



**Steinbeis**



# RISC-Processes and RISC-Societies

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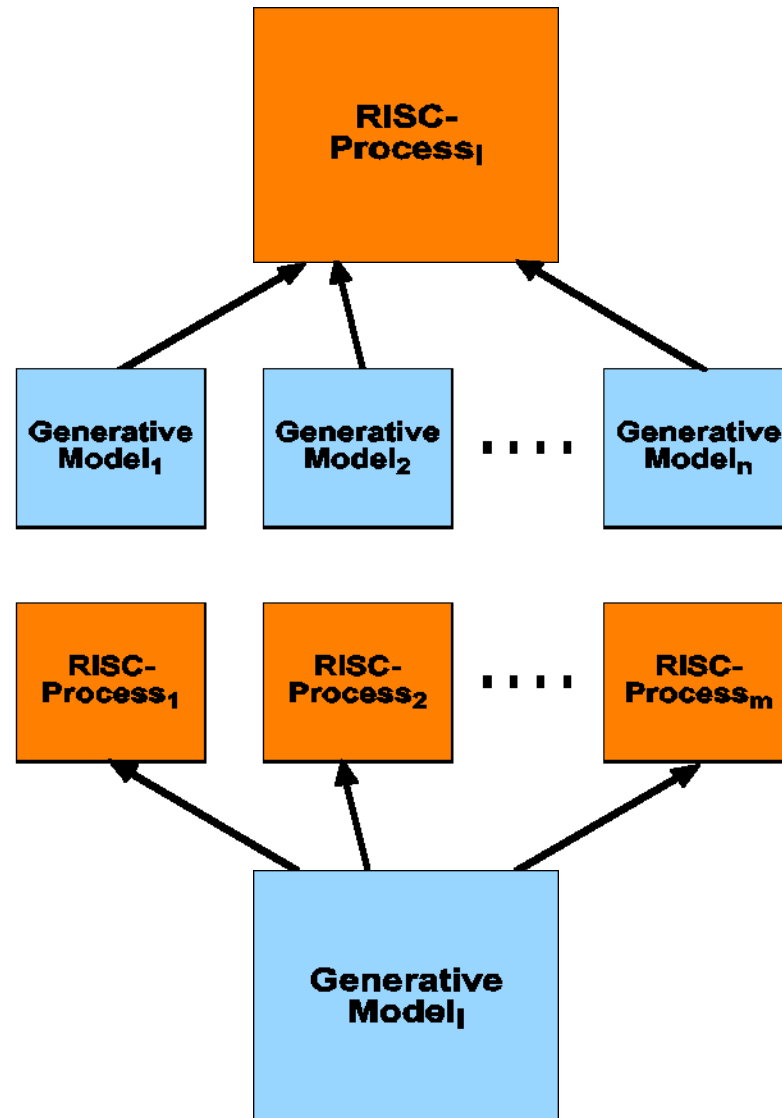
# RISC-Processes and RISC-Societies

- RISC-Processes: Rare Incidents, Strong Consequences
- Main Characteristics of Contemporary RISC-Societies
- Coupled RISC-Processes as an Enormous Cognitive Challenge
- Relevant Literature

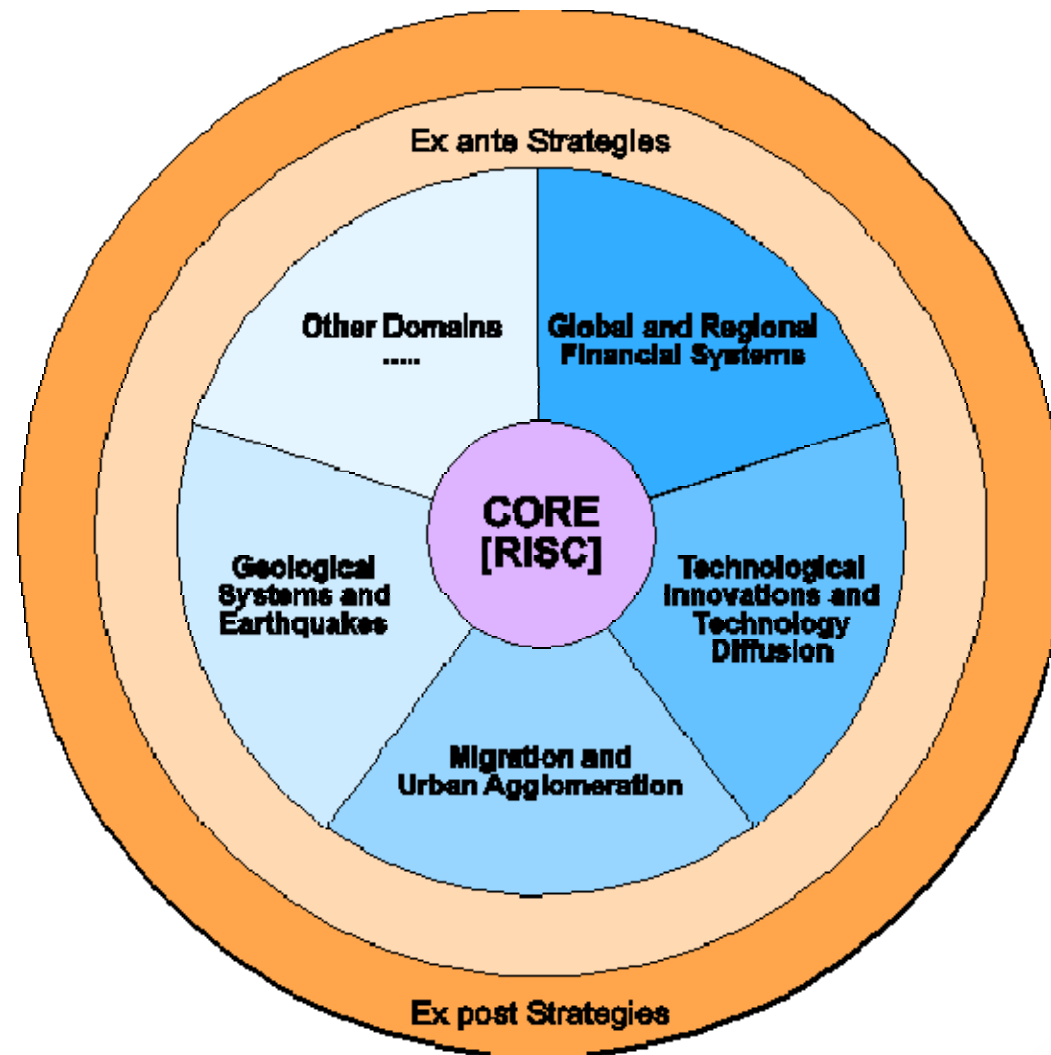
# RISC-Processes and Power-Law Distributions

- Sandpile-Paradigm (Avalanches)
- Geomorphology
- Earthquakes
- Solar Flares
- Forest Fires
  
- Viruses and Epidemics
- Ecological Systems
- The Brain
- Cell-Metabolism
  
- Language (Distribution of words, letters, etc.)
  
- Scientific Quotations
- Scientific Breakthroughs (Institutes)
- Innovations
- Financial Markets
- Wealth and Income
- Migration and Settlement
- Traffic Jams

# RISC-Processes and Generative Models and Mechanisms



# Three Domains for the RISC-Program



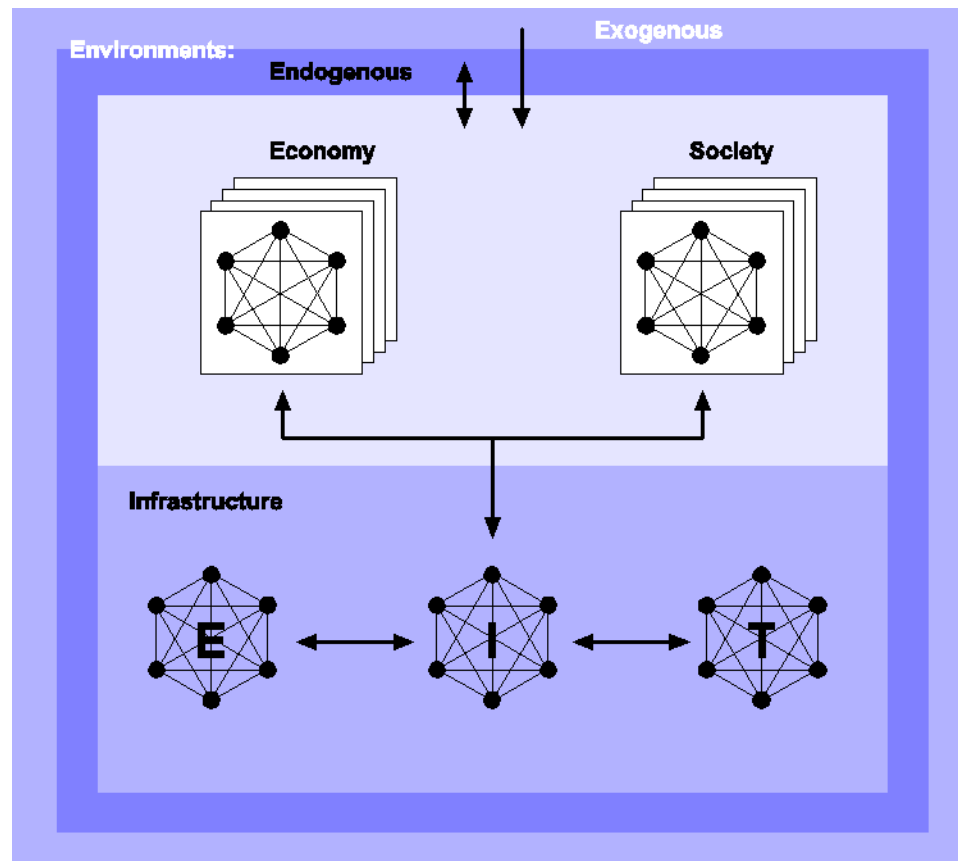
# The Traditional Configuration of RISC-Societies

E: Energy

I: Information

T: Transport

Environmental and Economic, Societal and Infrastructural RISC-Processes as Separated

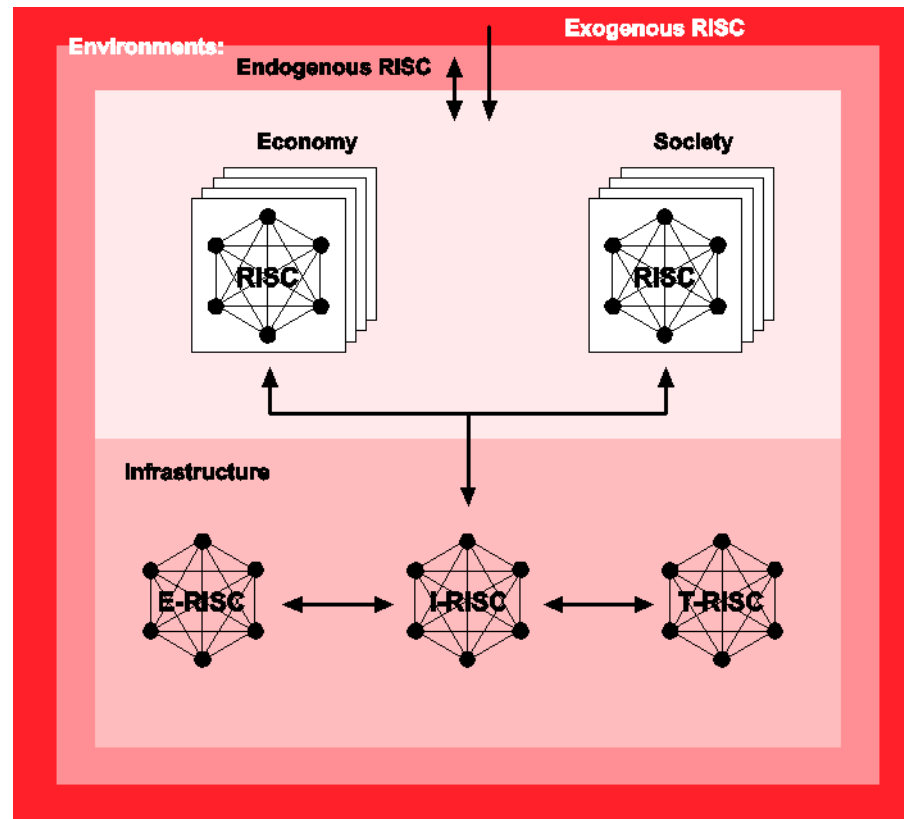


# The Traditional Configuration of Schumpeterian Long Waves

Long Wave	From - Peak	To	Infrastructural Segment	
Steam engines/ Textile industry	1788	1814	1848	Energy
Railway	1848	1873	1896	Transport
Electrical industry	1896	1914	1945	Energy
Automobile	1945	1973	1996	Transport
ICT/Internet	1996	?	?	Information

# The Grand Contemporary Challenge for RISC-Societies

Coupled RISC-Processes: Environment + Economy & Society & Infrastructure





# Unlocking the Secrets of Coupled RISC-Processes: Trans-Disciplinary Explorations



# Relevant Literature

Müller, K.H. (2008), Farewell to Long Waves. Substituting Cyclical Approaches in Innovation and Technology Research with a RISC-Framework. RISC-Research Paper No. 1. Ljubljana:University of Ljubljana

Kajfež-Bogataj, L., Müller, K.H., Svetlik, I., Toš, N. (2010)(eds.), *Modern RISC-Societies. Towards a New Paradigm for Societal Evolution*. Wien:edition echoraum

Müller, K.H., Svetlik, I., Toš, N. (2010), „The RISC-Program: An Experiment in Trans-Disciplinary Knowledge Production at the University of Ljubljana”, in: Kajfež-Bogataj, L., Müller, K.H., Svetlik, I., Toš, N. (eds.), *Modern RISC-Societies. Towards a New Paradigm for Societal Evolution*. Wien:edition echoraum, 25 – 42

Hollingsworth, J.R., Müller, K.H. (2008), „Transforming Socio-Economics with a New Epistemology“, in: *Socio-Economic Review*, no. 3, vol. 6, 395 – 426

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