

RSD8

2019
Chicago

**Resetting
Growth
Curves**

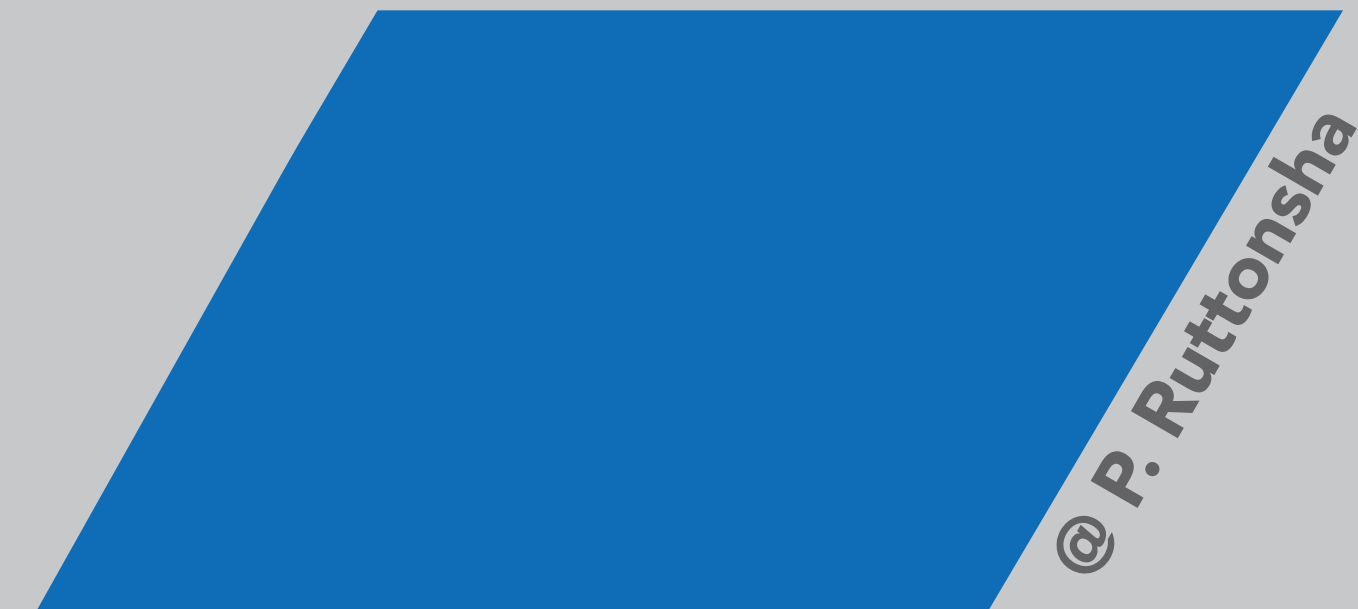
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WATERLOO

“Almost all existing approaches to the challenge of global sustainability focus on relatively specific issues, such as the environmental consequences of future energy sources, the economic consequences of climate change, and the social impact of future energy and environmental choices. While such focused studies are of obvious importance and where most of our research efforts should be directed, they are not sufficient. They focus primarily on the trees and risk missing the forest.”

(West, Scale, 2017, p.412)



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Systematizing

Problem

Solving for

Transition

Synchronizing

Social with

Ecological

Systems

**Kate
Raworth**

**Doughnut
Economics**

**Stockholm
Resilience
Centre**

**Planetary
Boundaries**

**The Rockefeller
Foundation-
Lancet
Commission on
Planetary
Health**

**Planetary
Health**

**United
Nations**

**Sustainable
Development**

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Conditions

Processes

Nature

History

Concepts

**Balancing Among
Planetary, Socio-Ecological
Systems Dynamics**

Methodologies

**Evolving Regenerative
Science, Innovation
and Governance**

Analyses

**Profiling
Emergent
Patterns**

Applications

**Reorganizing
Multiscale
Systems**

"An evolutionary theory seeks to understand a phenomenon by describing the processes that brought that phenomenon into being and that generate the transformations it successively undergoes."

(Lane et al., Complexity Perspectives in Innovation and Social Change: From Population to Organization Thinking, 2009, p.12)



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The order and dynamics of social and ecological systems can be compared on similar foundations, as constituents of a shared living world (see Fritjof Capra, *Web of Life*, 1996)

Challenges for sustainability have arisen primarily against the backdrop of the accelerating complexity of human life on Earth, over time, including aspects of consciousness, culture, and power (see David Christian, *Origin Story*, 2004)

Social network interactions generate collective productivities and economies of scale, which perpetuate super-exponential acceleration of socioeconomic activities (see Geoffrey West, *Scale*, 2017)



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