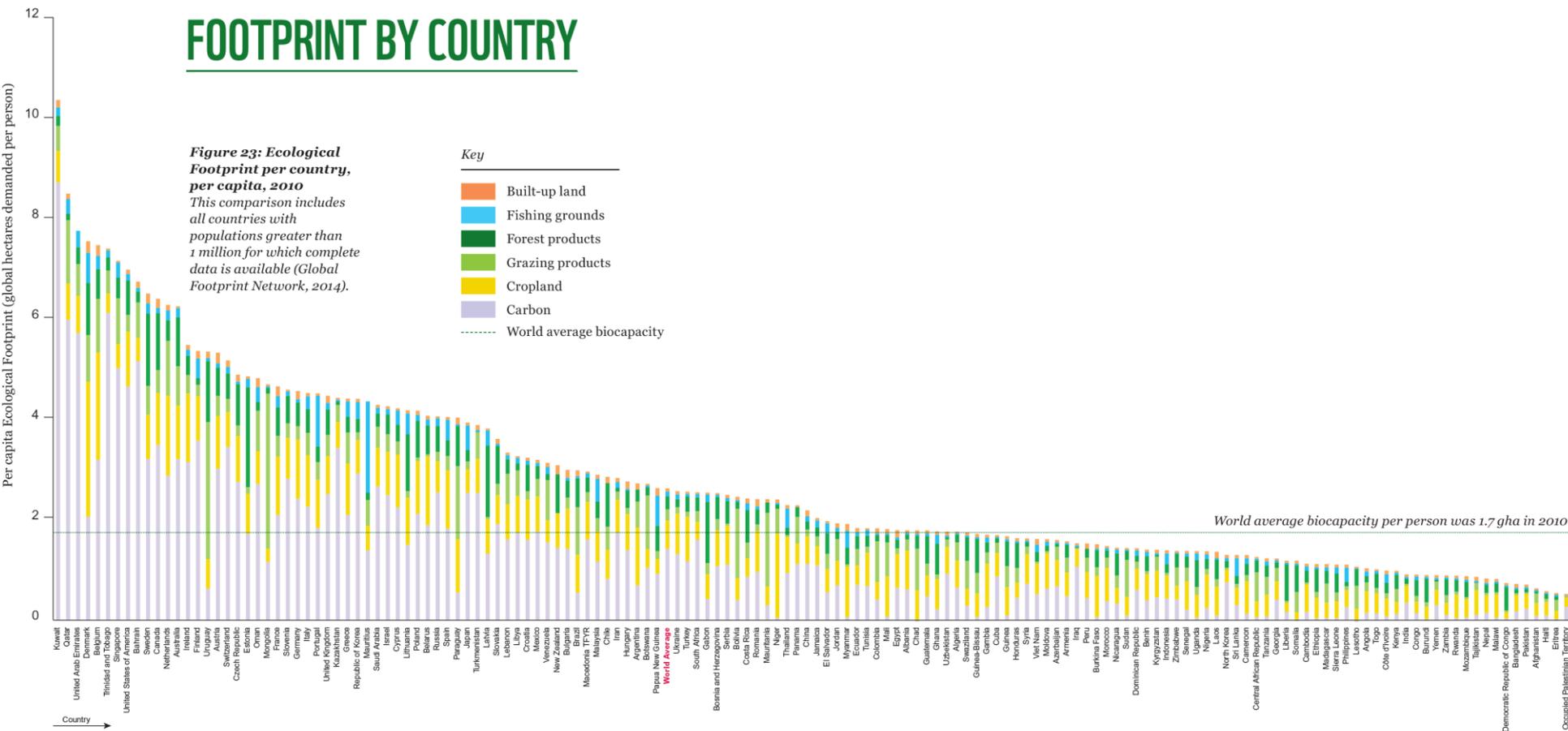
Sustainability Gained or Lost? The Human Development Index

<http://www.footprintnetwork.org/our-work/sustainable-development/>

FOOTPRINT BY COUNTRY

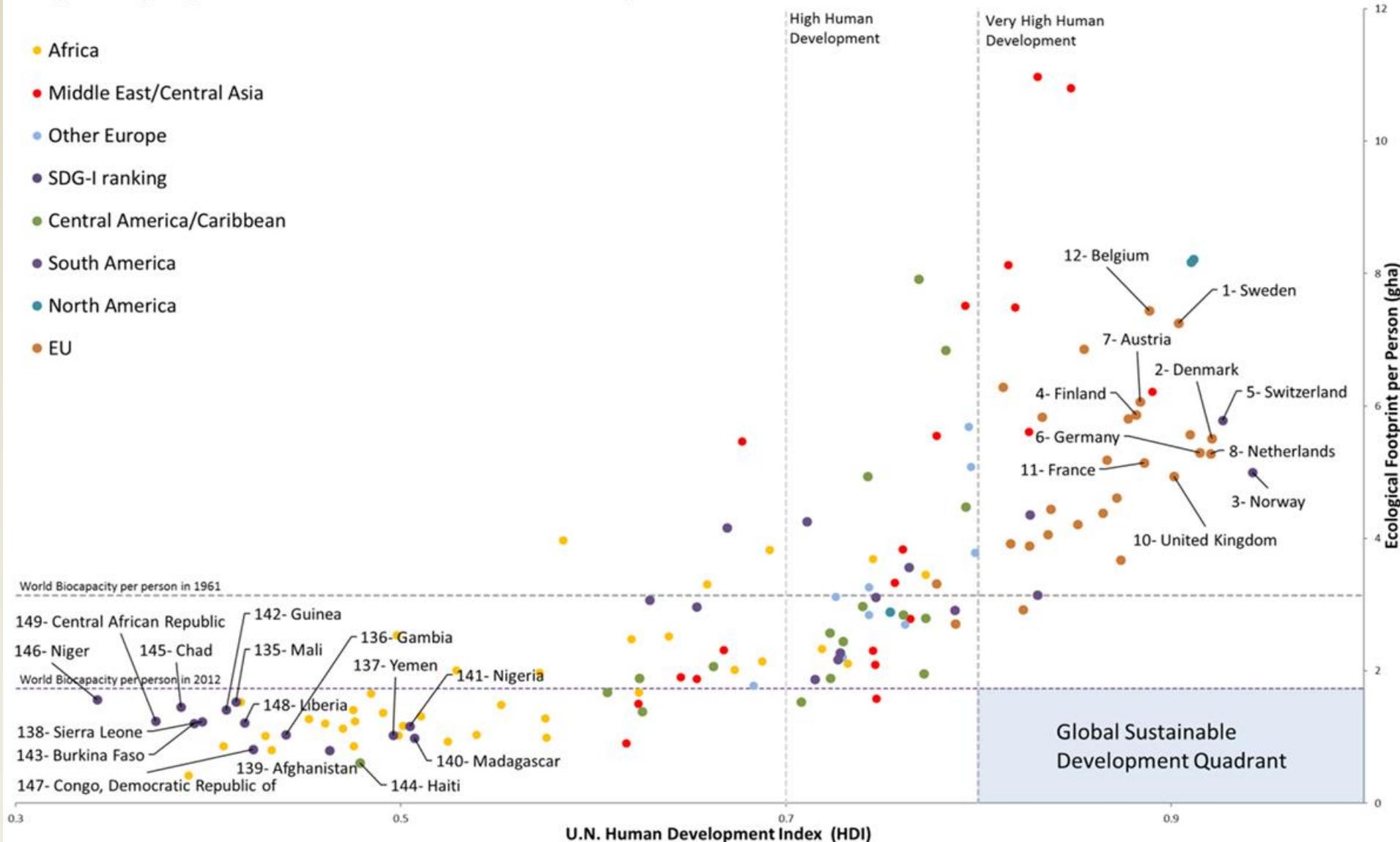
Figure 23: Ecological Footprint per country, per capita, 2010
 This comparison includes all countries with populations greater than 1 million for which complete data is available (Global Footprint Network, 2014).

- Key**
- Built-up land
 - Fishing grounds
 - Forest products
 - Grazing products
 - Cropland
 - Carbon
 - World average biocapacity



Technological Wonderlands or Alternative Futures? Go Costa Rica!

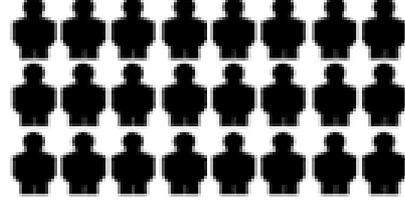
Ecological Footprint per Person and HDI of Nations with SDG-I Ranking



Small is Beautiful:

Fisheries

Similar pattern for small vs. large scale farming (2/3 of food on 1/3 of land)

FISHERY	LARGE SCALE 	SMALL SCALE 
BENEFITS		
Subsidies	<p>\$\$\$\$\$</p> <p>25-27 billion</p>	<p>\$</p> <p>5-7 billion</p>
Number of fishers employed	<p></p> <p>about 1/2 million</p>	<p></p> <p>over 12 million</p>
Annual catch for human consumption	<p></p> <p>about 30 million t</p>	<p></p> <p>same: about 30 million t</p>
Annual catch reduced to fishmeal and oils	<p> </p> <p>35 million t</p>	<p></p> <p>Almost none</p>
Annual fuel oil consumption	<p></p> <p>about 37 million t</p>	<p></p> <p>about 5 million t</p>
Catch per tonne of fuel consumed	<p> = </p> <p>1-2 t</p>	<p> = </p> <p>4-6 t</p>
Fish and other sealife discarded at sea	<p></p> <p>8-20 million tonnes</p>	<p></p> <p>Very little</p>

Source: National Geographic 2008 / UBC

The Future: Fusion of the Old and the New?



Source: permaground.wikispaces.com

Sustainable Economy Traditions: How do they work?



Source: discover-bali-indonesia.com

MORAL ECONOMY = System Thinking

Change Back Human Behaviour

- Social cooperation on all scales across all sectors
- Reduced material consumption – *based on Increased security*
- Forget Obsession with Economic Growth

Change Back the Mode of Production

- Avoid use of non-renewable resources
- Limit use of renewable resources to their renewal rate
- Reuse / Repair / Upgrade – then
- Recycle (closed loop of production, minimal wastage)
- Superior Quality and Durability – *based on warranty legislation*
- Short supply chains

MOTIVATION???

Where will the motivation come from?

All the SUSTAINABLE ECONOMIES that prevailed universally and over 99% of human history are based on

Spiritual Traditions

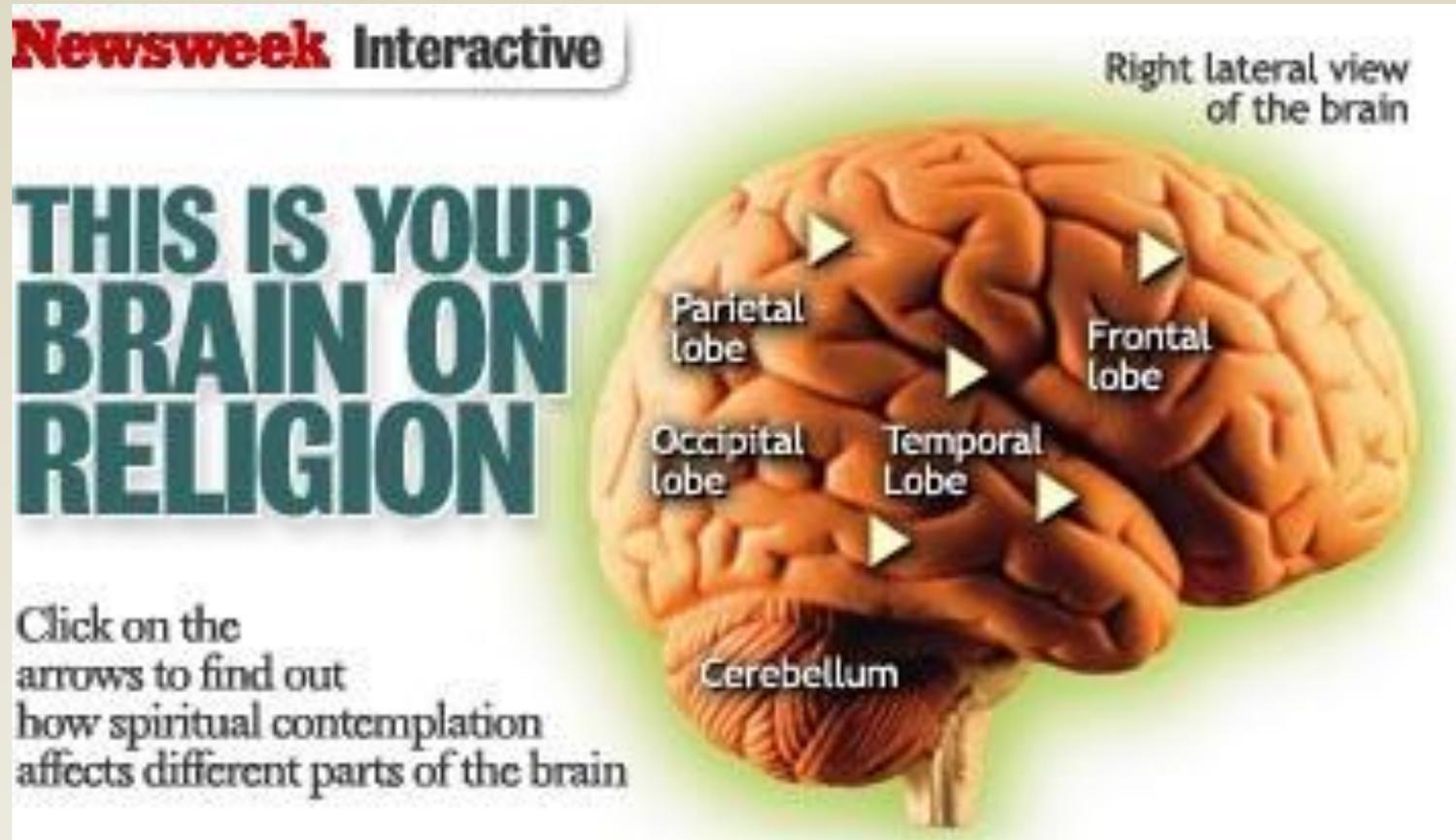
That in turn are based on:

Sacred Knowledge

Direct spiritual experience of unity with all humanity and with all of nature.

Science cannot provide that, but it CAN show that is is real.

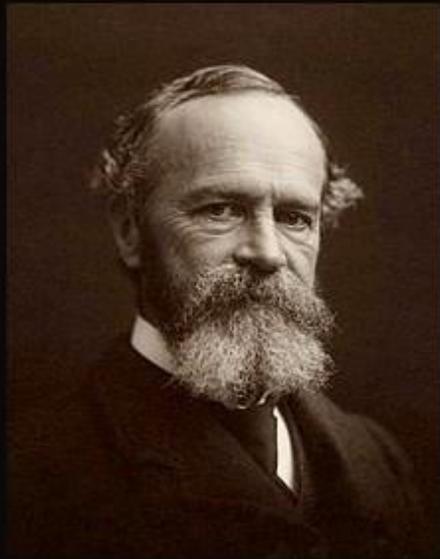
Individual Religious Experience: Compatible with Science



Neurotheology – a new branch of science

Spiritual experiences - turn quantum physics into a lived reality

From Direct Experience to Orthodoxy



A genuine first-hand religious experience... is bound to be a heterodoxy to its witnesses, the prophet appearing as a mere lonely madman. If his doctrine prove contagious enough to spread to any others, it becomes a definite and labeled heresy. But if it then still prove contagious enough to triumph over persecution, it becomes itself an orthodoxy, its day of inwardness is over: the spring is dry; the faithful live at second hand exclusively and stone the prophets in their turn.

(William James)

izquotes.com

William James

The Varieties of Religious Experience

Psychologist, Gifford Lectures on Religion, Edinburgh, 1901-1902

Orthodoxy is part of the problem

Institutionalisation of Charisma



The term 'charisma' will be applied to a certain quality of an individual personality by virtue of which he is considered extraordinary and treated as endowed with supernatural, superhuman, or at least specifically exceptional powers or qualities. These are such as are not accessible to the ordinary person, but are regarded as of divine origin or as exemplary, and on the basis of them the individual concerned is treated as a 'leader.'

(Max Weber)

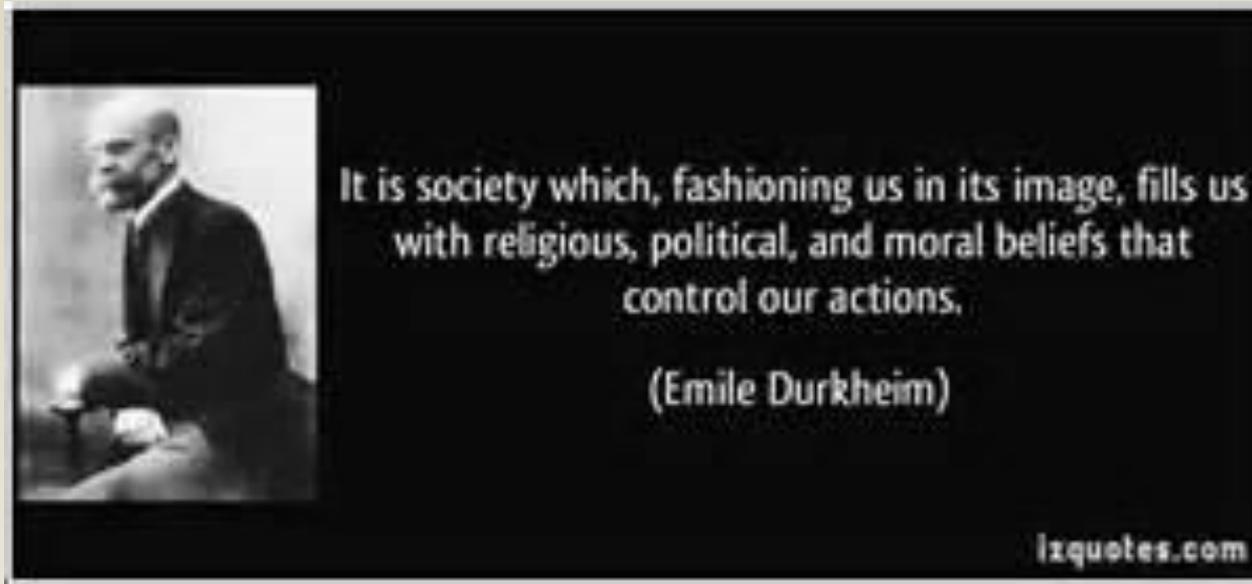
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Max Weber

The Institutionalisation of Charisma

On the interface between religion within the individual and in society...

Orthodoxy can be ok as a 'Living Tradition'



Emile Durkheim

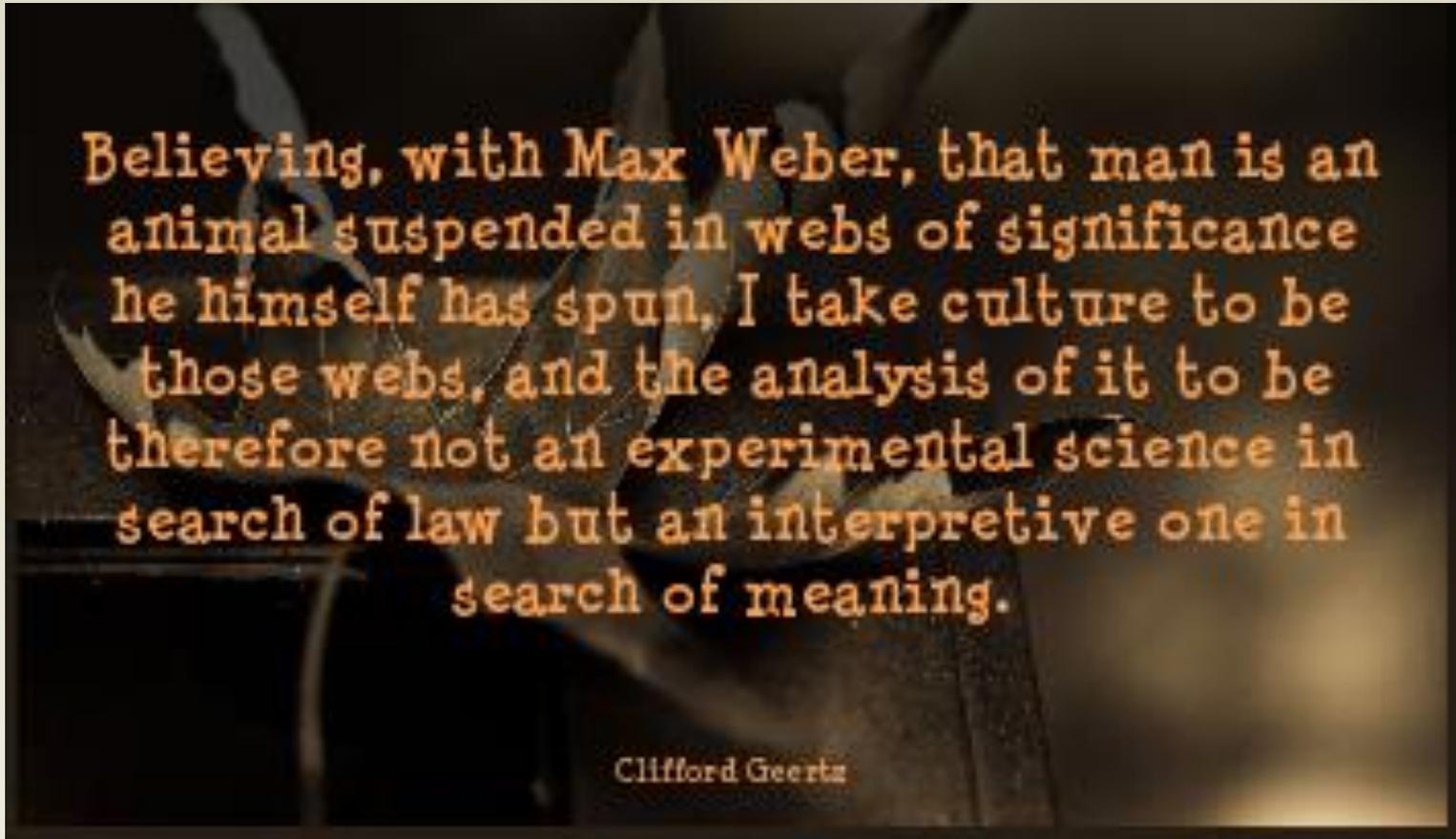
“A religion is a unified system of beliefs and practices ... that unite its adherents in a single moral community”

Elementary Forms of Religious Life

“[God] is only a figurative expression of [...] society”(ibid).

Traditional religions make us feel connected (e.g. to ancestors)

When Orthodoxies fall we are left disoriented



Clifford Geertz

Hermeneutics

We must reconnect to the sacred. How?

My research on new worldwide trends in religion shows a

- growing desire for direct experience of the sacred
- a 'greening' of orthodox religions

In Indonesia, the spiritual quest for sacred knowledge has a long history

Nerima, Semadi, Manunggal

THANK YOU
for your attention

Contact: thor2525@gmail.com