

## Complexity Epistemology & Real Property Rights

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Introduction  
Complexity and Transdisciplinarity  
The Land Policy Challenge  
Engaging an Holistic Approach  
Helpful Hierarchies  
Simplex / Complex / Multiplex  
Directions

Introduction





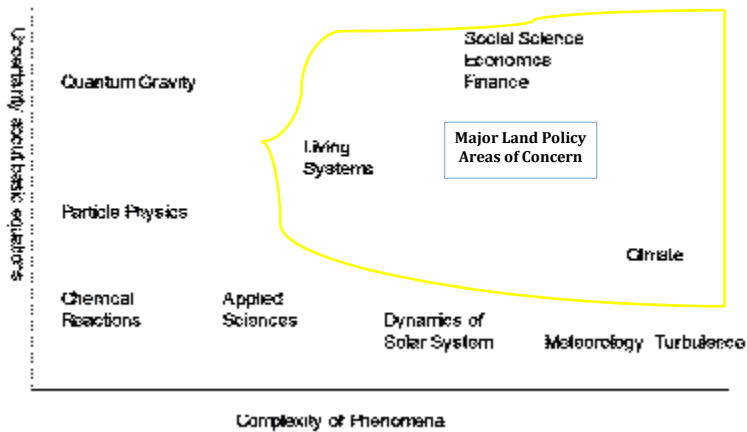
Context

FIG



Context

FIG



Barrow, John D. (1999) *Impossibility: The Limits of Science and the Science of Limits*. Vintage. London, p. 68.

Context

FIG

The Orthogenic Principle states that development always proceeds from a position of relative globality and lack of differentiation to one of increasing differentiation, articulation, and hierarchical integration.

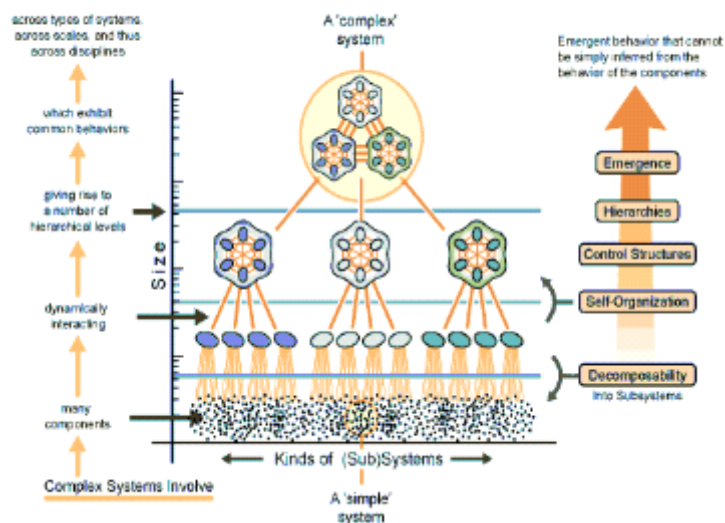
Definition of Orthogenic Principle


Autopoiesis is defined as an organized network of processes of transformation and destruction of components that produce the components that:

1. Through their interactions and transformations continuously regenerate and realise the network of processes that produced them; and
2. Constitute ... a concrete unity in space which the components exist by specifying the topological domain of its realisation as a network.

Source: After Maturana & Varela (1992) *The Tree of Knowledge*. London. Shambhala

### Characteristics of Complex Systems

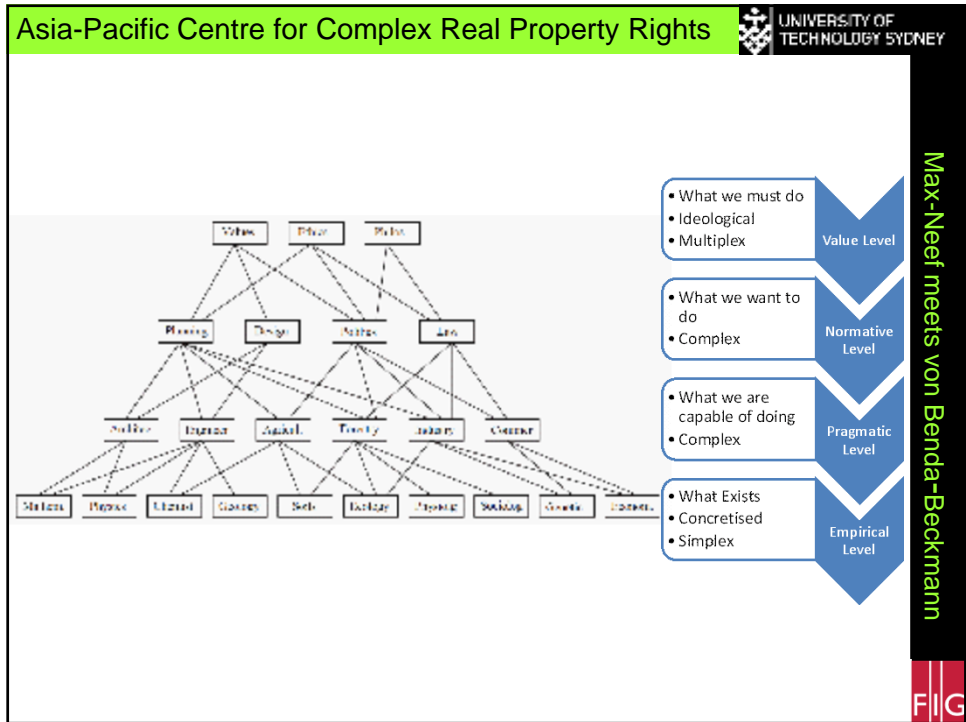


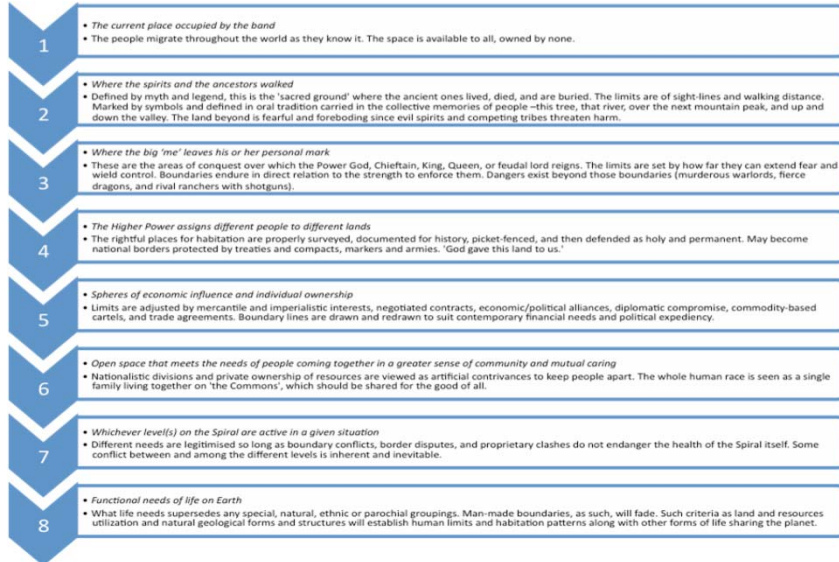
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Accounting	History	Project Management
Appraisal and Valuation	History of Design	Psychology
Architecture	History of Science	Public Administration
Archaeology	Humanities	Qualitative Methods
Behavioural Economics	Information Theory	Quantitative Methods
Computer Science	Institutional Economics	Regional Planning Theory
Computer Technology	Investment	Religious Studies
Construction Management	Law	Sales
Decision Science	Management	Science
Decision Theory	Management Science	Sociology and Anthropology
Ethics	Managerial Accounting	Spirituality
Environmental Science	Managerial Economics	Strategy
Economics	Marketing	Statistics
Engineering	Philosophy	Transportation
Finance	Planning & Control Systems	Urban Land Economics
Geography	Political Science	Urban Planning Theory

Fundamental Disciplines for Real Estate Involvement (Boydell 2007, adapted from Roulac 2001)

Fundamental Disciplines for Real Estate Involvement





Appropriate Land Tenure III  
Different Environments

One Model of Appropriate Land Tenure at Different Developmental/ Environmental Levels (adapted from Beck & Cowan 2003)

