



The modern story of separation

- Nature is a **machine**
- Humans are **separate from nature**
- Humans are **separate from each other**
- Human progress arises from **the conquest of nature**
- The **Earth is a resource** to exploit for human benefit
- The **purpose** of life is to get **wealthy** and **powerful**

Integrating science and traditional wisdom



Our intrinsic interconnectedness

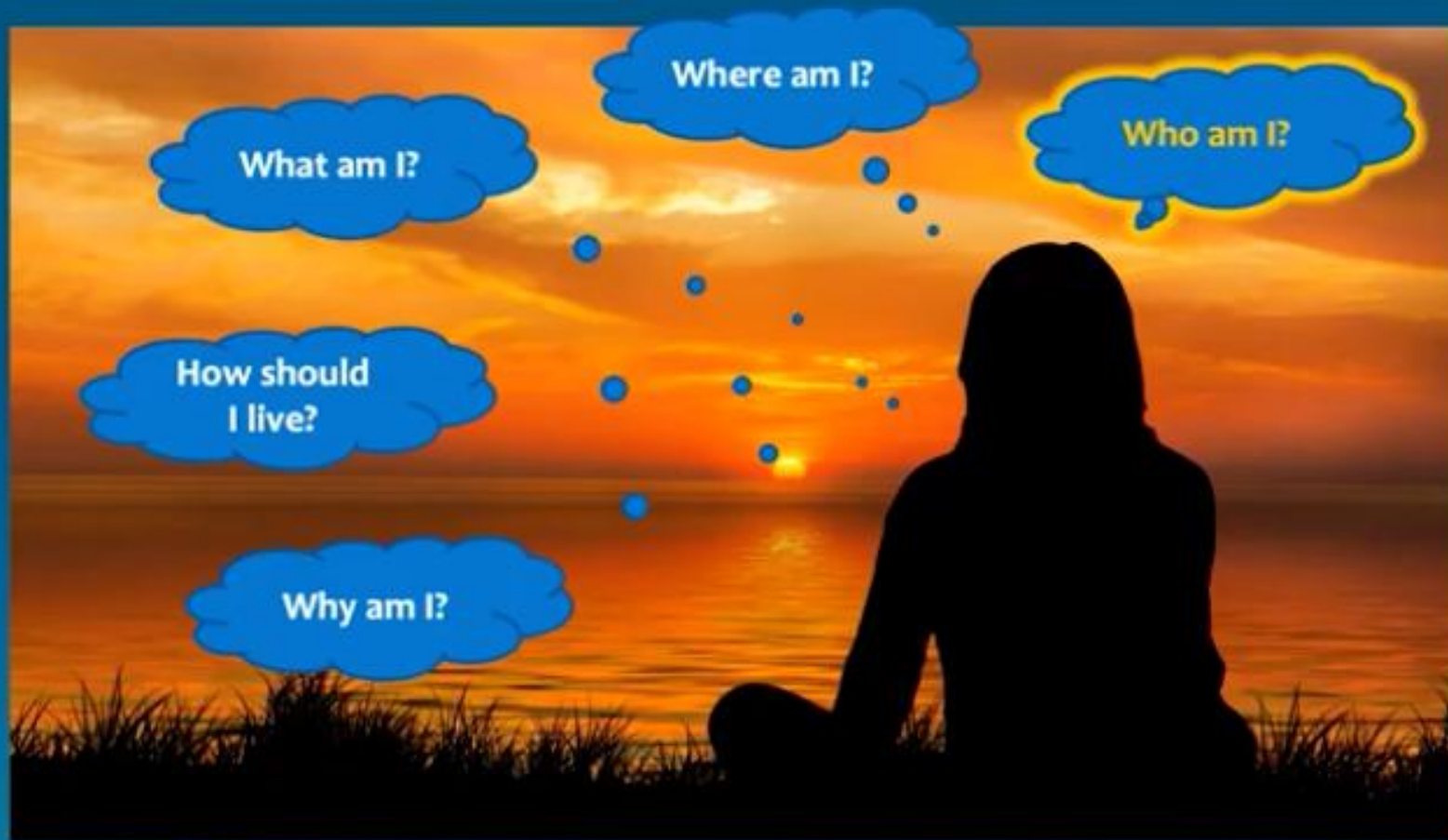


A new story of connectedness

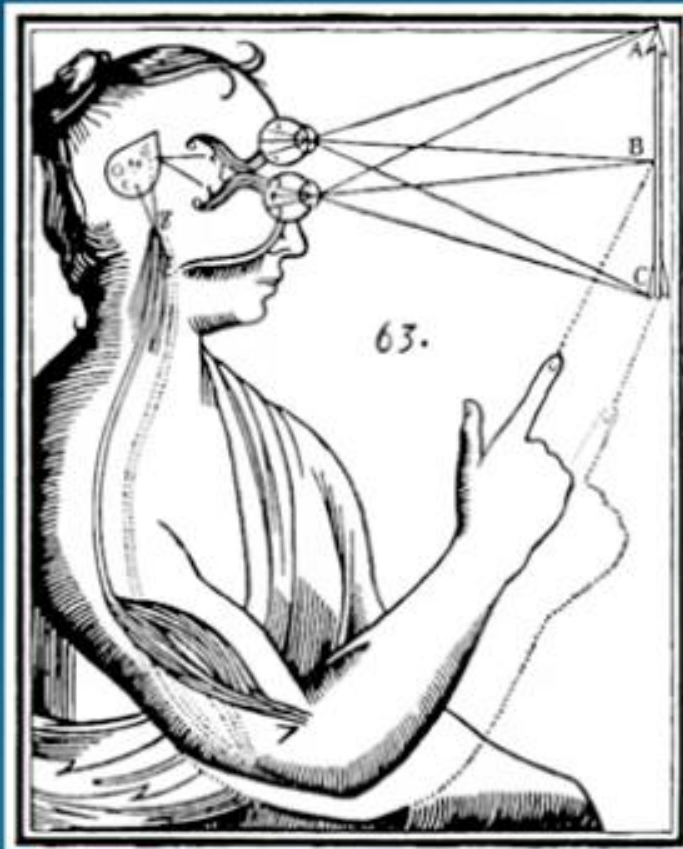
“We are all interconnected in a web of meaning”



Existential questions we ask



Descartes: “I think, therefore I am”



Rene Descartes, 1596–1650

*Human identity exists
solely through our
conceptualizing faculty*

*Animals—and our
bodies—are mere
machines*



Animals are not machines



Elephants

- Communicate over hundreds of miles through infrasound
- Perform ceremonies over dead family members



Wolves

- Deep family commitment
- Males help raise young until they reach maturity



Dolphins & Whales

- Talk in local "dialects"
- Call each other by name
- "Gossip" about those temporarily absent



Plants have a networked intelligence

Distributed intelligence of plants

- Up to 20 different senses
- Act intentionally & purposefully
- Learn & have memories
- Communicate with each other
- Allocate resources as a community



“Wood-wide web”

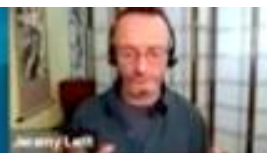


Even cells display stunning intelligence

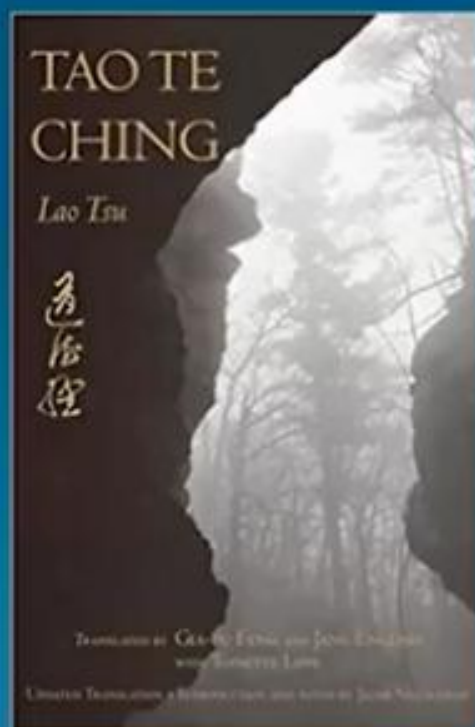


Awe-inspiring cellular intelligence

- Thousands of sensors & proteins
- Sends & receives hundreds of signals
- Awareness of itself & others
- Knows what to do
- Cooperates in community
- Makes decisions as a group



Tao Te Ching: Classic of *Tao* and *Te*



道

Tao

- “Way” or “path”
- How the forces of nature manifest in the world

德

Te

- Spontaneity
- Intrinsic nature
- Inherent in all living things

Wu-wei (“effortless action”) is the state of acting with *te*

Nonhuman organisms act in *wu-wei* naturally





What happened to humans?

- Using a fire to dry up a well
- Forcing water uphill to irrigate a mountainside



"The world is a spirit vessel which cannot be acted upon. One who acts on it fails, one who holds on to it loses."

– Tao Te Ching

Taoist theory of civilization



“The men of old shared the placid tranquility which **belonged to the whole world...** That was what is called the **state of perfect unity.**

People lived in common with birds and beasts, and were **on terms of equality with all creatures, as forming one family.”**

– Zhuangzi





Taoist theory of civilization

“People began everywhere to be suspicious. With extravagant orchestras and gesticulating ceremonies, **men began to be separated** from one another.”

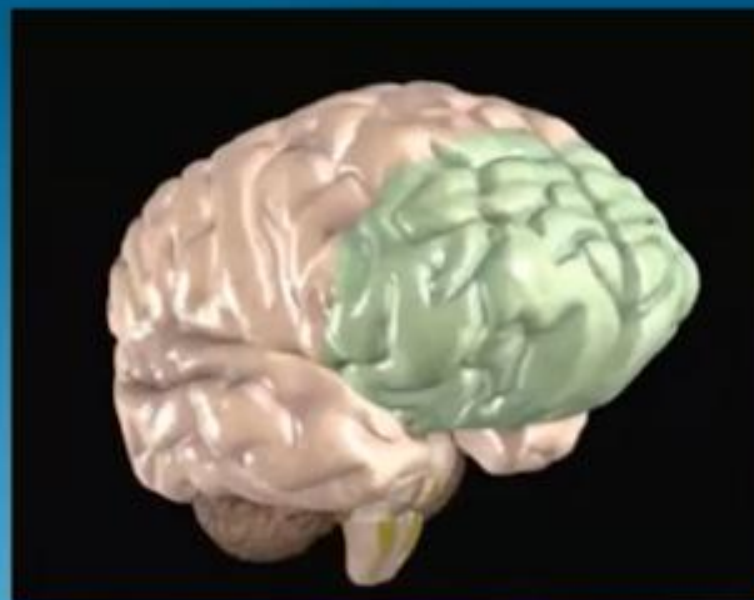
– Zhuangzi





The prefrontal cortex mediates our “yu-wei” cognition

- Symbolic thought
- Conceptualizing
- Planning
- Creating abstractions





Emergence of symbolic thought



- Language
- Culture
- Art
- Tool-making

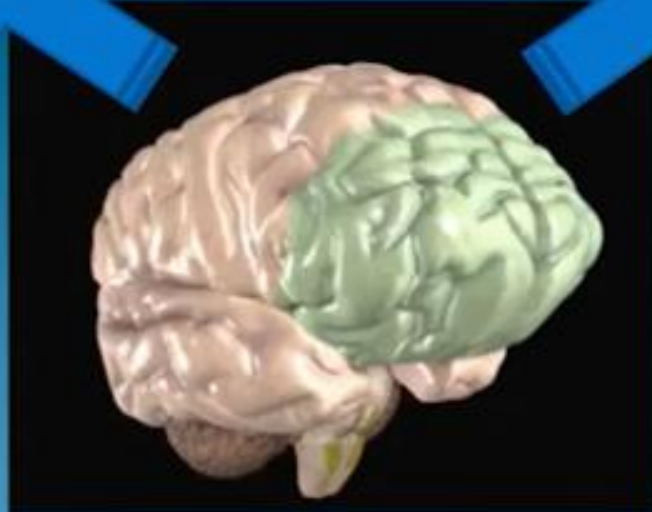


Dual human consciousness

Animate Consciousness

- Intuitive
- Fast
- Emotional
- Effortless

Wu-wei



Conceptual Consciousness

- Analytic
- Slow
- Rational
- Effortful

Yu-wei

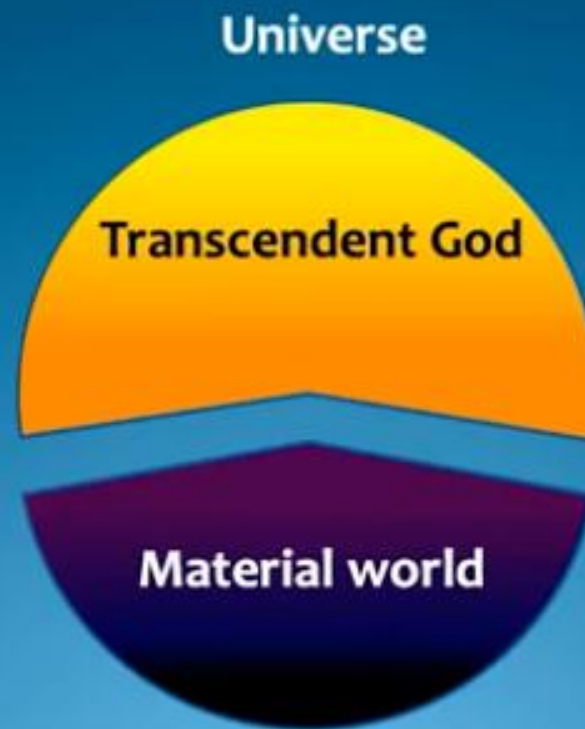
Human challenge: integrate both systems in harmony



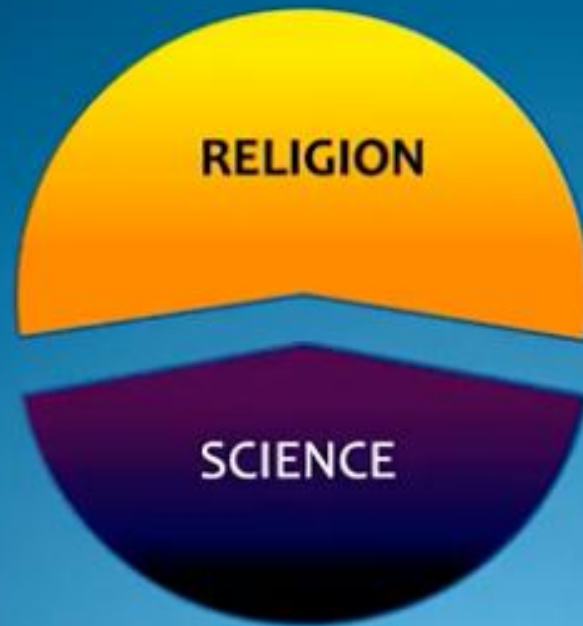
Existential questions we ask



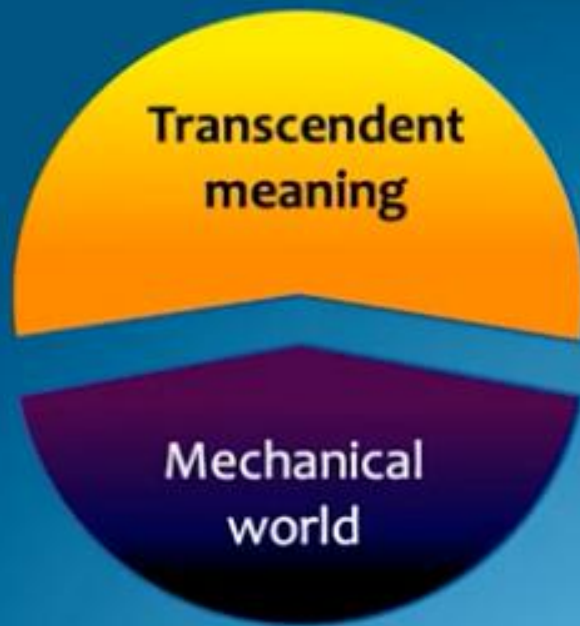
Mainstream view of a split universe...



Religion and science exist in different “domains”



Our unsustainable worldview



...and ransack Nature

Pray...



“The School of the Tao” in Song Dynasty China



Taoism



Confucianism



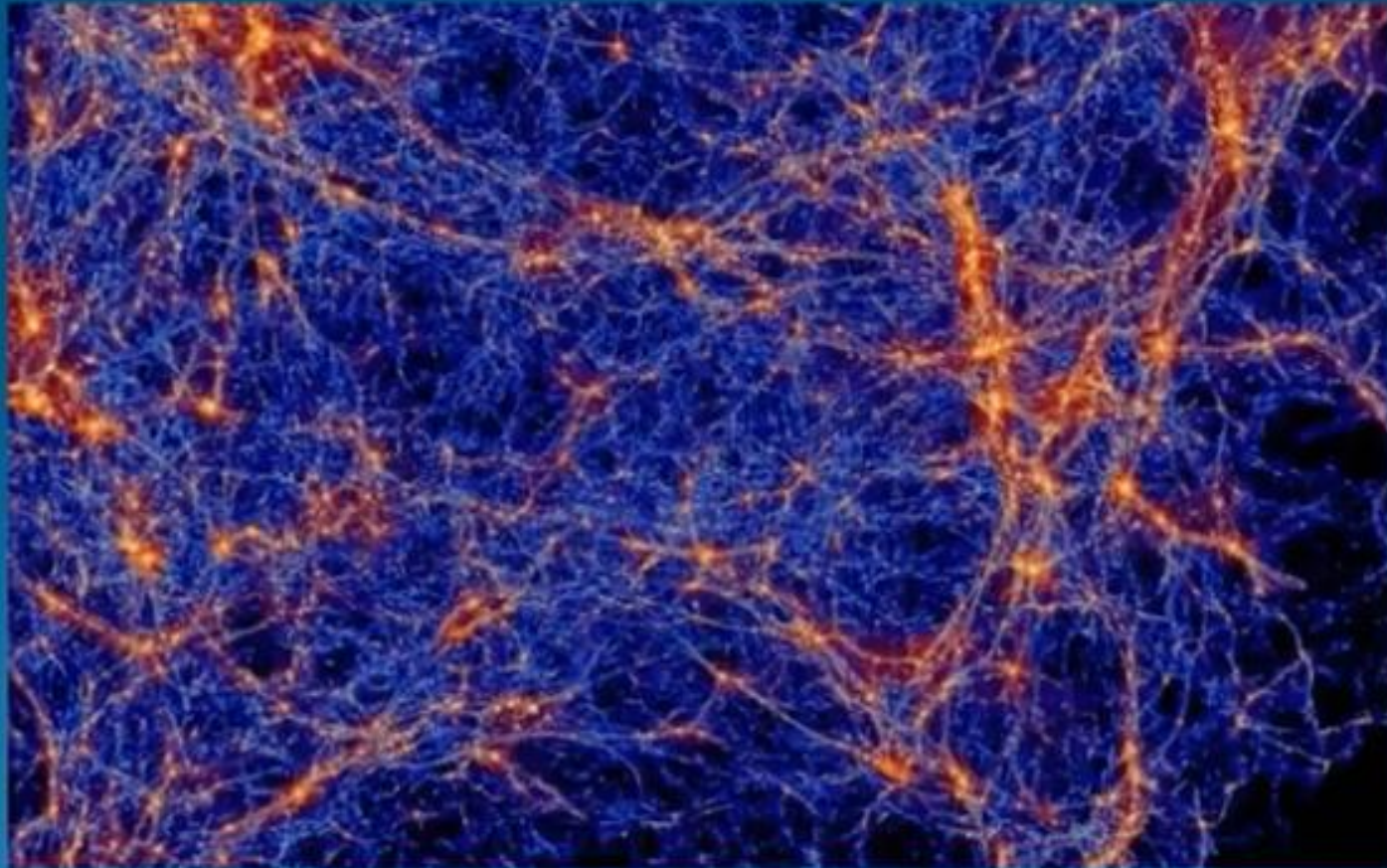
Buddhism



For the Neo-Confucians, the entire universe consists of qi (matter/energy)...



... and li: the principles by which qi is connected



The totality of all the li in the universe was understood as the Tao



Systems sciences point to a connected universe



Everything is connected... in nonlinear ways



Interactions between things tell us more
than the things themselves





Each system is fractally connected within larger systems

FRACTAL

- Pattern that repeats itself at different scales
- Self-organized activity
- Everywhere in the natural world



Coastline



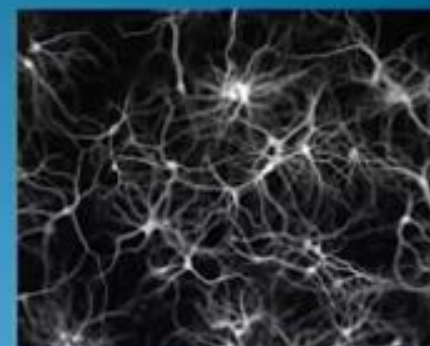
Leaf



Lightning



Lungs



Neurons

Nature as a fractally connected system



Cell



Nature as a fractally connected system



Cell

Organism



Nature as a fractally connected system



Species

Organism



Cell

Nature as a fractally connected system



Species



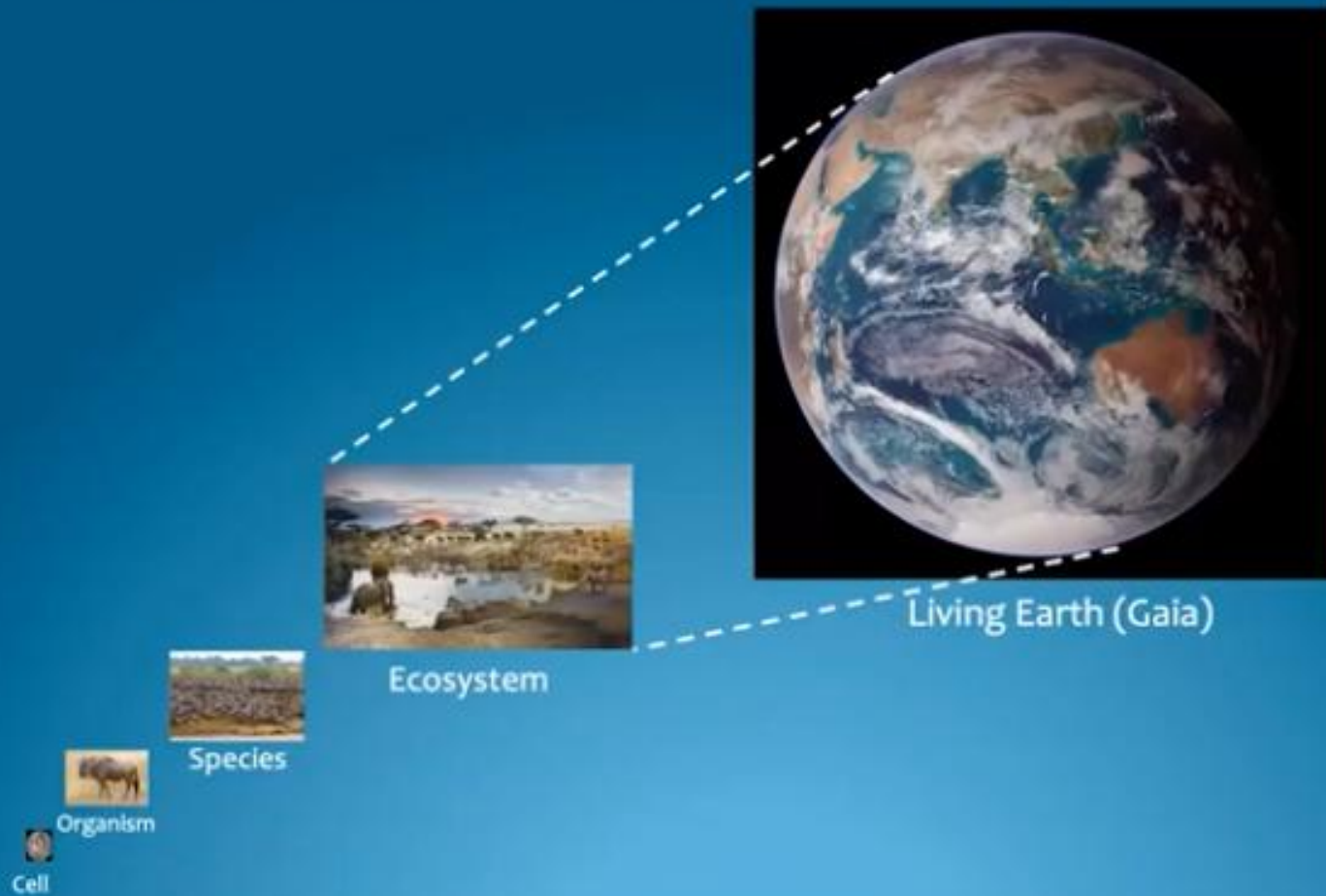
Organism



Cell

Ecosystem

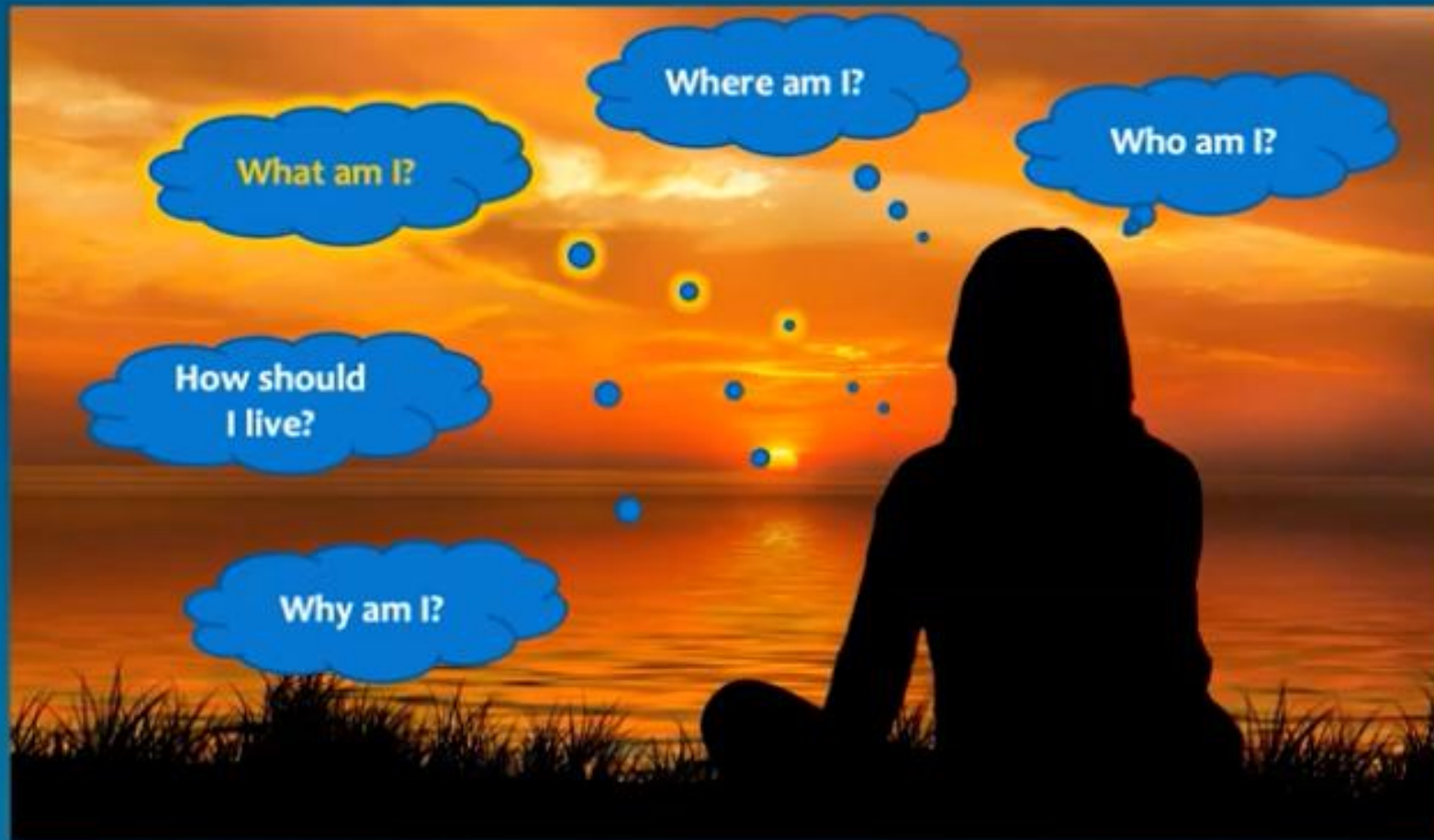
Nature as a fractally connected system



Existential questions we ask



Existential questions we ask



The Tao in one's own nature

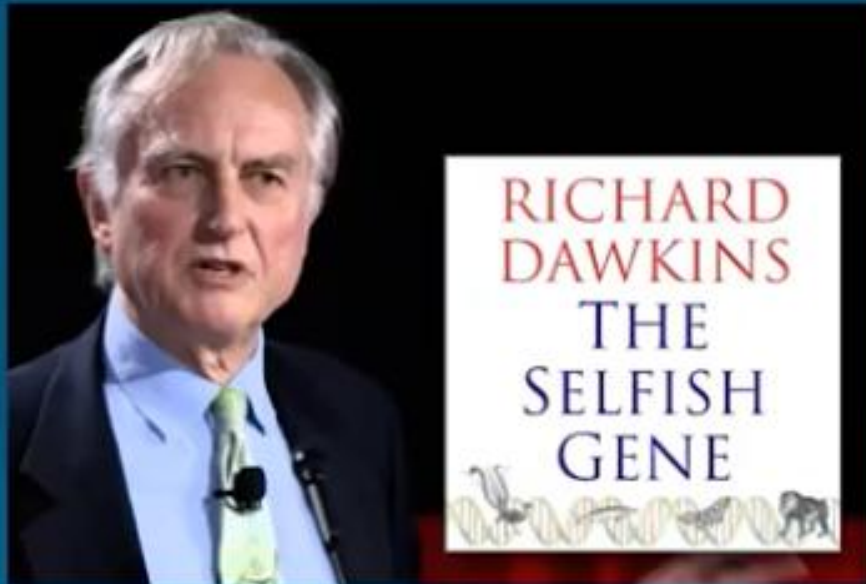


Zhu Xi

“If one wishes to know the reality of Tao, one must seek it in one's own nature.”



Dawkins: “selfish gene”



“We, and all other animals, are **machines created by our genes** . . . in a highly competitive world.

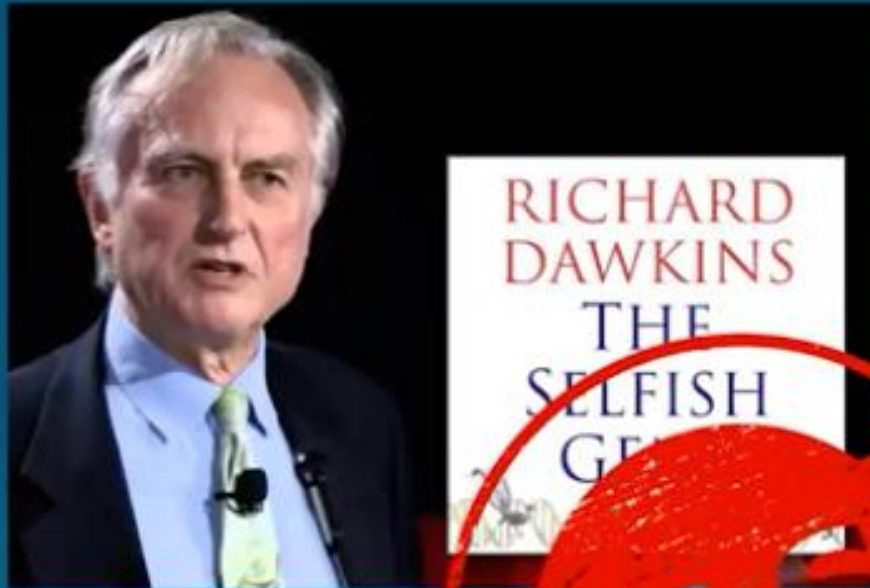
A predominant quality to be expected in a successful gene is **ruthless selfishness**”

The gene...

- ... is the fundamental unit of evolution
- ... dictates everything about the organism
- ... is inherently selfish and competitive



Dawkins: “selfish gene”



“We, and all other animals, are machines created by our genes ... in a highly competitive world.

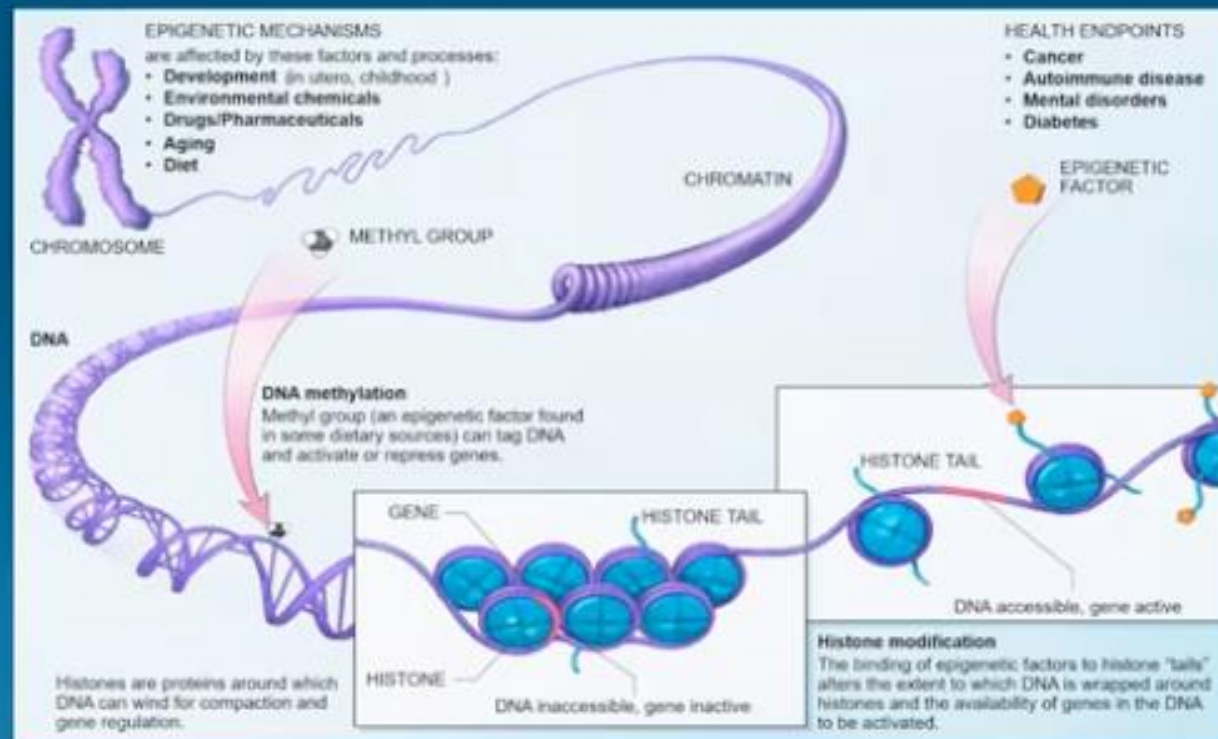
A predominant quality to be expected in a successful gene is selfishness”

... the formula for evolution
... the organism
... inherently selfish and competitive





Genes are part of an iterative process with the cell



→ A vibrant, dynamic, circular flow of interactivity

Genotype as artist's palette

A repertoire of capabilities that the cell can select based on its particular needs as determined by the environment.



Genotype as artist's palette

Grasshopper



Gentle, solitary

SAME
DNA



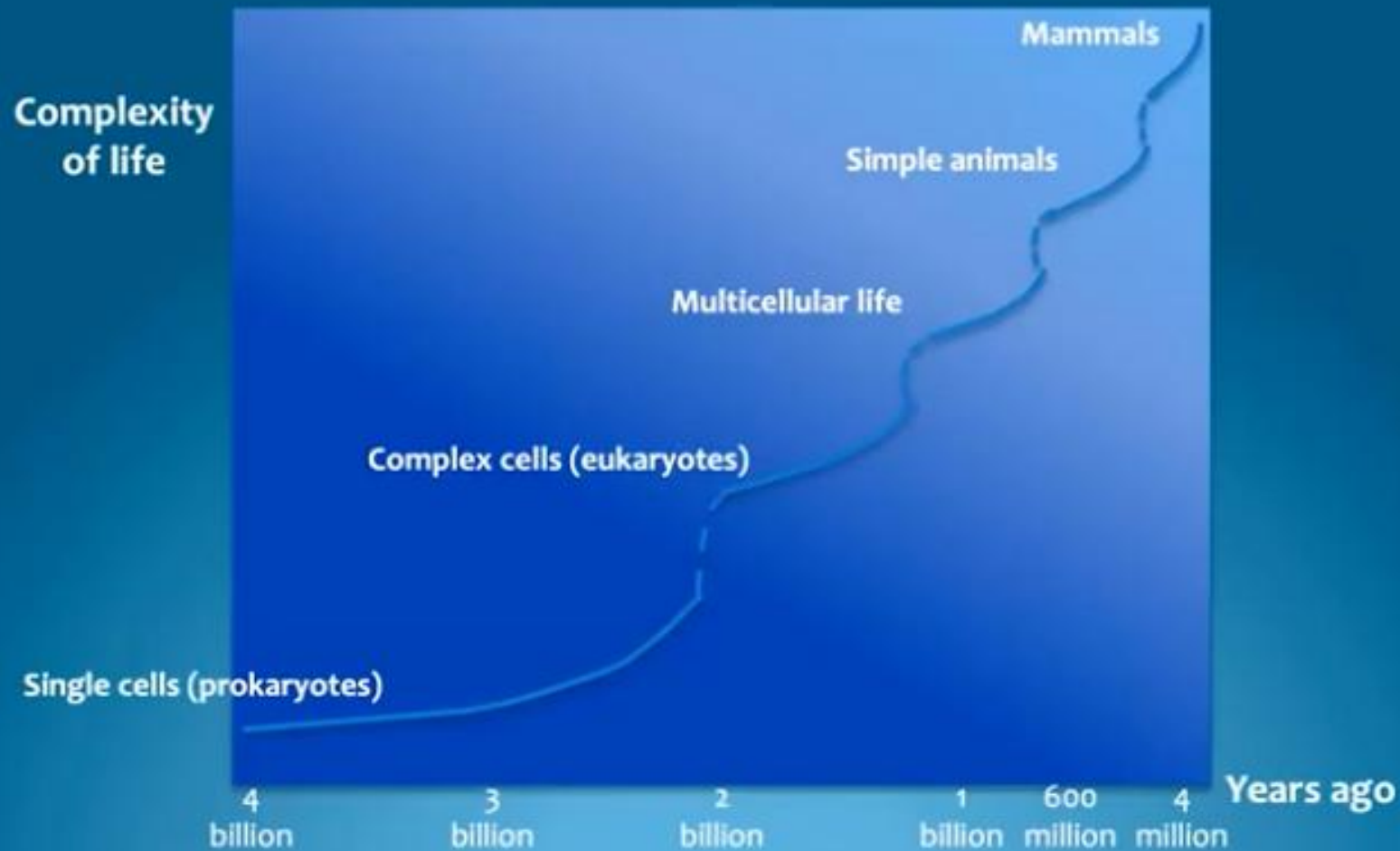
Locust



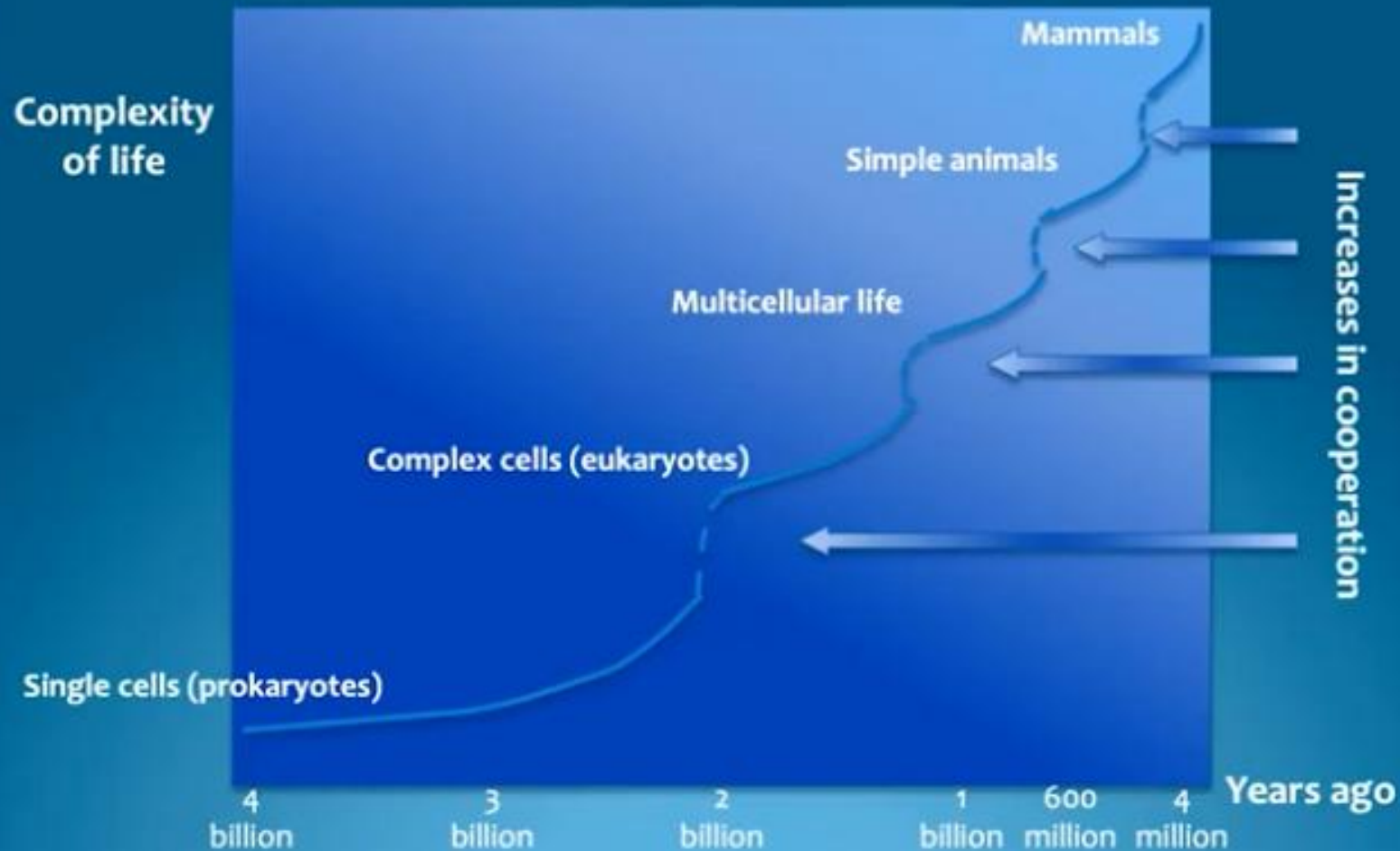
Aggressive swarms



Evolution of complexity of life



Evolution of complexity of life



Life evolved through cooperation

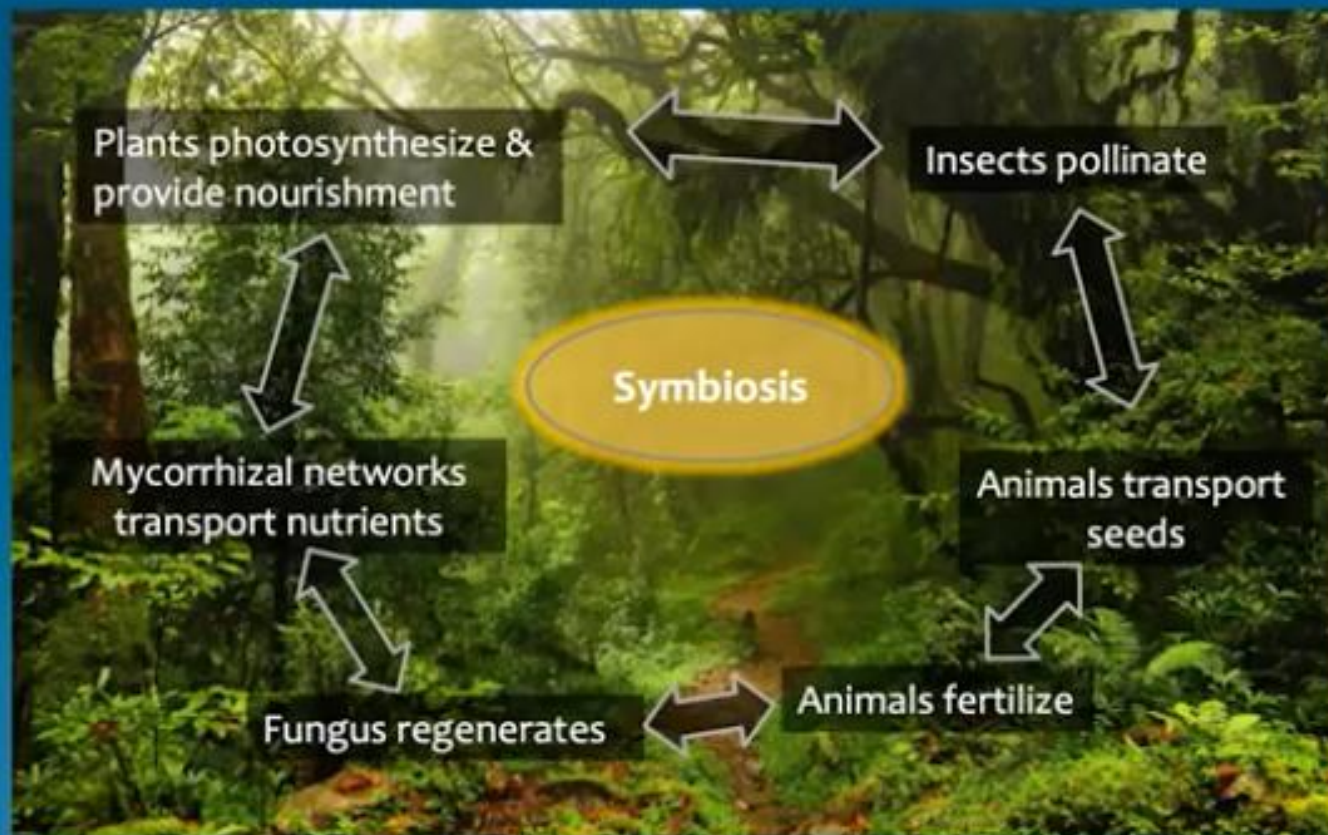


“Life did not take over the world by combat but by networking”
– Lynn Margulis





Symbiosis: the harmonic dance of life





Organisms are self-organized, fractal dynamic patterns



Organisms as “resilient patterns in a turbulent flow – patterns in an energy flow.”

“It is becoming increasingly clear that to understand living systems in any deep sense, we must come to see them not materialistically, as machines, but as stable, complex, dynamic organization.”

– Carl Woese

Existential questions we ask



The dominant culture's mindset

- Humans are intrinsically selfish and greedy
- Selfish behavior by individuals in the best interest of everyone



Dawkins: “Overcome our selfish genes”

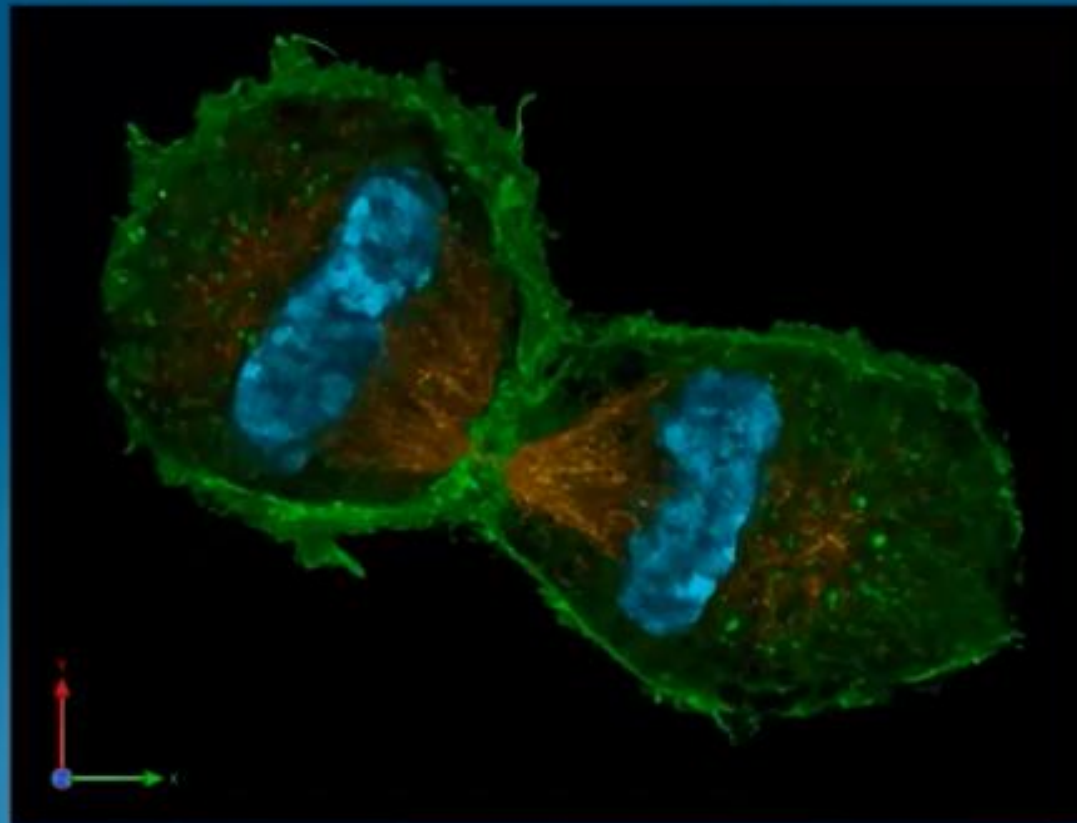


Richard Dawkins

“Let us try to teach generosity and altruism, because **we are born selfish**. Let us understand what our own selfish genes are up to, because we may then at least have the chance to **upset their designs**.”



Autopoiesis: life's self-generation



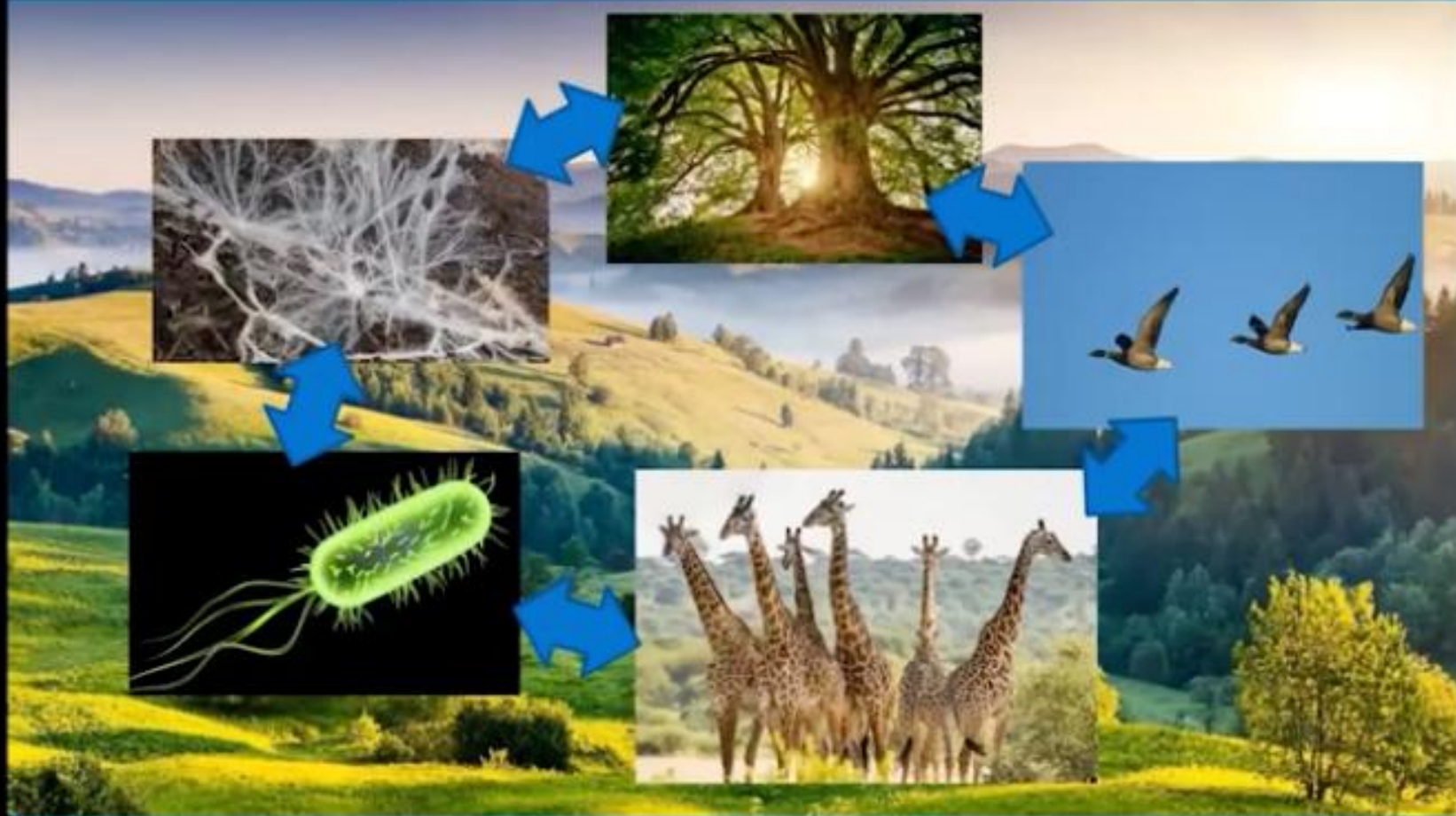
Life is a continual process of self-organized creativity



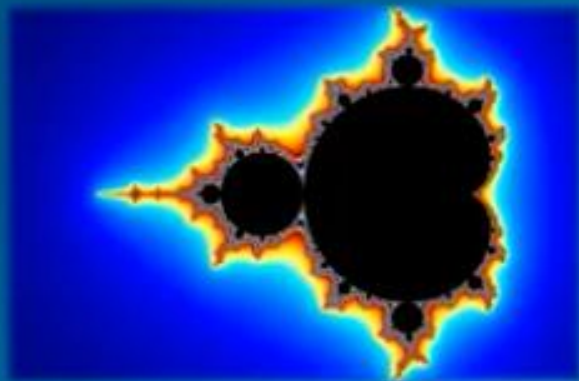
The deep purpose of life is to create more life



... forming a fractal cascade of abundance



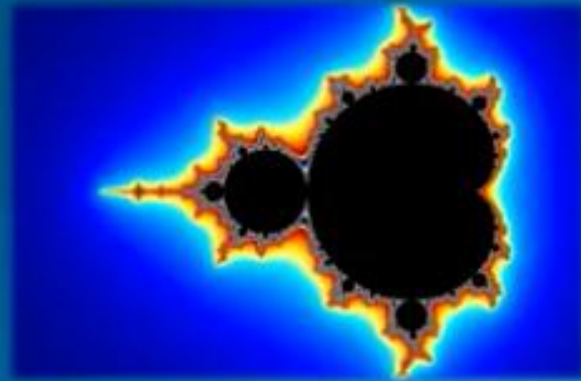
Human flourishing is fractal



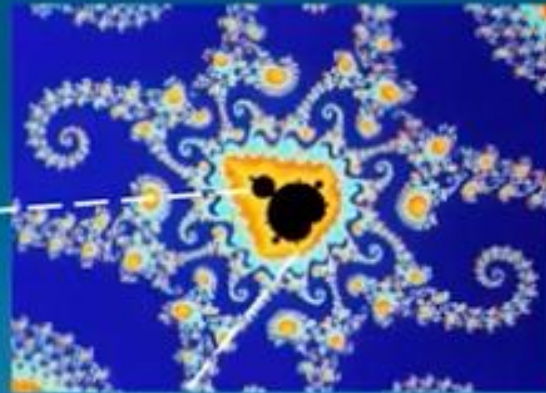
Human mind-body organism



Human flourishing is fractal



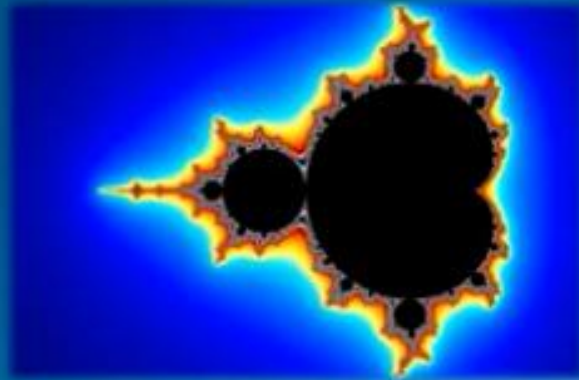
Human mind-body organism



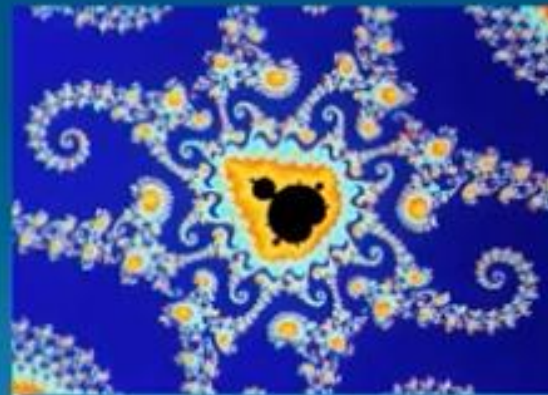
Community



Human flourishing is fractal



Human mind-body organism



Community



Living Earth



Lakota: *Mitakuye Oyasin* | “We are all related”



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Flourishing based on our intrinsic connectedness

Within
ourselves





Flourishing based on our intrinsic connectedness

Within
ourselves



With the
natural
world



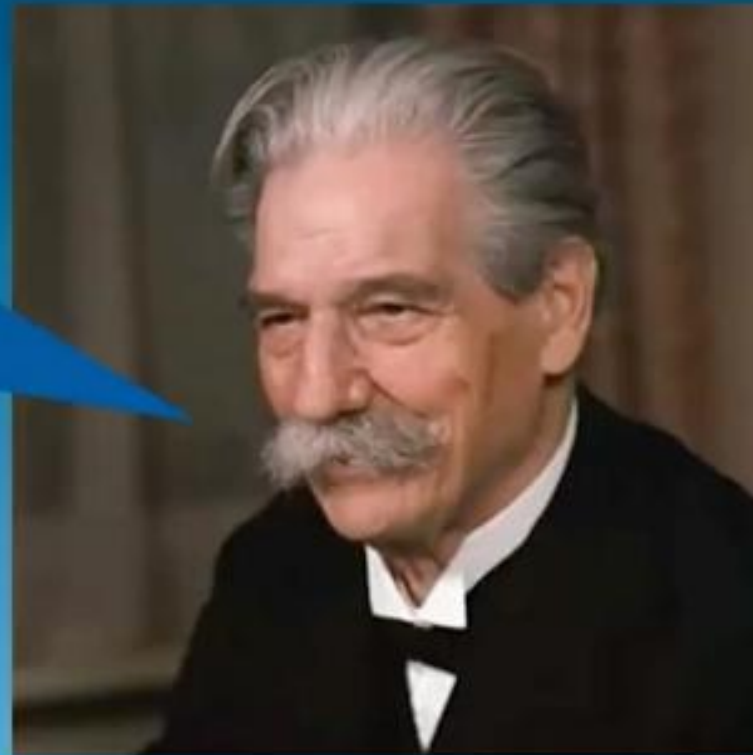
With
others



With the
living Earth

An alternative, life-based value system

“I am life that wills to live, in the midst of life that wills to live.”



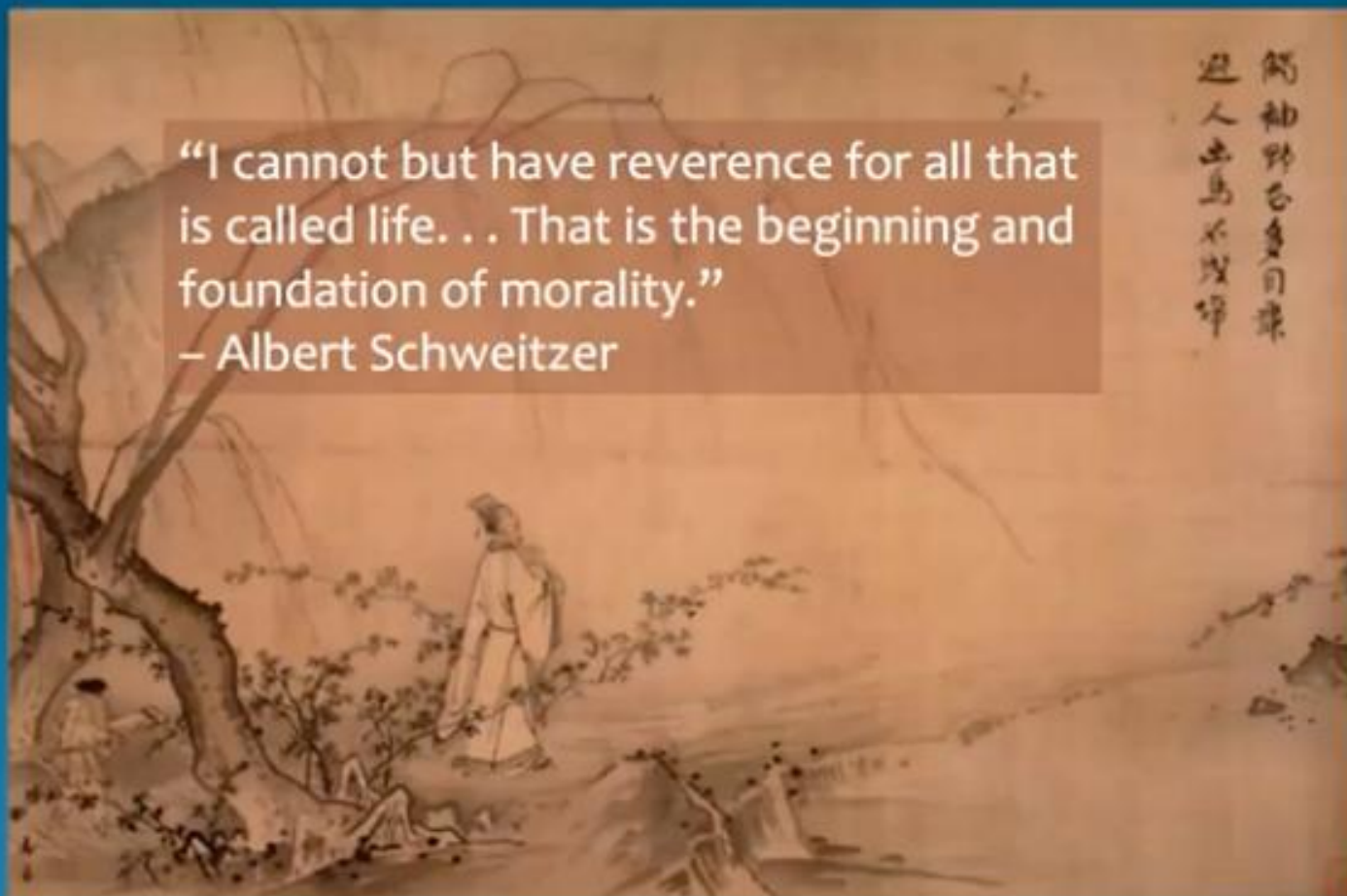
Albert Schweitzer





Reverence for life

"I cannot but have reverence for all that is called life. . . That is the beginning and foundation of morality."
– Albert Schweitzer



Existential questions we ask



Existential questions we ask



Weinberg: the pointless universe



Steven Weinberg

“The more the universe seems comprehensible, the more it also seems pointless”



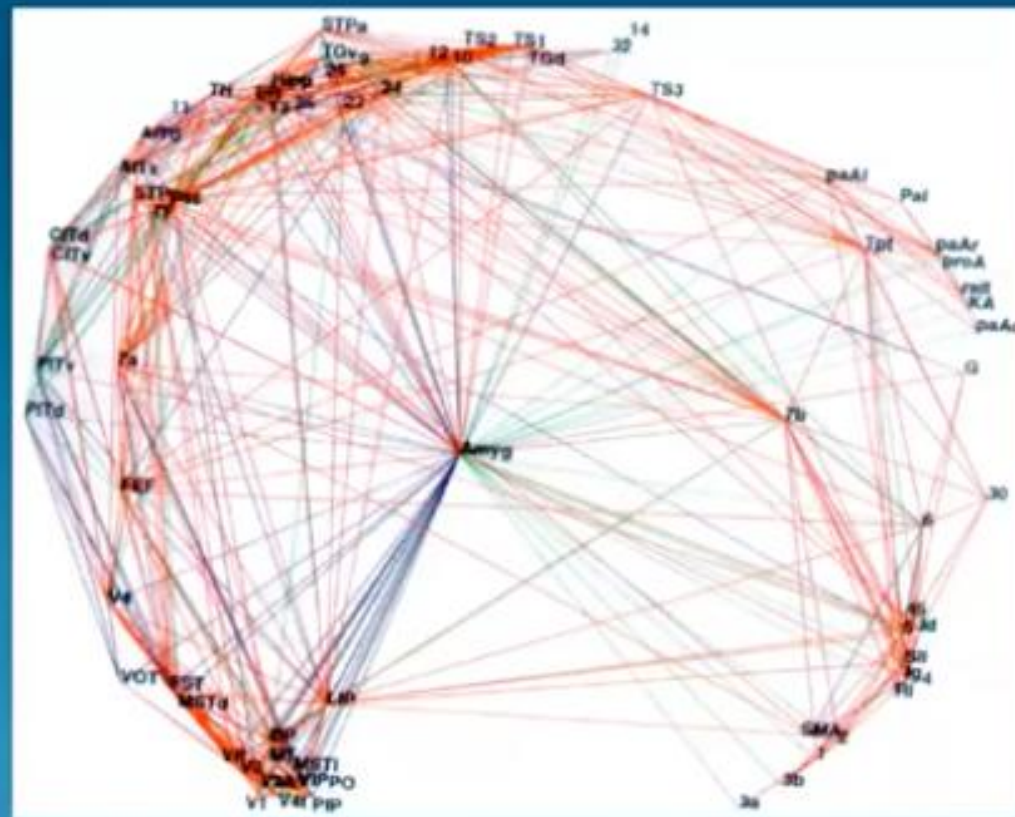


Meaning is a function of connectedness

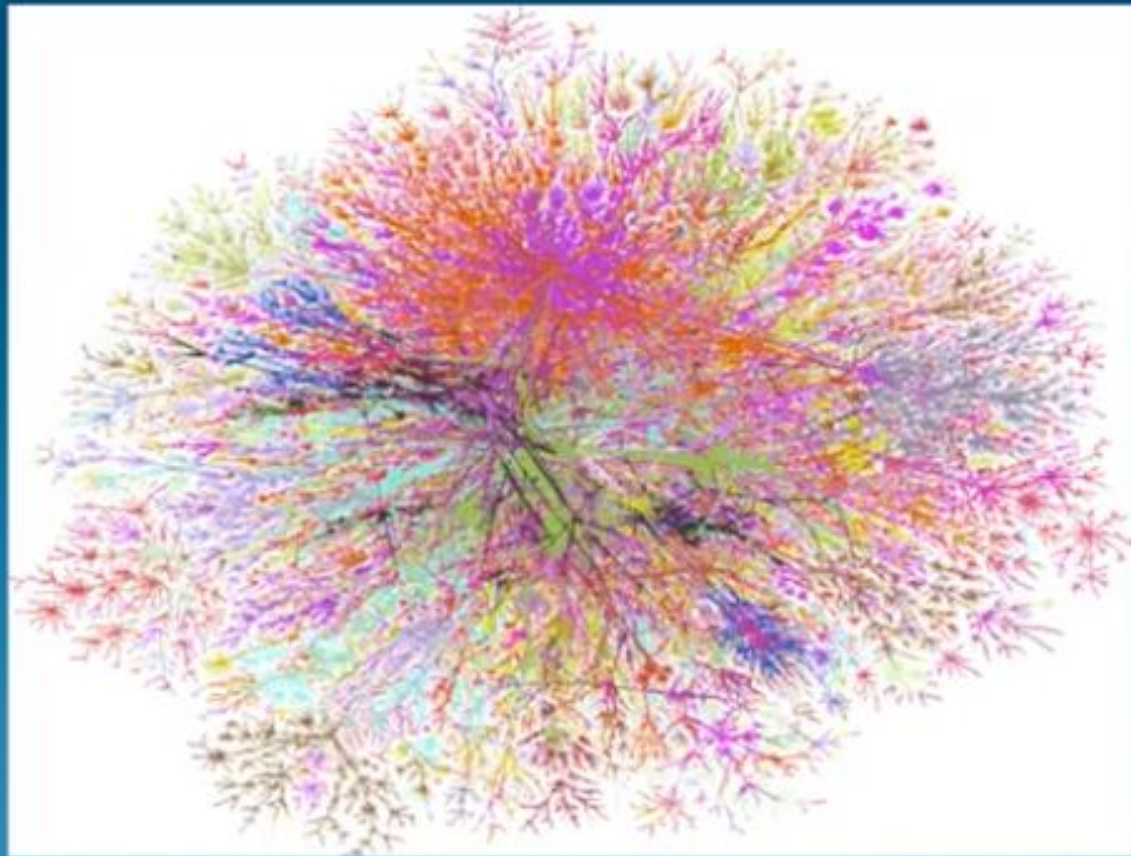
As the number of connections increases . . .



... they lead to a phase transition...



... and emergence of new meaning

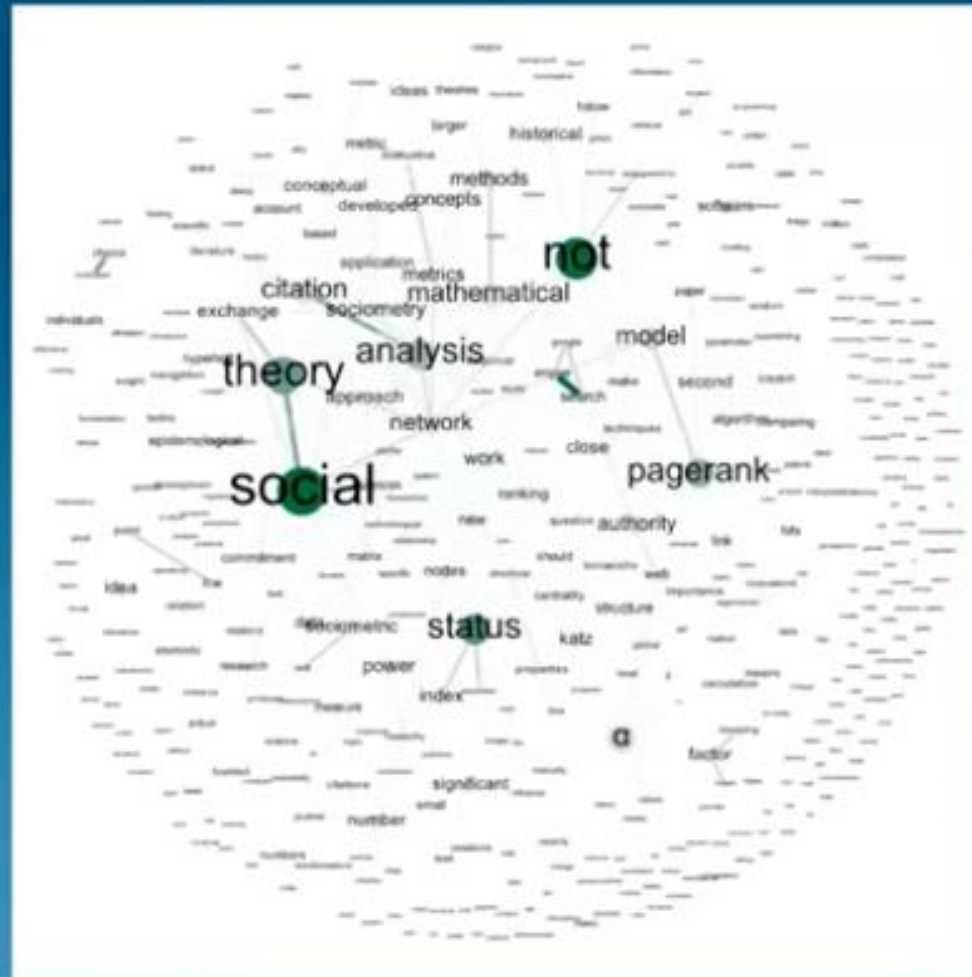




When words connect...



... language emerges



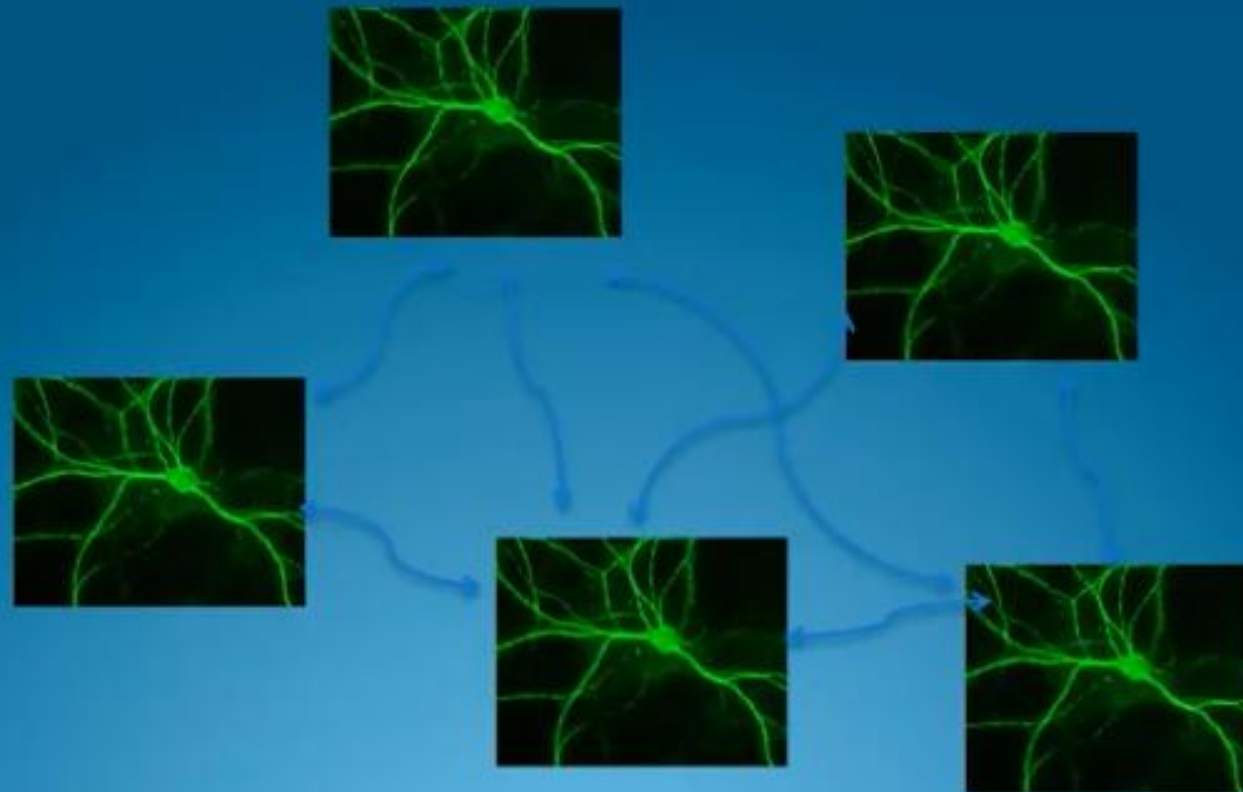
When organisms connect...



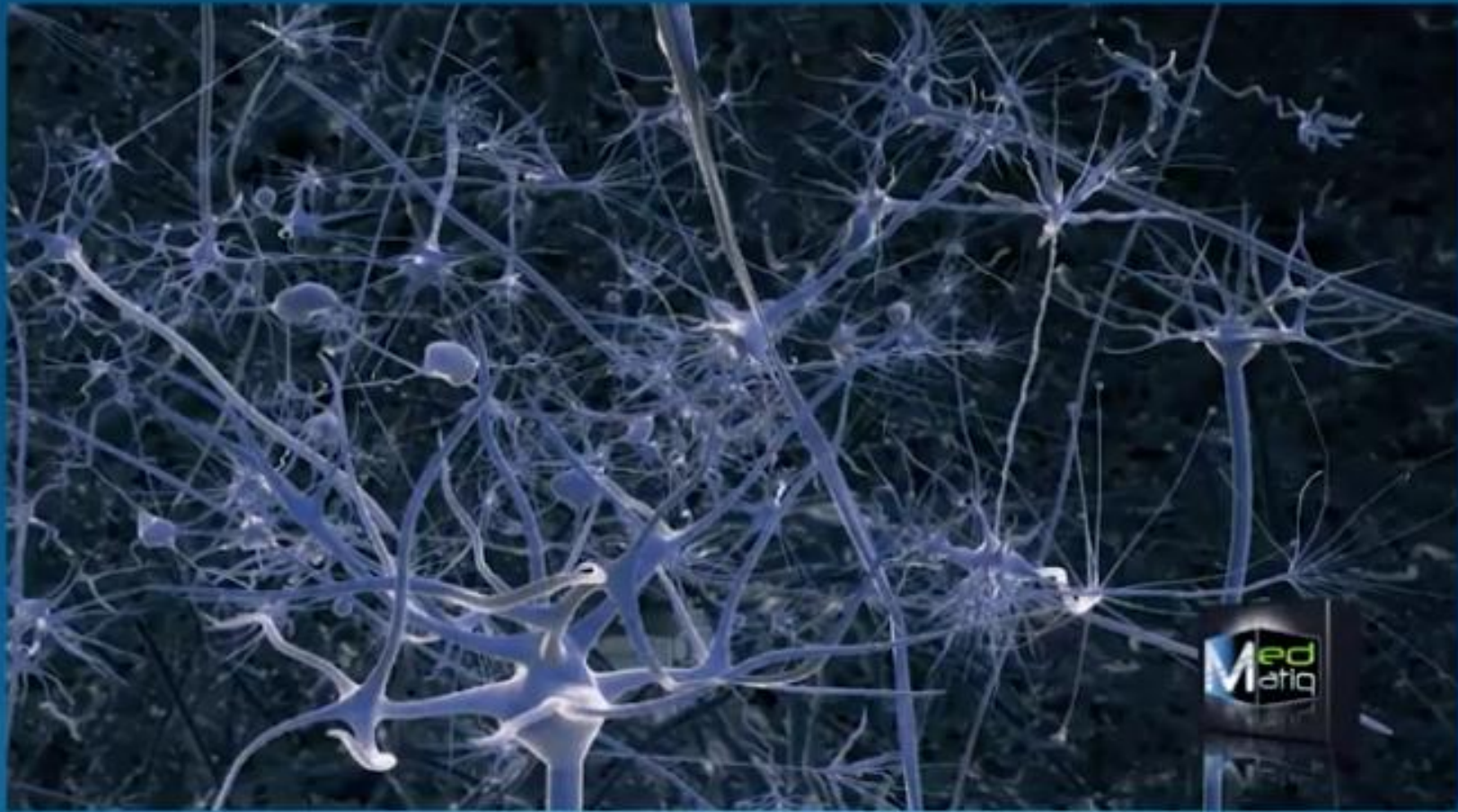
... an ecosystem emerges



When neurons connect...



... consciousness emerges



“Peak experience” of oneness



Implications of connectedness

Everything you do in your life...

creates li
ripples
which
affect...



everything
else in the
universe

Principle: the ultimate connectivity of everything in the cosmos



We exist in an ocean of li



The li ripples exist within each of us



The choices we make . . .

Personal
choices and
actions



Engaging in the
broader political
process



Participating in
regenerative
community



... weave the Web of Meaning

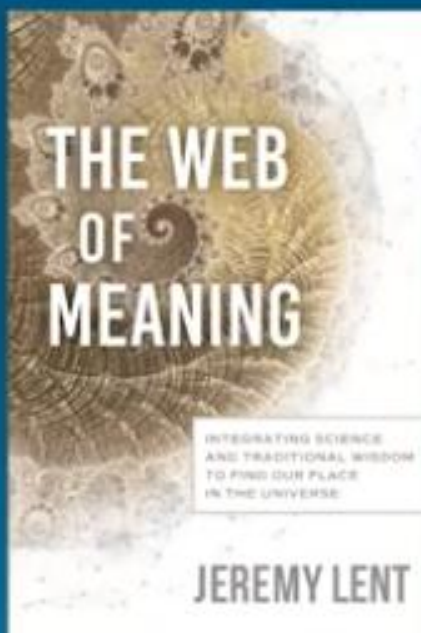


Existential questions we ask



Regenerate our beautiful, fragile Earth

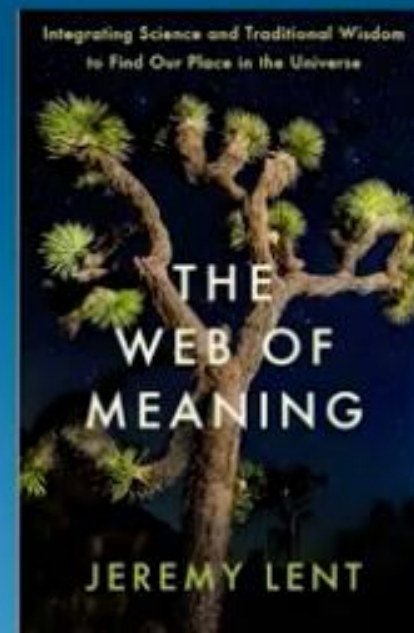




New Society Publishers
USA & Canada

The Web of Meaning
*Integrating Science and
Traditional Wisdom to
Find Our Place
In the Universe*

Publication
June/July 2021



Profile Books
UK & Commonwealth

For Discussion

“Where are the opportunities in my own life to weave my part in the Web of Meaning?”

