

The Eighth Futurological Colloquium *"Designing the Future in Europe '05,,*

Second Prague Workshop On Futures Studies Methodology

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Global Civilization Change Model Version 1.0

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Global Civilization Change Model Version 1.0 - Methodologies

- **Dissipative Structures – Ilya Prigogine**
- **Implicated Order and Holomovement – David Bohm**
 - **Creative Destruction – Joseph Schumpeter**
 - **Networking – John Arquilla, David Ronfeldt**
- **Network-Centric Warfare – Arthur Cebrowski, John Garstka**
- **Swarming – Kevin Kelly, John Arquilla, David Ronfeldt**
 - **Hidden Civilization Code – Alvin Toffler**
 - **Information Superiority – David Alberts**

Global Civilization Change Model Version 1.0 – Concepts

Core and Gap Concept – Thomas P. M. Barnett

Market State Concept – Philip Bobbitt

Value Memes Concept – Don Beck, Chris Cowan

**New Spaces Concept – Michael Vlahos, John
Arquilla, David Ronfeldt**

**Information Society Concept – Alvin Toffler, John
Naisbitt**

Social Evolution Concept – David Ronfeldt

Syntropy Concept – Buckminster Fuller

Global Civilization Change Model Version 1.0 - Transformations

Core to Gap – Globalization 3.0

Nation States to Market States – Market State Economy

**Hierarchical Systems to Value Memes Network Systems –
Value Memes Network Society**

Global Civilization Attractors

Economic Productive Factors as Civilization Attractors

- Economic and civilization transformation is process of change of civilization attractors
- Economy and civilization are restructuring around new civilization attractors in the form of economic productive factors
- Platform-centric organization of civilization is substituted by network-centric organization



Industrial Age Order

Industrial Society

Civilization Attractors:

Capital, Work, Money



Industrial Age Order

Industrial Power Centres:

USA

Soviet Union

Western Europe

Japan

Canada



Information Age Order

Information Society

Civilization Attractors:

Information, Knowledge, Attention

Information Age Order

Information Age Power Centres:

USA

EU

G8

Global Corporations

Alvin Toffler's global gladiators

Basic Structure of Economy

Industrial Age Structure of Economy:

Platform-Centric Organization – Nation States

Information Age Structure of Economy:

Network-Centric Organization – Global Networks

New Ordering Principle



Information Theory of Value





Information Theory of Value

Information is Creating Value

Information Theory of Value



Information is Creating Structure

Information Theory of Value



Information is Creating Order

Global In-Formational Factor

Information as In-Formational and Structure Creating Factor

- **Information is in-formational and structure creating factor, which is creating a new structure of economy, society and civilization – information society**

Global In-Formational Factor

- **Information is new productive factor**
- **Information is new form of capital**
- **Information is new form of resource**



Emerging New Spaces

Cyberspace

Infosphere

Blogosphere

Wikisphere

Space Economy



Emerging New Structure

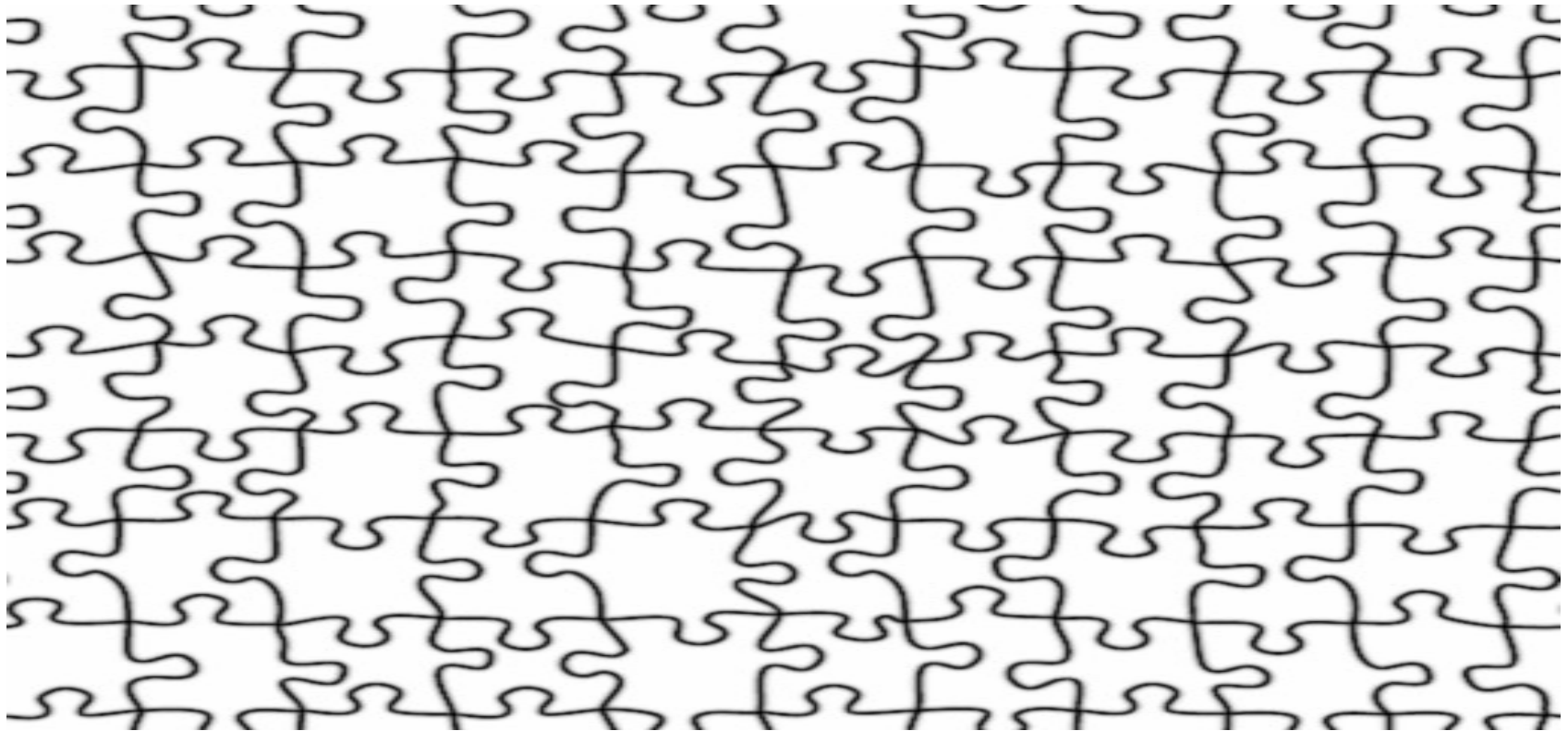
Puzzle Paradigm



Emerging New Structure

Puzzle Structure

Emerging New Structure



Emerging New Structure

Wikipedia





Emerging New Organization



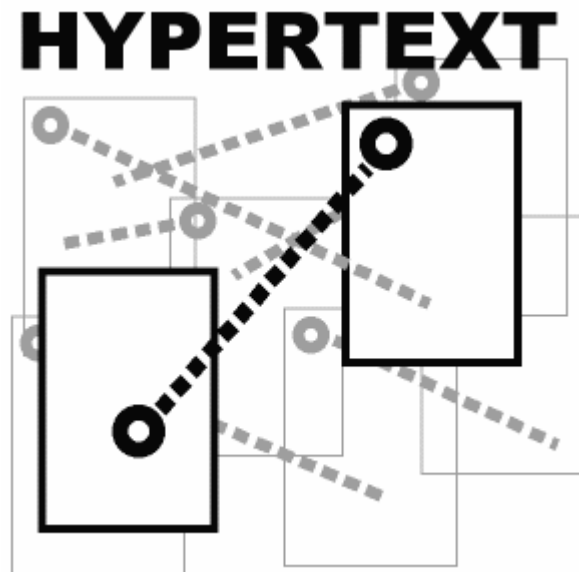
Hypertext



Emerging New Society

Hypertexted Society

Emerging New Society Organizational Structure



Emerging New Structure

SPIRAL DYNAMICS:
the evolution of
consciousness and culture

The history and forecasting theory of Spiral Dynamics, originating with the work of Clare W. Graves in the 1960s, and developed and applied by Dr. Don Beck and others, charts the evolution of human culture and civilization over roughly 100,000 years ago, through eight color-coded future phases or levels of development, with a shift in the factors. These models are systems of values that evolve as a result of the movement of individuals or to the watershed of whole societies in the world today at the same levels of maturation — from a vital state (Stage 1) to a social democratic system, and from a stage based on human development (Stage 1) to a social democratic system, which is a very natural social result just beginning to emerge.

	<p>UNBORN MIND Unborn mind — starting 100,000 years ago Description: An empty vessel or pattern of relationships Manifestation: Instincts, reflexes, and basic survival instincts</p>
	<p>BELOW MIND Below mind — starting 10,000 years ago Description: The world is a hostile, dangerous place to a human and other animals Manifestation: Survival, responsibility, and spontaneity; hierarchical power</p>
	<p>GREEN MIND Green mind — starting 5,000 years ago Description: A human subject to nature and other species separation, from human dignity Manifestation: Fairness, justice, and equity; the early formation of community</p>
	<p>ORANGE MIND Orange mind — starting 1,000 years ago Description: A human subject to other humans and separation Manifestation: The emergence of individualism, individualism, and individualism</p>
	<p>BLUE MIND Blue mind — starting 500 years ago Description: An ordered universe under the control of the universal laws Manifestation: The rise of money, science, and justice, which are the principles of organization</p>
	<p>RED MIND Red mind — starting 100 years ago Description: A world where the strongest and best survive Manifestation: Survival, competition, individualism, and individualism</p>
	<p>PURPLE MIND Purple mind — starting 10,000 years ago Description: A world where the best and the best survive Manifestation: The rise of the world and the world's best, which are the principles of organization</p>
	<p>BEYOND MIND Beyond mind — starting 10,000 years ago Description: A world where the best and the best survive Manifestation: The rise of the world and the world's best, which are the principles of organization</p>

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Global Civilization Change

**Global Civilization Change
through
System Perturbations**

Global Civilization Change



Industrial Society



System Perturbations



Information Society

Global Civilization Change



Industrial Society Economy



Information Theory of Value



Information Society Economy

System Perturbations Theory



**Thomas P. M. Barnett: The Pentagon's New
Map**

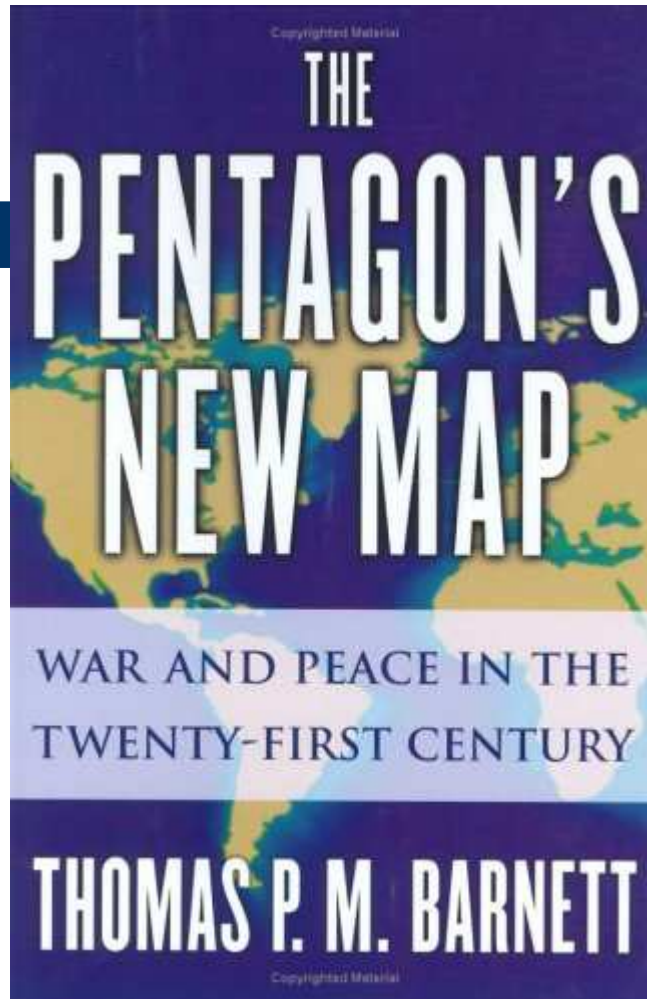
**Thomas P. M. Barnett: The Blueprint for
Action**

System Perturbations Theory

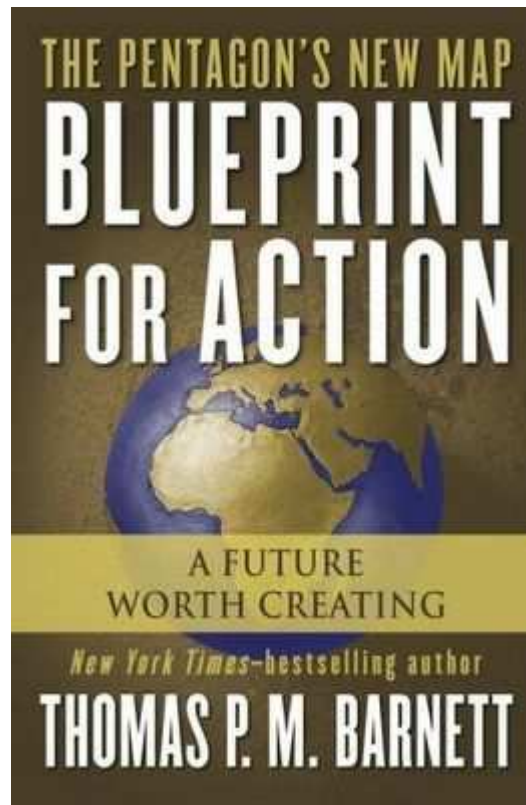
Thomas P. M. Barnett



System Perturbations Theory



System Perturbations Theory



System Perturbations Theory

System perturbations — A system-level definition of crisis and instability in the age of globalization; a new ordering principle

Thomas P. M. Barnett

System Perturbations Theory

Main themes of Thomas P. M. Barnett's theory:

Global World = Core and Gap

Gap is shrinking through four flows:

- **People migration**
 - **Energy**
 - **Investments**
 - **Security**

System Perturbations Theory

Main themes of Thomas P. M. Barnett's theory:

Connectednes

Disconnectednes

System Perturbations

Vertical Systems

Horizontal Systems

Vertical Shocks

Horizontal Shocks

Information Theory of Value

- **Economic value is creating by information**
 - **Economic value is adding by information**
- **Economic profit is generating by incorporating more information into products and services**
- **Generating of information is disequilibrium creating process**
- **Diffusion of information is equilibrium renewing process**
- **Networking process is based on better access to information therefore more networks means greater value and more profits**

Global Civilization Attractors

Economic Productive Factors as Civilization Attractors:

- Economic and civilization transformation is process of change of civilization attractors
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- Platform-centric organization of civilization is substituted by network-centric organization

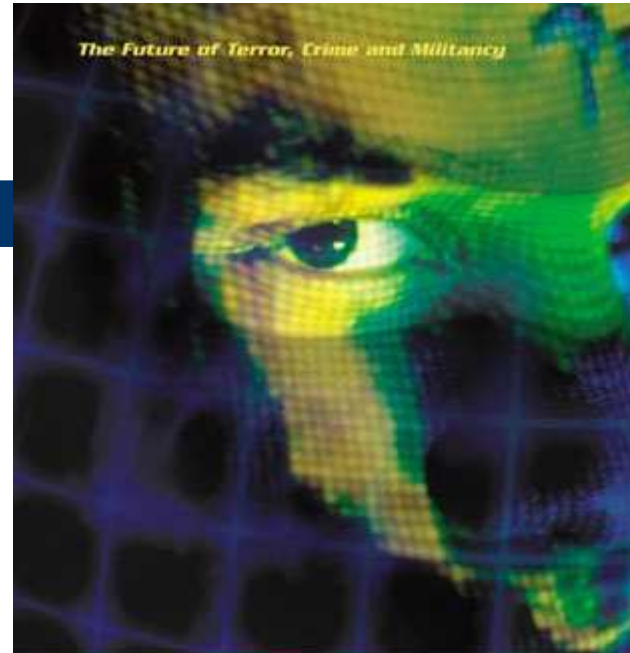


Societal Evolution



**David Ronfeldt: Tribes, Institutions, Markets,
Networks: A Framework about Societal
Evolution. Rand, Santa Monica, CA, 1996**

The Future of Terror, Crime and Militancy



Networks and Netwars

John Arquilla · David Ronfeldt

National Defense Research Institute RAND

Societal Evolution

David Ronfeldt:

Four basic forms of organizations:

- Tribes – the kinship-based tribes
- Institutions – the hierarchical institutions
- Markets – the competitive-exchange markets
 - Networks – the collaborative networks

Societal Evolution

David Ronfeldt:

Four types of societies:

- **S1 = T** Somalia, Chechnya
- **S2 = T + I** Cuba, Soviet, Union
- **S3 = T + I + M** Chile, China, Mexico
- **S4 = T + I + M + N** post-industrial democracies

Market State Theory

Philip Bobbitt: Shield of Achilles

New Constitutional Order – Market State

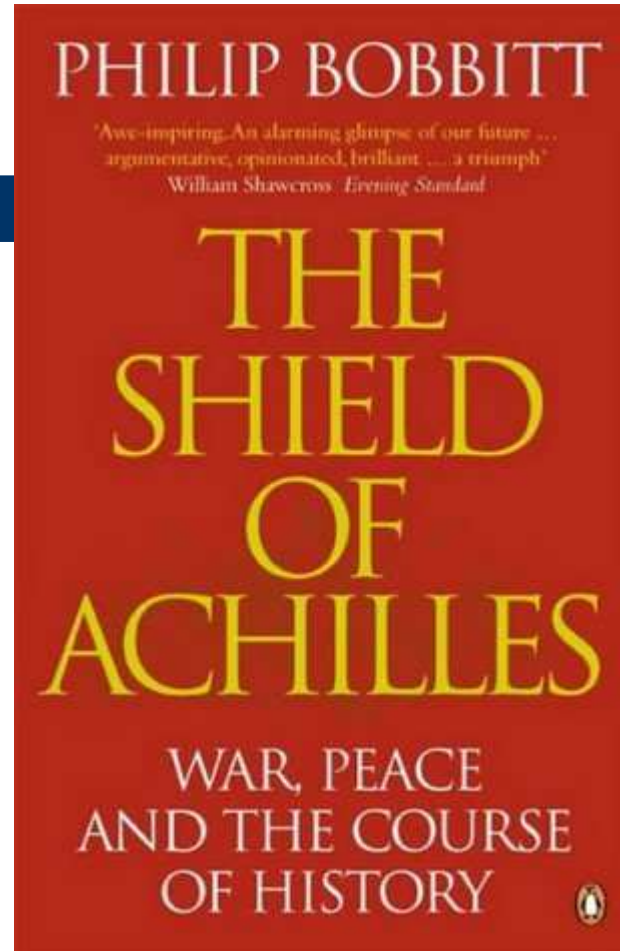
Main shift from nation state to market state

Market State Theory

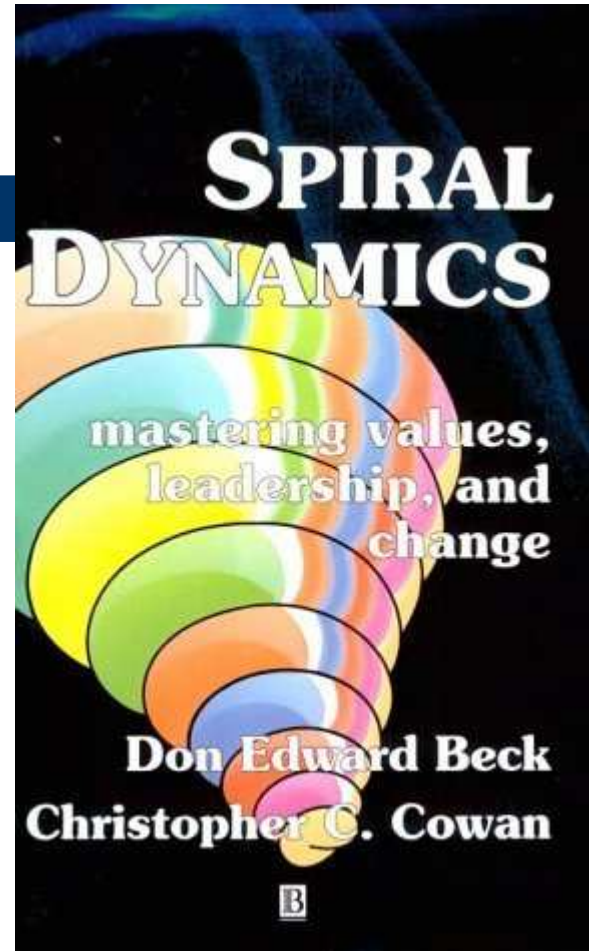
Philip Bobbitt



Market State Theory



Spiral Dynamics Theory



Source of Spiral Dynamic Theory

Clare W. Graves - The Emergent Cyclical Levels of Existence Theory (ECLET)



Spiral Dynamics Theory

Don Beck



Spiral Dynamics Theory

Chris Cowan





Spiral Dynamics Theory

Ordering Principle – Value Memes



Spiral Dynamics Theory

Societal Attractors – Value Memes

Spiral Dynamics Theory – Value Memes

8 value memes according to Don Beck and Chris Cowan:

Beige Meme – Instinctive/Survivalistic Meme – starting 100.000 years ago

Purple Meme – Magical/Animistic Meme – starting 50.000 years ago

Red Meme – Impulsive/Egocentric meme – starting 10.000 years ago

Blue Meme – Purposeful/Authoritarian Meme – starting 5.000 years ago

Orange Meme – Achievist/Strategic Meme – starting 300 years ago

Green Meme – Commutarian/Egalitarian meme – starting 150 years ago

Yellow Meme – Integrative meme – starting 50 years ago

Turquoise Meme – Holistic meme – starting 30years ago

Don Beck, Chris Cowan

Meme - definition



Meme - a unit of cultural transmission, or a unit of imitation

Richard Dawkins

Spiral Dynamics Theory

Value memes are organizing principles that act like attractors for the content-rich memes Dawkins and Csikszentimihalyi describe. Big value memes are the amino acids of our psycho-social 'DNA' and act as magnetic force which binds memes and other kinds of ideas in cohesive packages of thought.

Don Beck, Chris Cowan

Value Memes Networks

8 value memes networks of global civilization:

Beige Meme – Instintic/Survivalistic meme network

Purple Meme – Magical/Animistic meme network

Red Meme – Impulsive/Egocentric meme network

Blue Meme – Purposeful/Authoritarian meme network

Orange Meme – Achievist/Strategic meme network

Green Meme – Commutarian/Egalitarian meme network

Yellow Meme – Integrative meme network

Turquoise Meme – Holistic meme network

Clash of Value Memes Networks

**War on Terrorism:
Clash of
Orange Value Meme Network – USA
versus
Red Value Meme Network – Al Qaida**

Clash of Value Memes Networks

Clash of Civilizations – Samuel Huntington's theory



Clash of Civilizations roots in:

- value memes
- interpretations of Good and Evil within Civilizations

Clash of Civilizations are example of Clash of Value Memes Networks within Civilizations

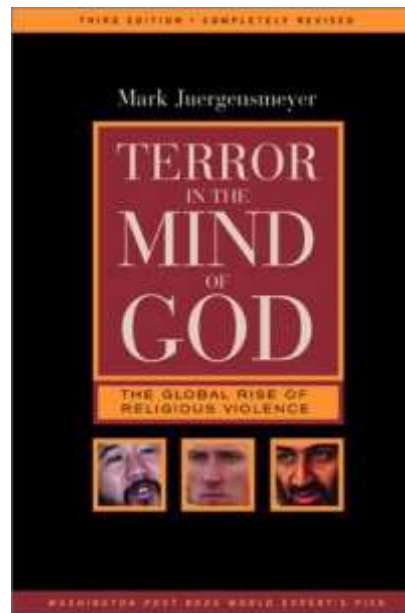
Clash of Value Memes Networks

Cosmic Wars – Mark Jungensmeyer's theory



Clash of Value Memes Networks

Cosmic Wars – Mark Juergensmeyer's theory



Clash of Value Memes Networks

Cosmic Wars – Mark Jungensmeyer's theory



Cosmic Wars between Good and Evil roots in:

- value memes
- interpretations of Good and Evil

Cosmic Wars are example of Clash of Value Memes Networks

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Global Civilization Change Model

Scenarios Version 1.0



GCCM Scenarios 1.0

Driving Forces

- **Core – Gap integration**
- **Market state transition**
- **Transition to value memes networks**

GCCM Scenarios 1.0

Main Topics

- **System Perturbations**
 - **Horizontal Systems**
 - **Vertical Systems**
 - **Horizontal Shocks**
 - **Vertical Shocks**
 - **Connectedness**
 - **Disconnectedness**

GCCM Scenarios 1.0

Main Topics

Value memes networks of global civilization:

- **Beige Meme – Instinctic/Survivalistic meme network**
 - **Purple Meme – Magical/Animistic meme network**
 - **Red Meme – Impulsive/Egocentric meme network**
- **Blue Meme – Purposeful/Authoritarian meme network**
- **Orange Meme – Achievist/Strategic meme network**
- **Green Meme – Commutarian/Egalitarian meme network**
 - **Yellow Meme – Integrative meme network**
 - **Turquoise Meme – Holistic meme network**

GCCM Scenarios 1.0

Main Topics

Market State Transition

- **Economic system**
 - **Social security**
 - **Personal security**
- **Educational system**
- **Science and research**
 - **State institutions**

GCCM Scenarios 1.0

Disconnectedness

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Global Disorder	Global Fragments
Global Blocks	Global World

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Connectedness

GCCM Scenarios 1.0

Nation State

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Global Disorder	Global Fragments
Global Blocks	Global World

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Market State

GCCM Scenarios 1.0

Industrial Hierarchies

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Global Disorder	Global Fragments
Global Blocks	Global World

Value Memes Networks

Global World Scenario

Core – Gap Integration:

- **Core is Integrating Gap**
- **Growing Connectedness**
 - **Flows not disrupted**

Global World Scenario

Market State Transition

- **Economic system – private enterprises**
- **Social security – primarily private fund system**
 - **Personal security – primarily private**
 - **Educational system - primarily private**
- **Science and research – private or NGO institutions**
 - **State institutions - shrinking**

Global World Scenario

Value Memes Networks

- Network-Centric structure
- Value memes as attractors
- Cooperation between value memes networks
 - 8 Layers of Value memes networks
 - Diversified value structure of society

Global Disorder Scenario

Core – Gap Integration:

- Core and Gap
- Problematic Connectedness
 - Flows are disrupted

Global Disorder Scenario

Nation State Resistance

- Economic system – market
- Social security – state or mixed system
 - Personal security – primarily state
 - Educational system - primarily state
- Science and research – primarily state
 - State institutions - strong

Global Disorder Scenario

Hierarchical Systems

- Hierarchical structures
 - Unification of main value systems
 - Hierarchical organization of society

Global Blocks Scenario

Core – Gap Integration:

- **Core is Integrating Gap very slowly**
 - **Connectedness rises slowly**
- **Flows not disrupted, but problematic**

Global Blocks Scenario

Market State Transition

- **Economic system – private and state enterprises**
- **Social security – mixed state and private fund system**
- **Personal security – primarily private with state support**
 - **Educational system - mixed private and state**
 - **Science and research – mixed private and state**
 - **State institutions - shrinking**

Global Blocks Scenario

Value Memes Networks

- Weak network structure
- Value memes as attractors
- Cooperation or clash between value memes networks
 - 8 Layers of Value memes networks
 - Diversified value structure of society

Global Fragment Scenario

Core – Gap Integration:

- **Shrinking Core and Growing Gap**
 - **Problematic Connectedness**
 - **Flows are disrupted**

Global Fragment Scenario

Nation State Resistance

- Economic system – market
- Social security – state or mixed system
 - Personal security – primarily state
 - Educational system - primarily state
- Science and research – primarily state
 - State institutions - diversified

Global World Scenario

Hierarchical Systems

- Hierarchical structures
- Unification of main value systems
- Hierarchical organization of society



Thank You for Your Attention !!!