Grand Unified Theory of Resilience & Sustainability

On the way to a research proposal.
Figure 1  Overview new Sciences

1972 Limits to Growth

2011 Towards Grand Unified Theory for Sustainability

http://wikipedia.org/wiki/Complexity
GRAND UNIFIED THEORY OF RESILIENCE & SUSTAINABILITY

PLANET METABOLISM COMPLEXITY NETWORKS

2 DOMAINS & 4 PILLARS

GAIA

ANTHROPOGENIC

PHYSICAL

BIO-

MATERIAL

SOCIO-

USE

ECONOMIC

I

II

III

IV

GRAND UNIFIED THEORY OF RESILIENCE & SUSTAINABILITY

R.W. 10.09.2011
Fig 2b. Sciences of Networks & Complexity
Grand Unified Theory for Resilience & Sustainability

Universal Laws
Thermodynamics
Attraction-repulsion

Gaia Domain
Anthropogenic Domain
Network clusters & nodes I-II-III

Societal Value Systems IV

Overshoot
Resilience-Sustainability
Collapse-Suicidal

RW 10.09.2011
The Grand Unified Theory
For Sustainability

Fig 3. Sustainability Network: Four Sectors and their Hubs
Upper half: Gaia-Domain; Lower half: Anthropogenic-Domain
Fig 4b. Sustainability Network: Sector II – Clusters, Hubs & Nodes

Gaia-Domain
Anthropogenic Domain

Fig 4c. Sustainability Network: Sector III, Clusters, Hubs & Nodes

III Anthropogenic Material Use

Population Tendencies

# Cities vs Country side

Communication Infrastructure

Living Space per ca

Energy/Water Resources/Minerals

Fossil

GHG

Regional

Renwables

Solar

Wind

Biomass

Fresh Water

ICT

Solid

Waste

Infrastructure

Air

Soil

Water

Ecological

Migration

Aging

Demography Numbers

Built Environ Habitat-Urban Infrastructure

Footprint

Water

Dark

Light

RW 15.08.2011 Vers10.1
Anthropogenic-Domain

**IV Anthropogenic Socio-Economic**

- Equity
- Health
- Education
- Well being Welfare
- Governance Institutional Manag. Political Culture
- Global ↔ Local
- Geo-policy & Population
- Eco ↔ Anthropo Centrism
- Is Humanity Suicidal?
- Commons
- Market Economy
- Green Economy
- Atm-Bio-Ocean

**Fig 4d. Sustainability Network: Sector IV, Hubs & Nodes**
Fig 4d. Sustainability Network: Sector IV, Hubs & Nodes

Anthropogenic-Domain

- Equity
- Health
- Education
- Well being Welfare
- Governance Institutional Manag. Political Culture
- Geo-policy & Population
- Global↔Local
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