Föhrenberg-Kreis Kernthemen

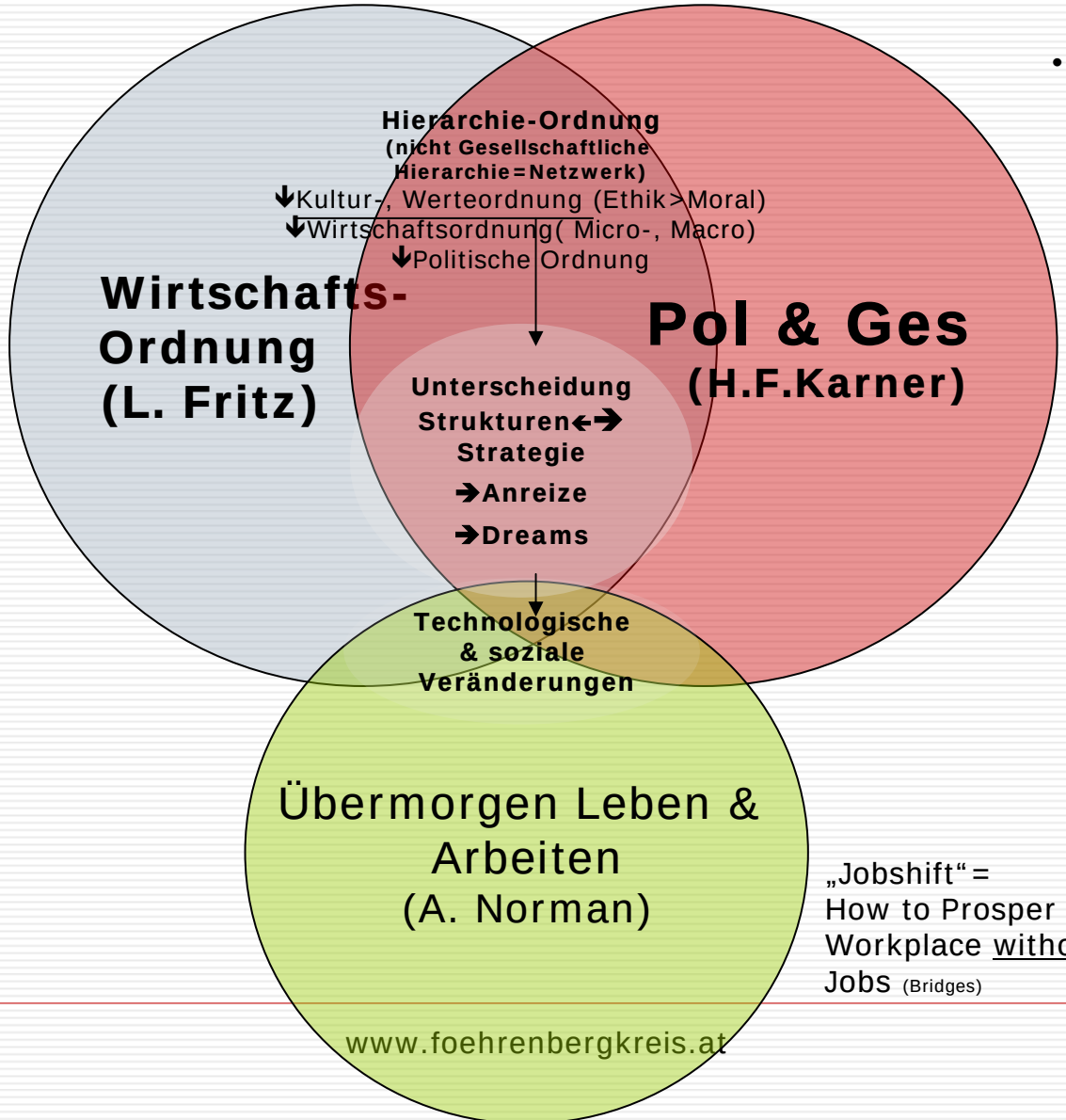
H.F.Karner

Gemeinsame Basis

Stand 28/09/06

Zusammenhang zwischen den Arbeitskreisen zu den Kernthemen

„Wirtschaft“ = Umgang mit Knappheit (Aristoteles)
„Managing Dilemmas in the 21st century“
Attention Economy



- Netzwerkgesellschaft
- Region State
- Process Politics
- Governance without a center

„Jobshift“ = How to Prosper in a Workplace without Jobs (Bridges)

Zusammenhang zwischen den Arbeitskreisen zu den Kernthemen-wer macht was?

„Wirtschaft“= Umgang mit Knappheit (Aristoteles)
„Managing Dilemmas in the 21st century“
Attention Economy

- Werte
- Fin.Wirtschaft
- Lokalisierung
- Business Agenda
- *Innovation*
- Damping/ strange attractors
- PE Firms
- Das neue *geschlossene* System der Globalisierung
- Ängste der Bürger

Wirtschafts-Ordnung (L. Fritz)

Hierarchie=Ordnung
(nicht Gesellschaftliche Hierarchie=Netzwerk)
↓Kultur-, Werteordnung(Ethik>Moral)
↓Wirtschaftsordnung(Micro-, Macro)
↓Politische Ordnung

Unterscheidung
Strukturen←→ Strategie
→Anreize
→Dreams

Pol & Ges (H.F.Karner)

- Globalisierung Rel. 3.0 – *inkl. Arbeitsmarkt*
- Ges. Verantwortung bzgl. „5 regions of the future“ Technologien
- Process Politics
- Governing without a centre
- Solidarität
- Subsidiarität
- Steuern
- Grundeinkommen

- Netzwerkgesellschaft
- Region State
- Process Politics
- Governance without a center

Technologische & soziale Veränderungen

- *Veränderung der Arbeitswelt durch neue Technologien*
- *Arbeitsmarkt regional*
- *Arbeitslosigkeit*
- *Human Capital (Drucker, Davenport)*
- *Work-Life-Balance*
- *Arbeitsorganisation kulturell*

Zwischen Kollektivismus und Individualismus

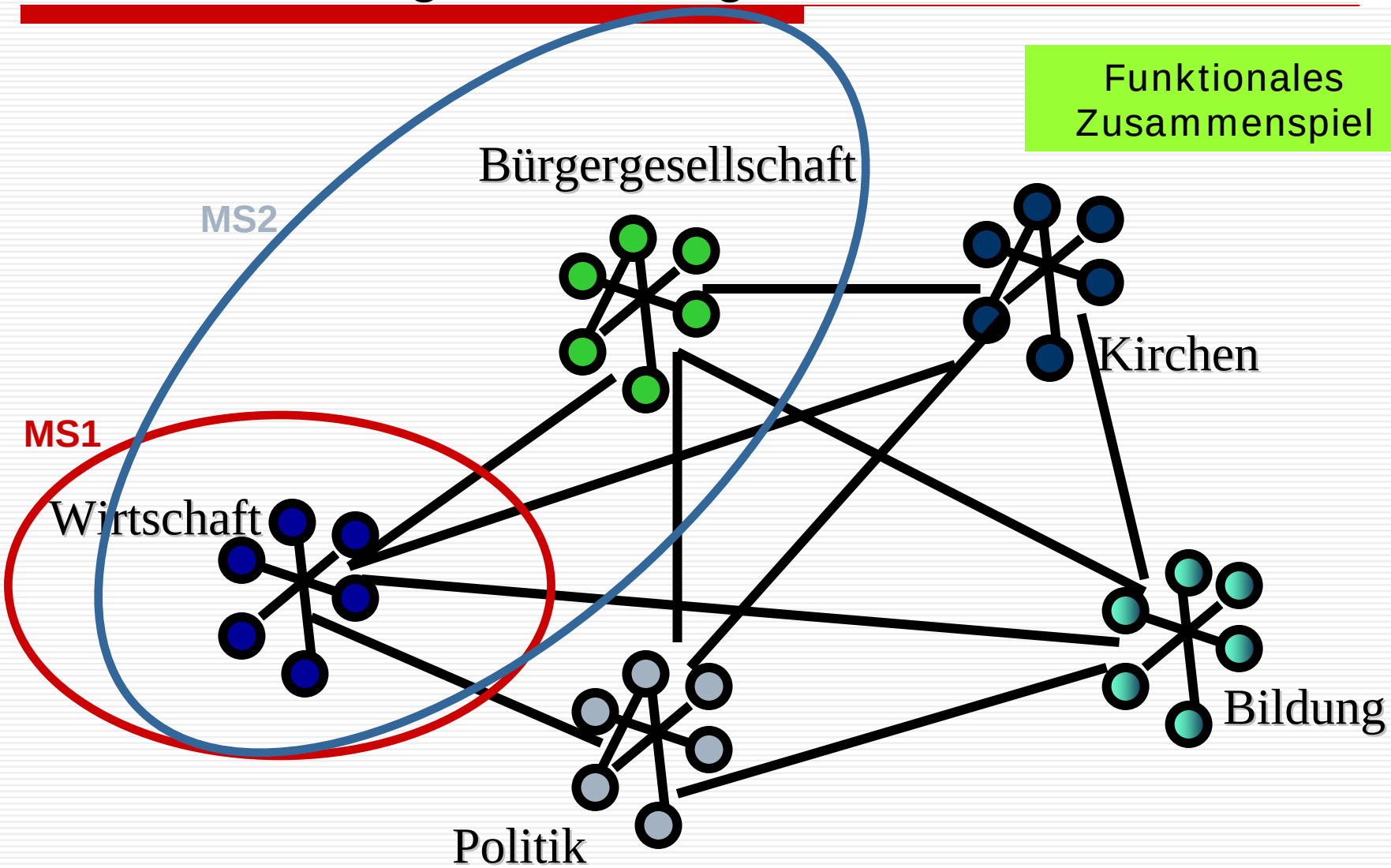
Arbeitsformen

Übermorgen Leben & Arbeiten (A. Norman)

„Jobshift“= How to Prosper in a Workplace without Jobs (Bridges)

30/03/06

In der Netzwerkgesellschaft gibt es keine Hierarchie



1. Equilibrium is Death

R. Pascale, "Surfing the Edge of Chaos"

- Alex Trisoglio (LSE): "Recent study of evolution, both in the natural world and in computer based complex systems, has demonstrated the surprising result that the presence of parasites in a system accelerated evolution dramatically"
- J. Welch challenged each business head:
  1. Hire 30 to 60 people with-commerce or other nontraditional backgrounds
  2. Protect them from the organization's immune defense response
  3. Come up with viable "destroy your business.com" options within 6 to 9 months
- In the natural world, the dichotomy between genetic uniformity, which perpetuates a winning formula, and genetic diversity, which dilutes a winning formula, is resolved by evolution and chance. In the business world, it's an important matter of choice.
  Companies must weigh the benefits of introducing new genetic material – say, in the form of new hires- against the possibly disruptive effects on a smoothly running operation.
  It is crucial to protect the reliable core of an organization's business platform while one simultaneously plants and nurtures the seeds of revolutionary change. One way to do this is to carefully cultivate the fringes. Here we adopt another process from nature. The "verge" – the boundary between forest and savanna, or the intertidal zone along the ocean's edge where no single species dominates – is known to foster the most prolific rate of mutation.
- E.g. Xerox Park, Monsanto, BP's oil exploration unit, Sears revival under Arthur Martinez

2. Surfing the Edge of Chaos

- The edge of chaos is a condition, not a location. It is a permeable, intermediate state through which order and disorder flow, not a finite line of demarcation. Moving to the edge of chaos creates upheaval but not dissolution. That's why the edge of chaos is so important. The edge is not the abyss. It's the sweet spot for productive change.
- Example: fire ants can't be eliminated by poison, they flourish. The fire ant appears to thrive at the edge of chaos. When the ant's environment is benign, there is one queen per colony. As environmental adversity intensifies, rival queens will live together in a communal nest until the colony reaches a critical mass, at which time the worker ants will execute all but one of the queens.
- When a complex adaptive system is moved towards the edge of chaos – when hurricanes and typhoons roil the deep seas, or fires rage through forests and prairies – the potential for generativity is maximized.
- Images of Life at the Edge of Chaos: Swarms, Jungles, a mad scientist's lab.
- Navigating the Edge of Chaos:
  - Attractors
    - Point attractors
    - Cycle attractors
    - Strange attractors (most important). Strange is an unsettling term. 1. They are co generated. They arise through the convergence of many factors within an organization and its environment. 2. they materialize when what is already present is expressed in away that provides shape and substance. 3. they flourish in an environment of adaptive challenge. 4. they foster breakthrough and outcomes that are unforeseen and unimaginable.
  - Amplifying and damping feedback ("feedback is the means by which a system talks to itself")– accelerate or slow down. Amplifying devices can evoke disequilibrium.
    One of the most effective of all amplifiers is to overload an organization so that it cannot continue to conduct business as usual.
    Damping conditions: reaching closure, defining boundary conditions.
    (1) overloading the organization beyond its business-as-usual carrying capacity (2) using deadlines, public scrutiny to sustain disequilibrium (3) identify the adaptive challenge
  - Fitness landscapes – used by ecologists to map the relative competitive advantage of species.
    Advantages: (1) the landscape imagery makes clear that "one must go down to go up" if the goal is to reach a higher fitness peak. The human disruptions and distress associated with that truth are often the most under managed aspect of corporate change efforts. (2) the landscape changes as soon as there is movement on it.

R. Pascale, "Surfing the Edge of Chaos"

3. Self organization and emergence

- Self Organization is the tendency of certain (but not all) systems operating far from equilibrium to shift to a new state when their constituent elements generate unlikely combinations.
  - A single ant can't fight off a wasp. A single brain cell is a simpleton – but a few tens of billions of them can perform miracles
  - "Ants have shown us that there is almost nothing so small in the world that it cannot be made larger by embedding a bit of interaction in many copies of it, and then connecting them all together.
  - Examples: dental plaque, bees and beehive, Tupperware, DNA
- Emergence is the outcome of all this: a new state or condition.
  - Networks = Nodes + Connections
  - Harnessing self organization and emergence:
    1. Increase the number of nodes
    2. Increase the number and quality of connections
  - "If data are volatile and untrustworthy and the interrelationship of key factors is complex and poorly understood, tapping the distributed intelligence of the entire system usually generates better solutions than a central authority. In these situations, it is better to **enrich the connections among the nodes** and let them play an instrumental role in evolving the way forward. It not only takes a village to raise a child (H.R. Clinton) – it often takes a swarm to meet an adaptive challenge".

R. Pascale, "Surfing the Edge of Chaos"

Evolution and Adaptation

- Stuart Kauffman, Santa Fe Institute:
  - “Whether we are talking about organisms or economies, surprisingly similar laws govern adaptive processes”
- Nobel Laureate Kenneth Arrow, SFI in “The Economy as an Evolving Complex Adaptive System”:
  - “The big idea is this: if you can figure out how adaptation is embedded in biological systems, and then broaden this knowledge into a theory of general evolution, you can effectively apply the theory to many complex systems – including business. Then you can begin to anticipate how your business will adapt to a changing environment and begin to influence its evolutionary path.”

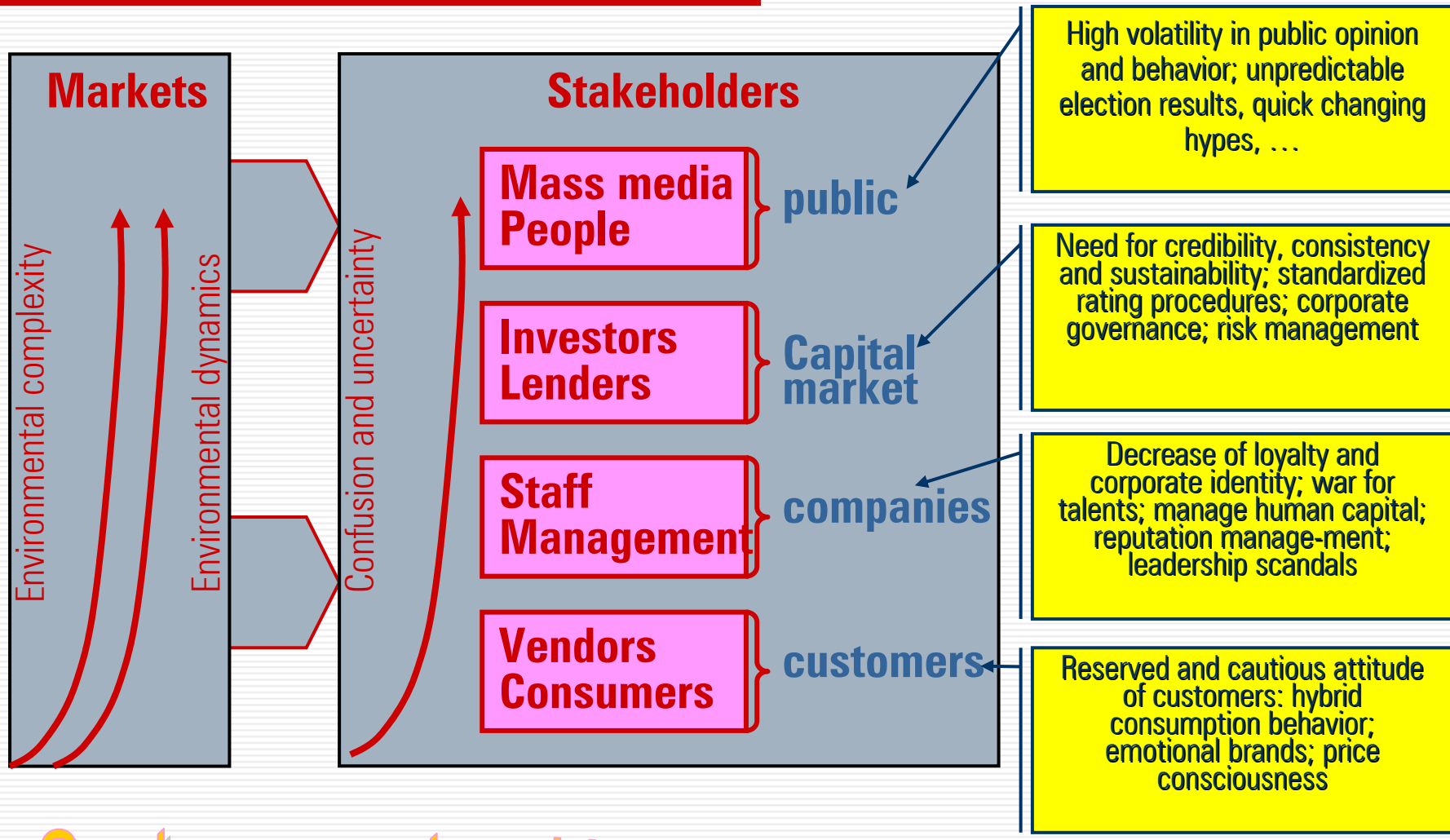
Ch. Meyer, S. Davis: “It’s alive”

Convergence: The 7 Core principles of adaptive systems

1. Agents
   - Atoms, software, people can all be referred to as “agents” in a system. Agents are the decision making units, and they have rules that determine their choices.
2. Self-Organization
   - An important property of agents is the ability to organize autonomously to create something more complex. Hydrogen and oxygen don’t need a manager to design water for them – put them together in conducive circumstances and water simply happens. Similarly, farmers in a village 100 years ago didn’t need Wal-Mart to bring them together to form a weekly farmer’s market.
3. Recombination
   - Breeding is the way biology recombines the recipes for agents. Recombination is the most efficient engine of innovation, in nature, and in human affairs. The Wright brothers created something completely new by combining the capabilities of the airfoil, the bicycle wheel, and the internal combustion engine.
4. Selective Pressure
   - Fitness is assessed by the environment. Selective pressures determine which agents get the opportunity to recombine in the next generation.
5. Adaptation
   - In nature, an animal can change its behavior; over generation, a species’ capabilities evolve. A business, then, can change its behavior to perform better, and an industry can evolve.
6. Co-Evolution
   - “when the frog evolves a sticky tongue, flies get Teflon feet”. Competition, cooperation, and innovation all lead to co-evolution in business as in biology.
7. Emergence
   - The interaction of self-organization, recombination, selection and co-evolution leads to an ecology – or an economy.

Ch. Meyer, S. Davis: “It’s alive”

Enhanced connectivity of the global markets increase environmental complexity and dynamics



The System reacts with confusion and uncertainty

Psychologically and neurophysiologically it is well proven that …

… in a situation of confusion and uncertainty emotional factors become more and more important for individual decisions (politics, branding, …)

Managing instability

17-10-05

	Strategy for action		Strategy for action	
	steering	regulation	Trial and error	Self-organization
System behavior	stable	stable	instable	instable
organization	simple	complex	simple	complex
Function mode	Cause and effect	Target/actual comparison	Random behavior	Spontaneous reorganization
	Management of stability		Management of instability	

Leadership requirements

- Exact target definition
- The knowledge to plan ahead
- Precise realization of objectives
- Factual motivation

- Convincing idea (emotion)
- Process understanding
- Step-by-step movement
- High tolerance for uncertainty
- Personal credibility

Environmental Complexity and Dynamics are the Price of Connectivity

R. Pascale, "Surfing the Edge of Chaos"

If you want to **slow down the complexity** of a network, You have to chose between three ways:

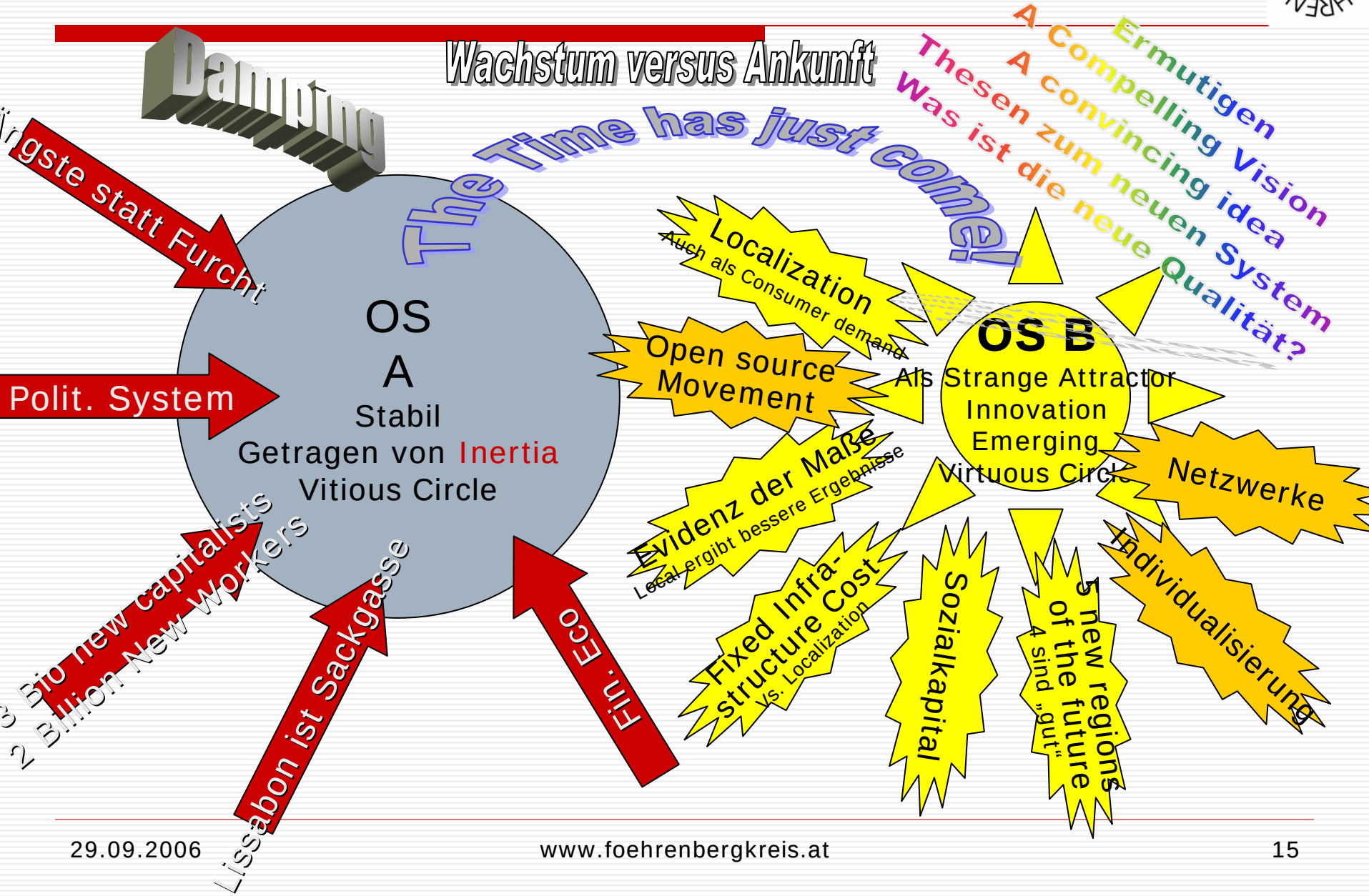
1. **Reduce connectivity**
   - Either reduce # of connections or
   - Increase # of nodes
2. **Restrict development by law**
3. **Selective valuation by ethical decisions**

4. Don‘t direct a complex adaptive system

- … because you can‘t
  - Example: 3 Bio $ were spent over the past 100 years to „control“ the coyote. Today it is 20% larger and significantly smarter than its predecessors
  - FedEx goal to increase pilot productivity by streamlining aircraft routing. The linear game plan evoked a non-linear response
- Efforts to direct living systems beyond very general goals are counterproductive.
  - Living systems cannot be directed along a predetermined path, but, like herding the proverbial butterfly, can be **ushered forth** with reasonable expectation of progress.
  - Issue: contemporary reward systems (most rewards are dissatisfiers) – rewards and punishments are two sides of the same coin (Herzberg). Don‘t disregard rewards, but regard them as imperfect!
- Consequence:
  1. **Design, don‘t engineer!**
  2. **Discover, don‘t dictate!**
  3. **Decipher, don‘t presuppose!** (decipher the unforeseen consequences before the begin to take form!)

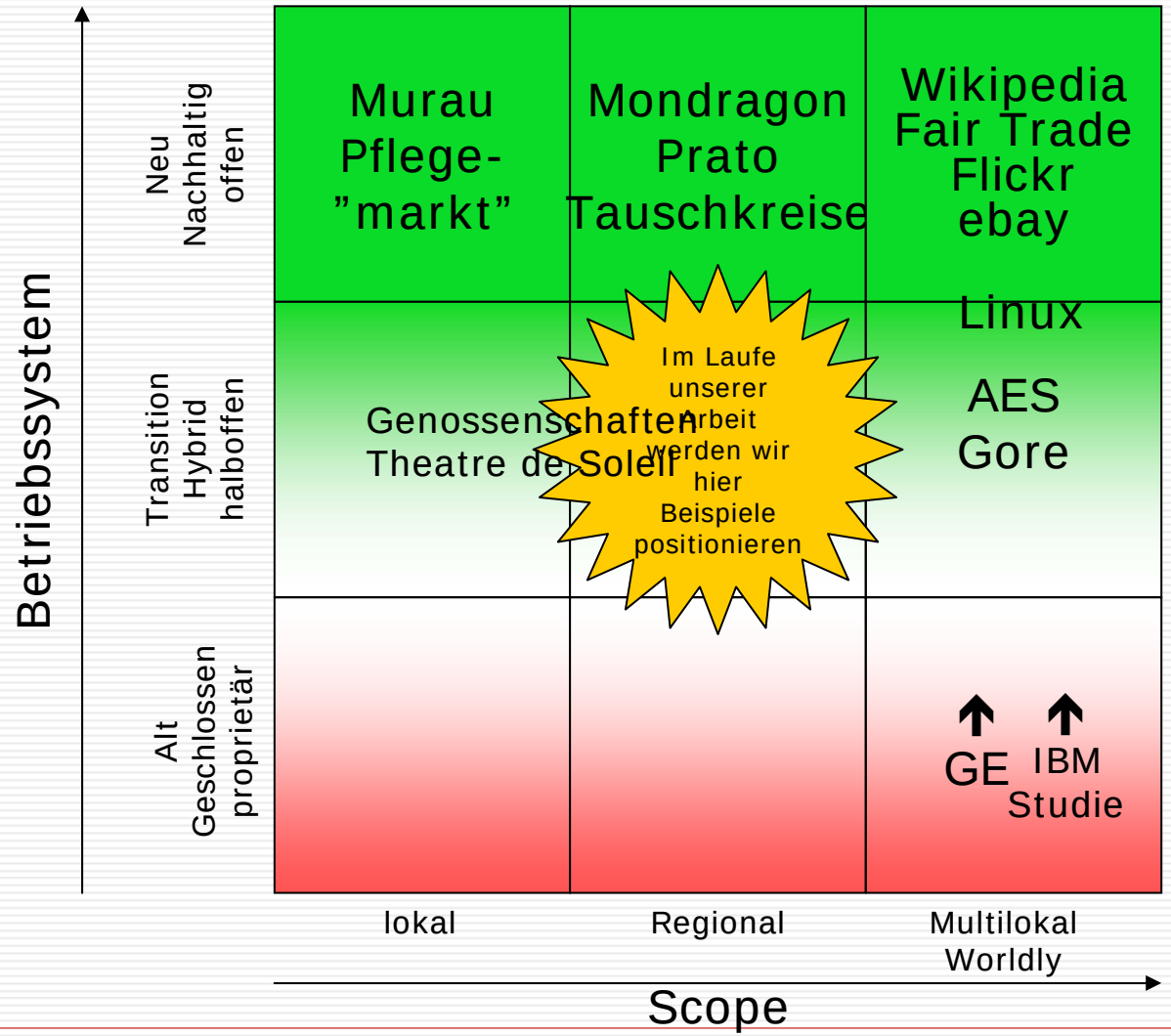
R. Pascale, “Surfing the Edge of Chaos”

Ein „Emerging New Operating System“



Portfolio: Beispiel für Neue Initiativen der Selbstorganisation

9/11+9/25



Issues zu klären:

- Regeln (Anreizkompatibilität!)
- Governance
- Scope vor Scale
- Werte schaffen! (Wertsteigerung oder Wertvernichtung)
- Optimierung statt Maximierung – Wertorientierung in der Strategie
- Relativ zur kulturellen Identität
- Qualität der Nachhaltigkeit des Trends (Vektoren)
- Welche System-Mechanismen laufen ab? („inherent" rules)
- Sicherheit (Angst vs. Furcht)
- Flexibilität
- Aufgeben von Geschlossenheit
- Co-opetition
- Einbeziehung von Menschen: Mit-"Unternehmer"

Beispielsammlung (LF Web-Research) Next Billion

- Worldchanging.com
- Pioneersofchange.net

Regeln/Governance

diese Seiten sind
ab dem nächsten Mal
auszufüllen

Scope vor Scale

Werte schaffen! Optimierung statt Maximierung – Wertorientierung in der Strategie – Aufgeben von Geschlossenheit - Co-opetition

- Disagio auf das Horten von Kapital

Relativ zur kulturellen Identität - Sicherheit (Angst vs. Furcht)

Dynamik (Vektoren)

Welche System-Mechanismen laufen ab? („inherent“ rules) - Flexibilität

Der Mensch