

Evolutionary Theories in Natural and Social Sciences: Measuring Human Extension in Big and Little History

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Symposium**
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What doesn't 'evolve'?

Extended Mind, Knowledge and Relationships

Evolutionary Theories in Natural and Social Sciences: Measuring Human Extension in Big and Little History

Presentation Outline:

- 1) Natural and Social Sciences, Big and Little Histories – The Anthropic and the Anthropocene
- 2) The Limits of Evolutionism – Human Extension (SSH)
- 3) Humanity 2.0 – Futurology
- 4) Human Extension and Development in the Electronic-Information Epoch
- 5) Concluding Thoughts & Questions



EVOLUTION OF A CANADIAN

Background Context

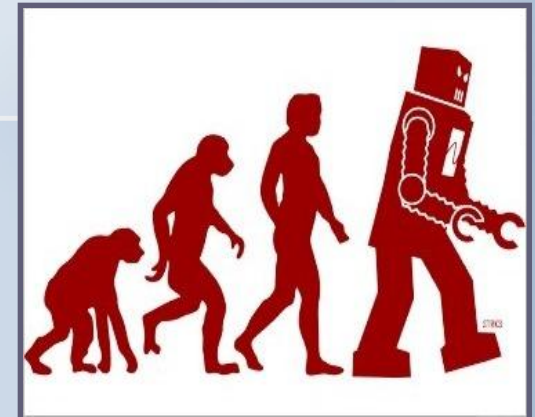
- **What are examples of *things that don't 'evolve'*?**
What are the possibilities and limits of evolutionary theories?
- Kraków Method – ‘philosophy in science’ – **‘Creative Tension’** between **science, philosophy and theology/worldview**; overcoming (western) aggressive ‘new atheism’

Main Theses:

- 1) Evolution is one type of change (among many), but **change (and motion) is the *master category***
- 2) **‘Human Extension’ provides an alternative meaning of change-over-time (origins & processes) to evolutionary theories in SSH**; minds ‘extend’ in addition to matter – a challenge in the electronic



UNAM , Mexico City - José Chávez Morado – “The Conquest of Energy” (1953)



“The analogy that relates the evolution of organisms to the evolution of scientific ideas can easily be pushed too far.” – T. Kuhn (1970)

Natural and Social Sciences, Big and Little Histories, The Anthropic and the Anthropocene – Evolutionism

- Big History = cosmos history (millions/billions of years)
- Little History = ‘human’ history (**scale**: 1000s of years)
- The **Anthropocene** (or Holocene) period creates a category of conversation that specifies **Anthropic/Anthropos**
- ‘**Anthropic**’ deals with **humanity**; normally understood as the province of **Social Sciences & Humanities** (SSH or *Geisteswissenschaften*), **not Zoo-centric** (P. Chadaev)
- The Human Kingdom ***Symbolia*** – John Allen (Biosphere2)
- The problem of ‘***evolutionism***’ as an ideology in SSH, ***not*** a challenge to evolutionary theories in natural-physical sciences (Sandstrom 2010), including Big History

Ideological Evolutionism Naked

“Darwin’s theory was good biology which was perverted by others to support bad sociology.”

– Theodosius Dobzhansky (1956)

“If we ask Nature, **‘Who are the fittest: those who are continually at war with each other, or those who support one another?’** we at once see that those animals which acquire habits of *mutual aid* are undoubtedly the fittest...more chances to survive, and they attain, in their respective classes, the highest development of intelligence and bodily organization.” – Pyotr Kropotkin (1902)

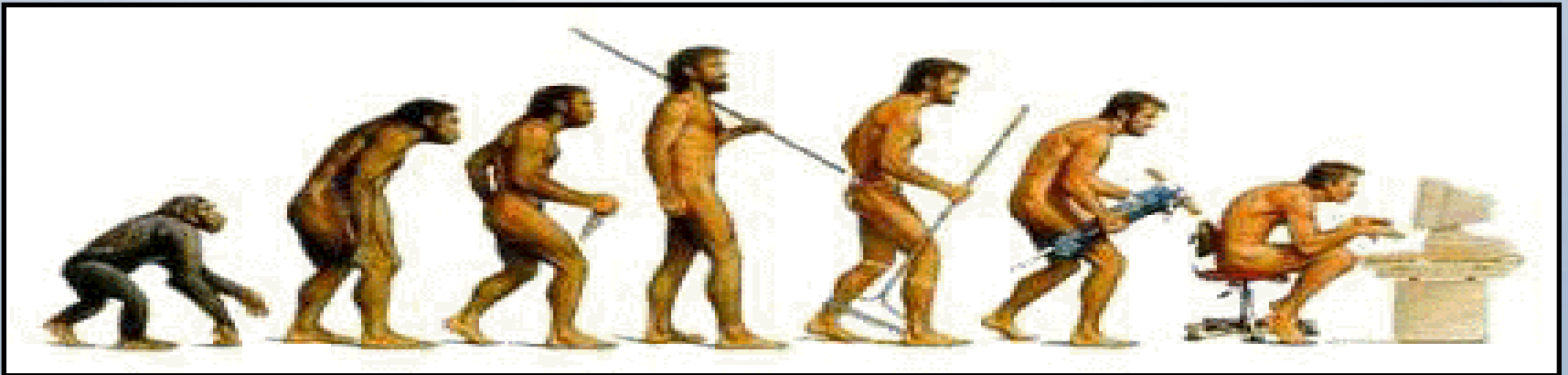
Nature vs. Art (“Man’s power of selection”) – Charles Darwin



The Limits of Evolutionism

Human Extension

1) Art, science, technology & society (human-made things) do not ‘evolve’ like biological entities & other **non-human made things**; this is a **category error, a false universalism** linked with naturalist/materialist (philosophical or methodological) thinking.



2) Human-made things are **extensions** of humankind.

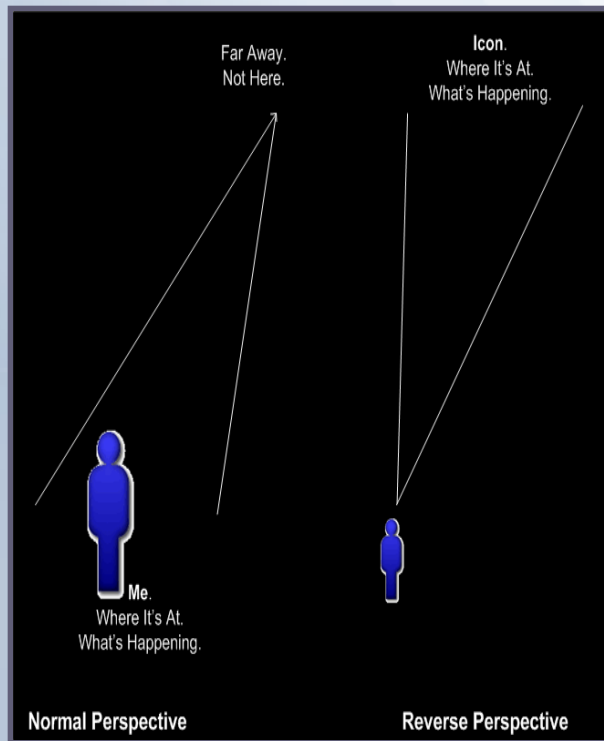
“All human artefacts are extensions of man[kind].”

– Marshall McLuhan (1967)

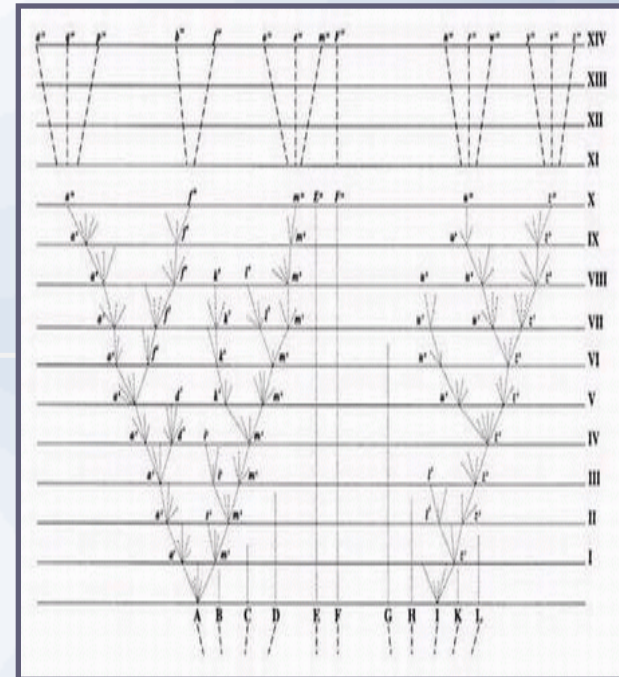
'Extension' & Human Extension

“**Extension** is the most general scheme of **real potentiality**, providing the background for all other **organic** relations.” – Alfred North Whitehead (1929)

“**[E]xtension** is the one essential attribute of whatever is **other than mind.**” – George C. Robertson (1888)



Normal & Reverse Perspective



Darwin's 'Tree of Life' – Single Diagram (1859)

The Limits of Evolutionism – Descartes, Whitehead, McLuhan

“The entire evolutionary process shifted, at the moment of Sputnik, **from biology to technology.**” – McLuhan (1969)



Whitehead's Process-Inversion

- “**Extension is derivative from process**, and is required by it” – Whitehead (1924)
- “For **Descartes** the primary *attribute* of **physical bodies** is *extension*; for the **philosophy of organism** the primary *relationship* of **physical occasions** is *extensive connection.*” – Whitehead (1929)

Centre for Research in the Arts, Social Sciences and Humanities

Extension and Embodiment in Cultural Evolution

with Emma Flynn · Cecelia Heyes · Wybo Houkes
Tim Ingold · Jesse Prinz · Michael Wheeler

Thursday 19 & Friday 20 September 2013
at CRASHH, Alison Richard Building, 7 West Road, Cambridge

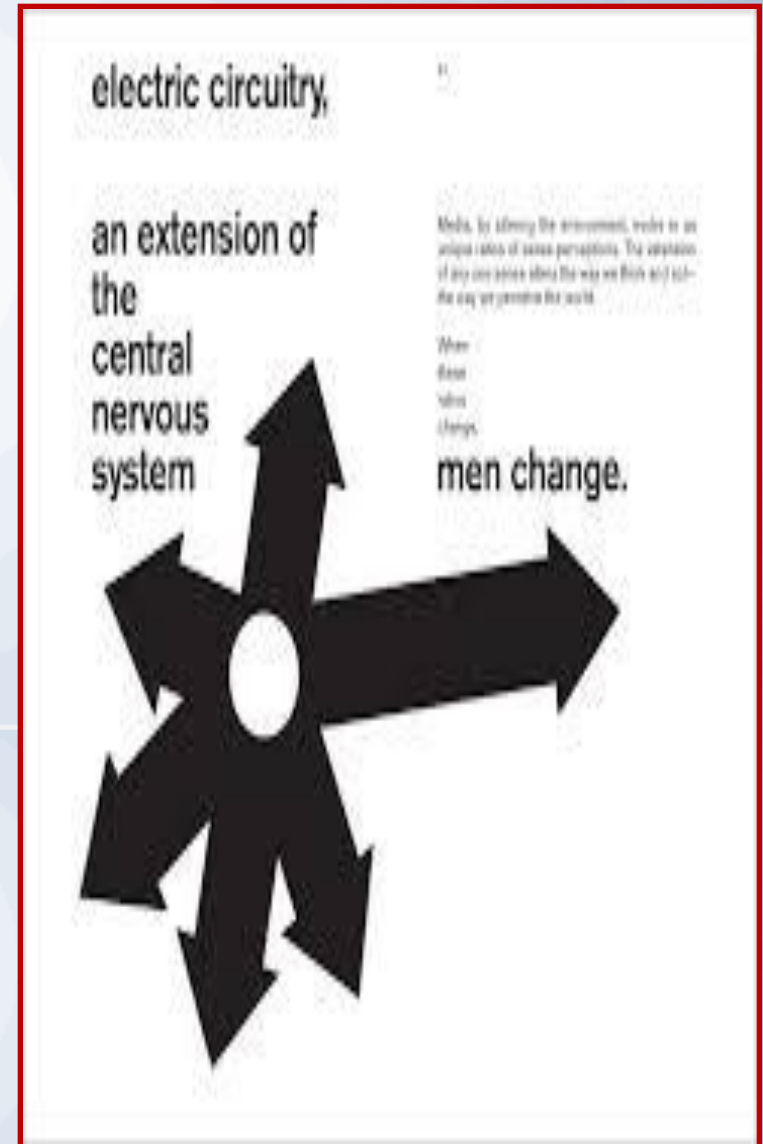
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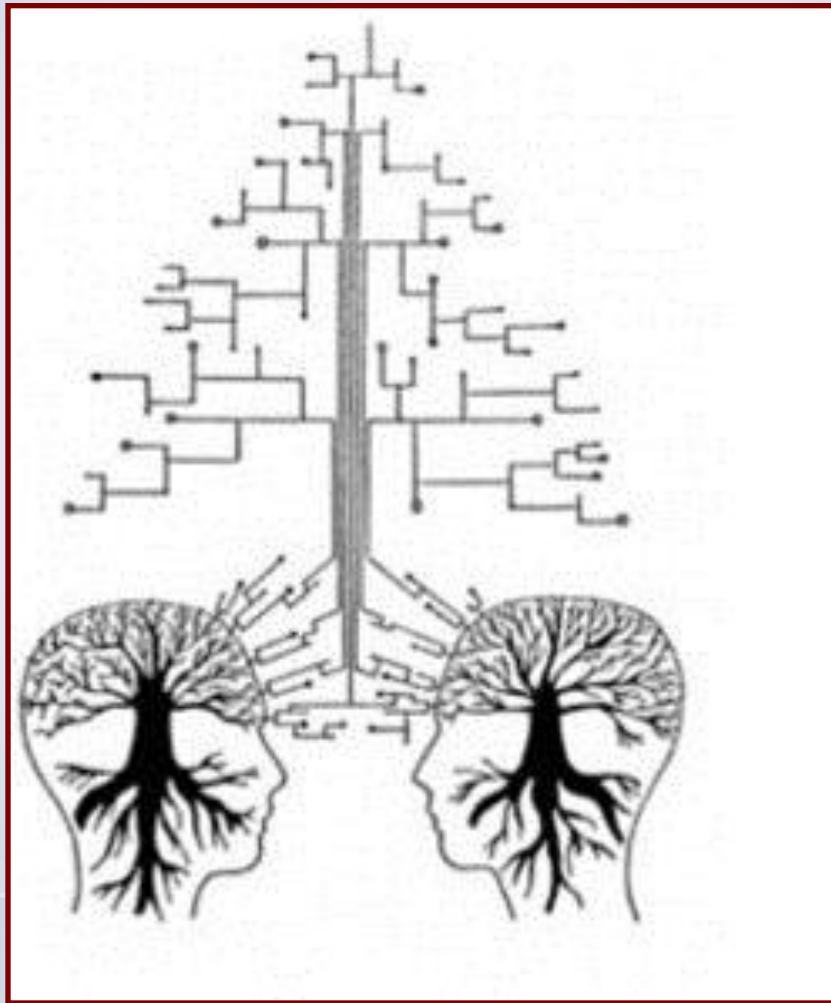
www.crashh.cam.ac.uk/events/2497

From the Philosophical to the Practical Humanity 2.0 – Futurology

Marshall McLuhan's 'Extensions of Man[kind]'

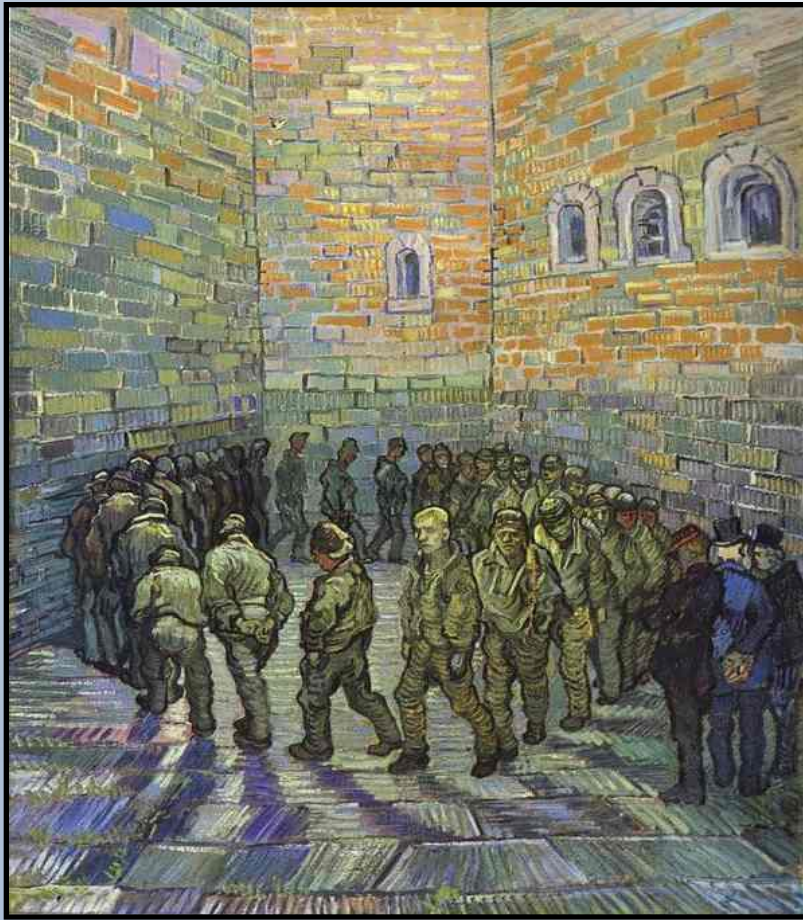
- “The Sage of the Wired Age”
- “That which had been the **first great extension of our central nervous system** – the mass media of **the spoken word** – was soon wedded to the **second great extension** of the central nervous system – **electric technology.**” (1964)
- The **Extended Mind** (Clark & Chalmers 1998), **Extended Knowledge** (Pritchard et al. 2013)



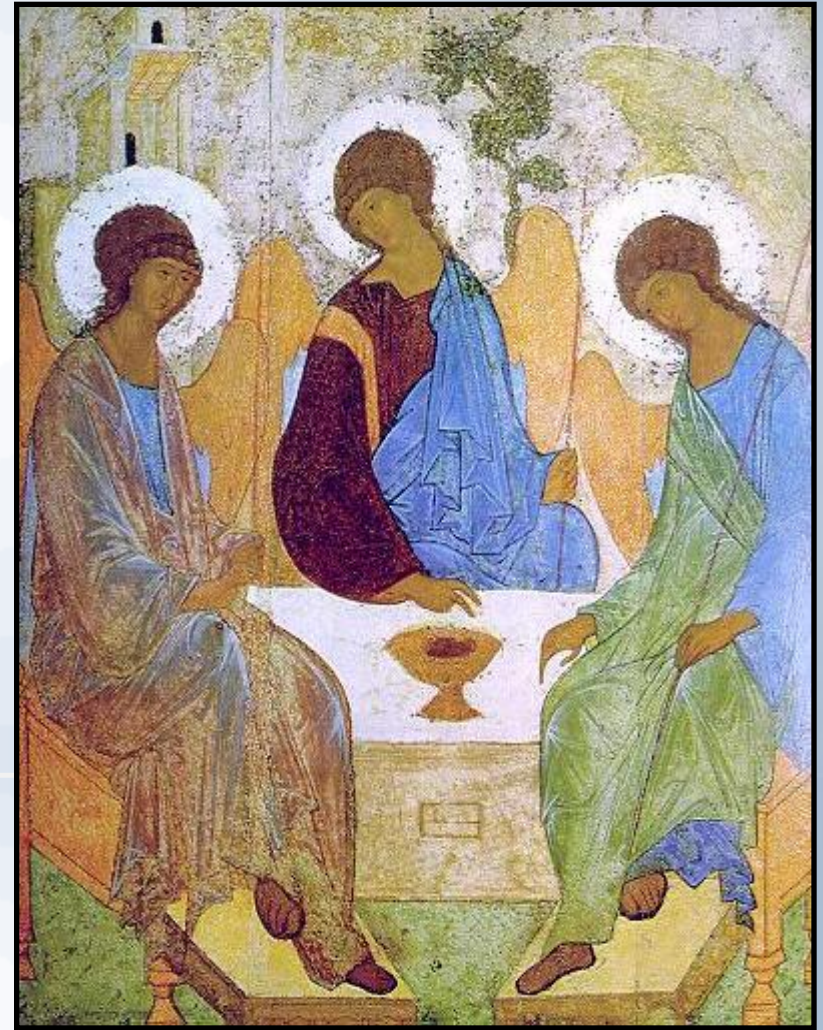


**Extended Knowledge Project
The University of Edinburgh**

Non-Evolutionary Action and Existence



Prisoners – Vincent Van Gogh



The Trinity – Andrey Rublev

Human Extension and Development in the Electronic-Information Epoch

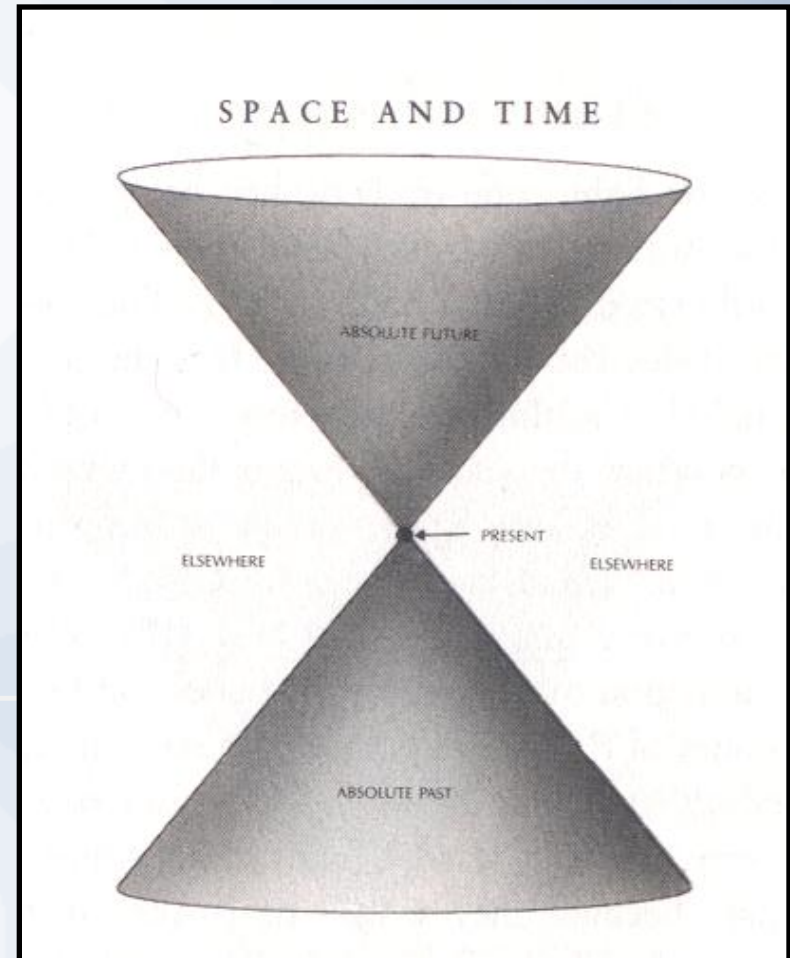
This is difficult for universal evolutionists – exaggeration!

***** Pause *****

What to look for:

*Things that do not evolve;
Things that are purposely
chosen, originate, innovate,
develop; extend.*

Human-made things, artefacts, institutions, systems, societies and their/our development 'extend' from/to people (i.e. individuals and groups) via goal-oriented choices and actions.



Space and Time Cones – Stephen Hawking (1989) – “A Brief History of Time”

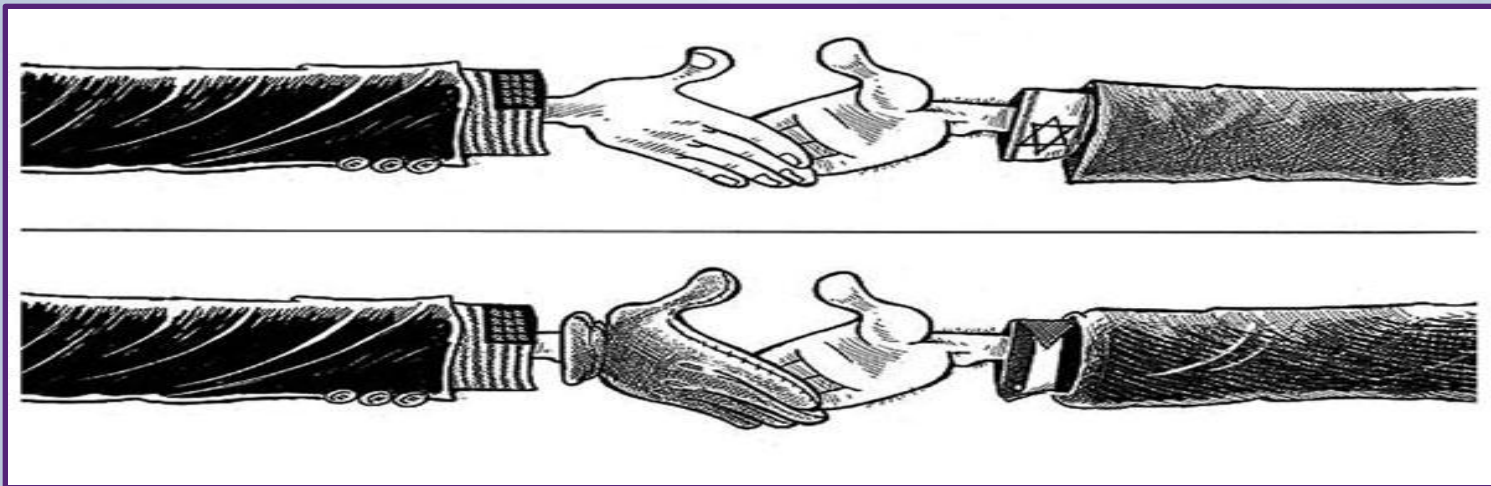
Why is 'Organic' Human Extension Relevant?

Non-Evolutionary Social Theory and Practise

- 1) Recognise the consequences of **dehumanization** caused by naturalistic-evolutionistic ideology in SSH
- 2) Case: Syria & the Middle East – **Peace does not 'evolve'**
- 3) Political-Economics: An **altruistic**, socially responsible, sustainable **global marketplace** with **redistribution**?

The Goal: Personal and community-environmental awareness of human extensions and intensions (pressures, stresses).

Pause for tension. Then bravely extend.



*****Measuring Human Extension as a Reflexive Anthropic Principle*****

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Thank You! Асіў! Спасибо!



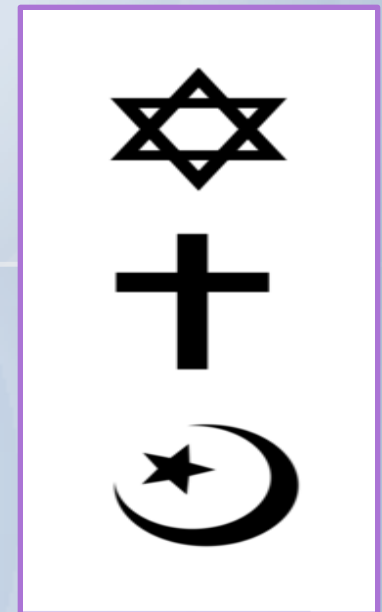
**“The problem is choice.”
– Neo (The Matrix)**

Human Extension Challenge

- Society is an ‘organism’ that doesn’t ‘evolve’ – **non-deterministic** – it/we develop and extend from choices and actions
- The **organic is inspiring** and helps overcome the disenchantment and mechanism of the 20th c.
- Extension was mechanical in the Cartesian style, but in the **Grassmann-Whitehead-McLuhan** style it is a living, organic feature of humanity
- Take a pause, stop ‘evolving,’ and be ready to **extend M-Dimensionally** with purpose – **Ready, SET, Go!**



Nikolai Roerich – Pax Cultura



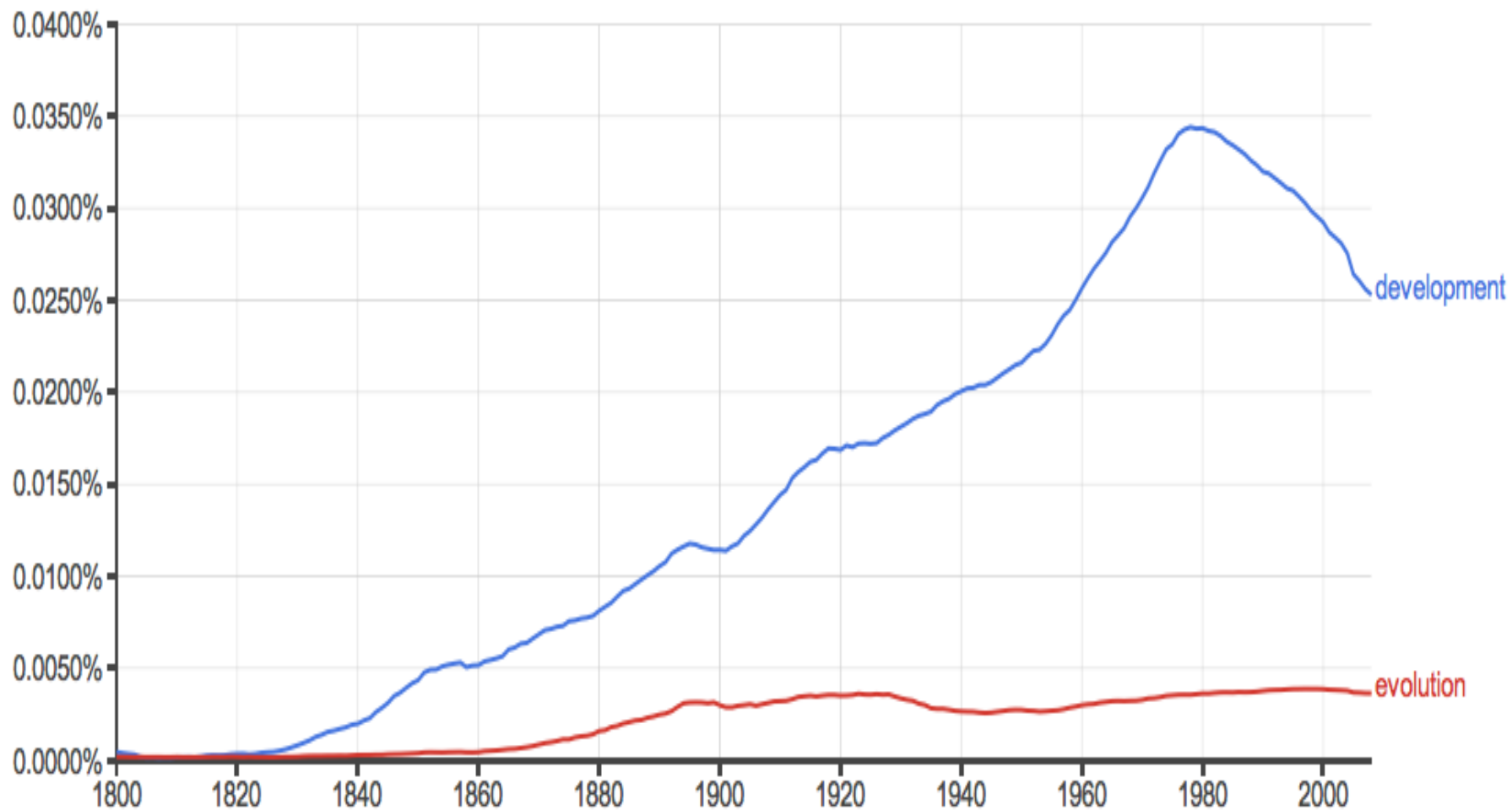
Graph these comma-separated phrases:

development, evolution

case-insensitive

between 1800 and 2008 from the corpus English with smoothing of 3 .

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