Harmony with Nature in the Anthropocene?

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The “Anthropocene”?  

Humans now have an impact on global scale physical processes and material cycles that will be evident in sediment and fossil records over geological timescales.

https://upload.wikimedia.org/wikipedia/commons/a/a9/Teghut_Strip_Mining_Forest_Destruction_by_Vallex_Corp_in_Armenia_trucks.jpg

images from https://commons.wikimedia.org
The “Anthropocene”?

“You are Here”: the Holocene and the Anthropocene

http://www.geosociety.org/science/timescale/
The “Anthropocene”?  

• “Starting date”? ➔ hotly debated…  
  – Beginning of agriculture (6-8 ky BC)?  
  – Mass intercontinental migrations (1600s)?  
  – Industrial Revolution (1700s)?  
  – Radioactive fallout from nuclear weapons tests (1960s)?  
  – Plastics, concrete, chicken bones…  
  – The “Great Acceleration”?
The “Great Acceleration” (based on Steffen et al., Anthropocene Review, 2015)
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Climate Change – a Key Indicator of the Anthropocene

Global Land–Ocean Temperature Temperature

Temperature Anomaly (°C)

-0.4 -0.2 0.0 0.2 0.4 0.6 0.8 1.0

Annual Mean
5–year Running Mean

1880 1900 1920 1940 1960 1980 2000

From http://data.giss.nasa.gov/gistemp/graphs_v3/
Not Only Temperature…

- Changes in precipitation (distribution and intensity)
- Rising sea levels (ca. 20 cm since 1900)
- Ocean Acidification
- Melting glaciers and ice sheets
- Fresh water shortages and agricultural difficulties
- Shifting climate zones (→ Extinctions, Migration)
- Tipping points
- Changes in extreme events (frequency and intensity):
  → heat waves, severe storms, droughts, floods
- Economic impacts
- Possibly increased international stress and conflicts
- …and many other effects
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Diversity of Challenges (➔ Harmonize Responses?)
Harmonizing Responses?

How ?!?  ➔ Current mitigation efforts insufficient... (...by a long shot!)
Proposals for “Climate Geoengineering”

- CH₄, BC, O₃, etc.
- CO₂
- CCU
- CDR
- CCS

a | Large-scale afforestation
b | Bioenergy with carbon capture and storage (BECCS)
c | Biochar production and burial
d | Enhanced weathering and ocean alkalisation
e | Direct chemical capture and storage of CO₂ (DACCES)

f | Space Mirrors
g | Stratospheric Aerosol Injection (SAI)
h | Cirrus Cloud Thinning (CCT)
i | Marine Sky Brightening (MSB)

Figure under review, please do not share or distribute
And how far does our Hubris go...???
If we truly *value* Harmony with Nature, what can we do?
**Diversity** of Approaches

- International: for example, various UN programs
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National Environmental Provisions

The following overview of national law highlights the role that the Environment has played in Constitutions around the world. There are 193 UN member states, and each of them is member of the UN General Assembly. Each country page displays relevant constitutional passages containing specific references to the
Diversity of Approaches

- International: for example, various UN programs
- City/town: Ecovillages and similar initiatives

http://auroville.org
Diversity of Approaches

- International: for example, various UN programs
- City/town: Ecovillages and similar initiatives
- Individual: Personal/family efforts in “typical” urban and rural settings

All images from https://commons.wikimedia.org
Diversity of Approaches

- International: for example, various UN programs
- City/town: Ecovillages and similar initiatives
- Individual: Personal/family efforts in “typical” urban and rural settings
- Meta-level: connecting “inner harmony” with “outer harmony” (between humans and with nature)

A good traveler has no fixed plans and is not intent upon arriving.
A good artist lets his intuition lead him wherever it wants.
A good scientist has freed himself of concepts and keeps his mind open to what is.

- *Tao Te Ching* (Stephen Mitchell translation)