Socialinė dimensija

Saulius Juršėnas
Vilniaus universitetas

Life

➲ Having evolved from inanimate matter, they constitute autocatalytic, evolvable, teleonomic organic systems that can transfer, store, and process information, based on template -and sequence –directed reactions, all of which characterize autopoietic entities

Theory of Cognition

➲ *Theories of Cognition* explain how intelligent organisms flexibly **react to stimuli** from the environment, how they exhibit **goal-directed behaviour** and **acquire goals** rationally, how they **represent knowledge** and **learning**.

Santjago pažinimo teorija

Humberto R. Maturana (*1928)   Francisco   J.   Varela   (1946-2001)

Santiago Theory

- **Living systems couples to its environment structurally, i.e. through recurrent interactions, each of which triggers structural changes in the system**

- **Each structural changes change influences organism's future behavior. Living system is "structure-determined"**

- **Cognition is not a reflection of an independently existing world, but rather development of world trough the living processes.**

Autopoiesis

⮫ Life as an autopoietic system, as defined by H.R.Maturana and F.J. Varela.

Autopoiesis literally means self-production or self-creation, and is a term for the "self-defining", "circular" organization (organizationally closed but structurally, i.e., materially and energetically, open) of a living system (such as a cell), consisting of a network of component metabolites that produces the very network and its own components plus the boundary of this network.
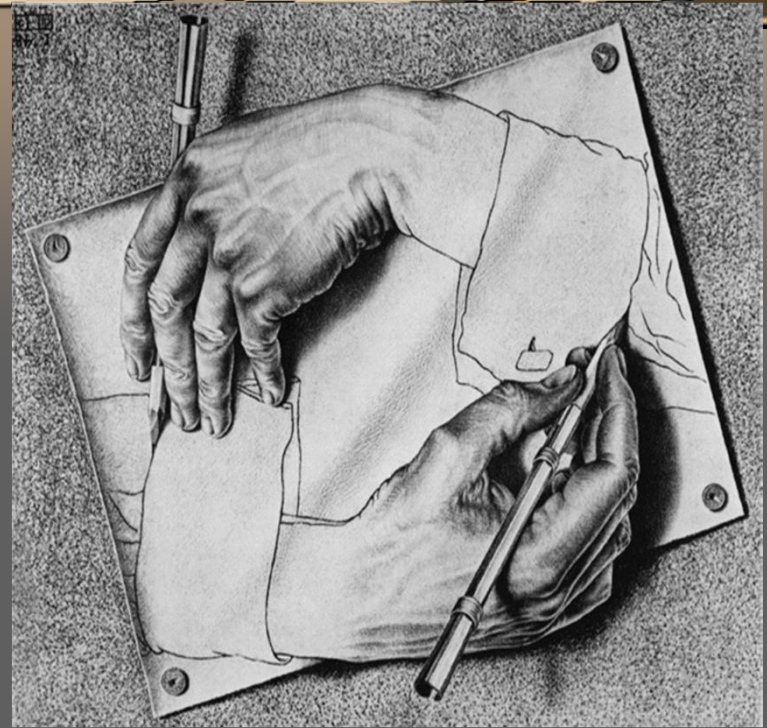
Santjago teorija

⮒ Aplinka tik sukelia trikdžius, tačiau jų neapibrėžia

Santjago teorija

- ➔ **Pažinimas nėra nepriklausomai egzistuojančio pasaulio atvaizdas bet greičiau pasaulio vystimasis per gyvybės procesus**

Consciousness and the Brain

⮑ Consciousness unfolds at a certain levels of cognitive complexity, that require brain and a higher nervous system

⮑ Instead of division into consciousness and the brain dynamic process of continuous embodiment of particular sensation.
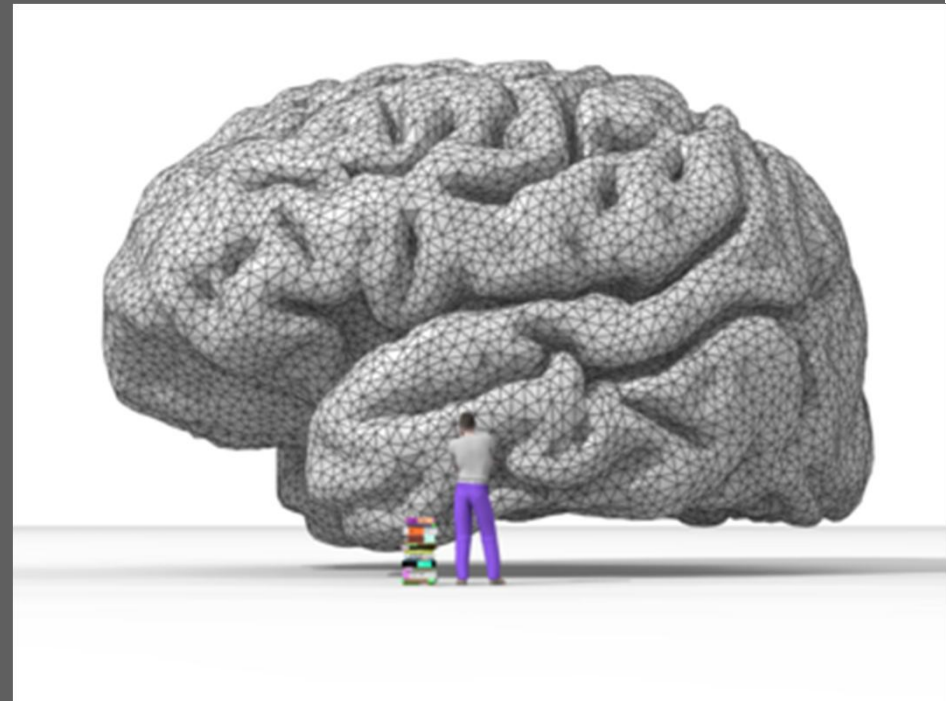
Santjago teorija

⮞ Skirstymas į sąmonę ir protą yra pakeičiamas įdaiktinimo procesu

Frenologija buvo vienas iš pirmųjų bandymų susieti sąmonės funkcijas su konkrečiomis smegenų dalimis.
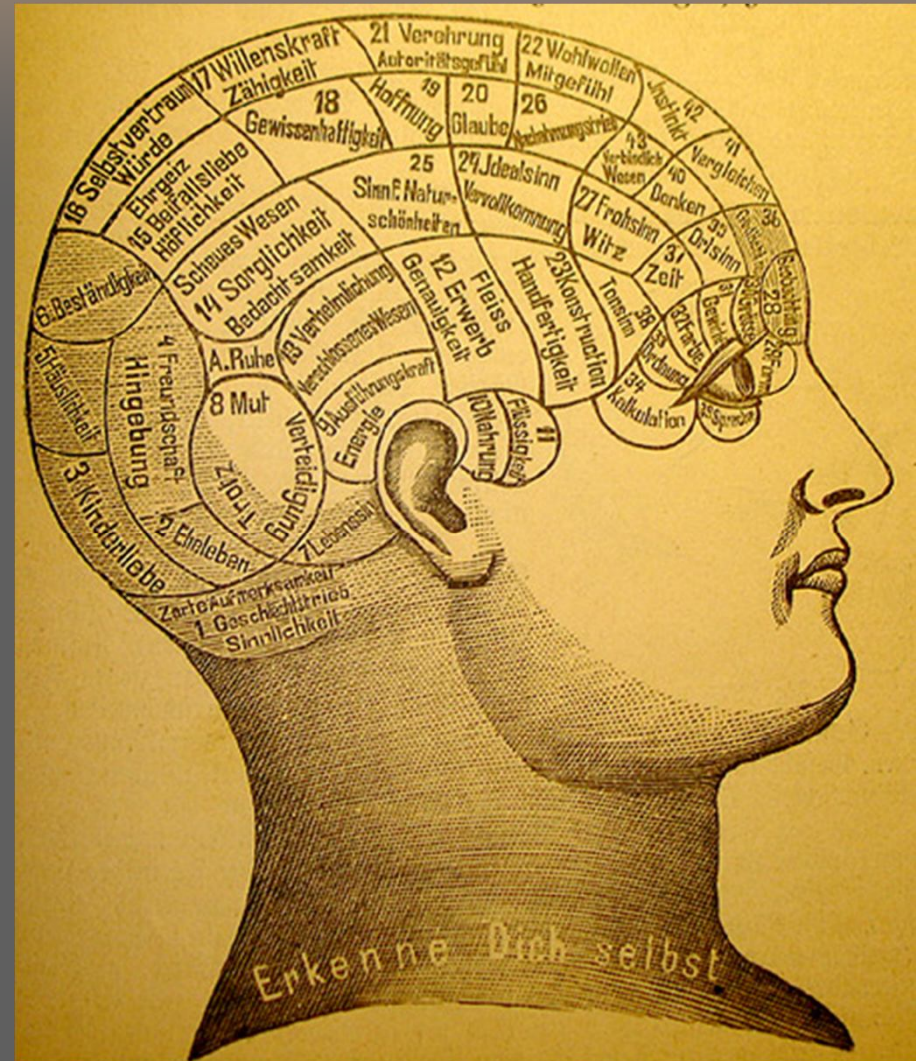
Cognition

Lakoff and Johnson

- ⮑ The mind is inherently embodied
- ⮑ Though is mostly unconscious
- ⮑ Abstract concepts are largely metaphoric

Sąmonės socialinė dimensija

- Mes jaučiame kas praskamba mūsų tinkle
- Mąstome
- Kalbame simboline kalba
- Vertiname
- Tikime
- Turime savimonę

Kalba

- Nuolatinis elgesio koordinavimas daro tinklą sudėtingesniu ir pagimdo kalbą
- Kalba atsiranda kai yra "bendravimas apie bendravimą", t.y. koordinuoto judesio koordinacija

- Kalbos fenomenas neatsiranda smegenyse, bet tik nuolatiniame bendravime
- Pasaulis kurį mes matome yra ne absoliutus pasaulis, bet pasaulis kuriamas bendraujant su kitais

- Pirma buvo gestų kalba
- Kalbos atsiradimas susijęs su technologijos vystimusi

Social life

F.Capra

⮕ <u>New phenomena</u>
- ▪ Rules of behavior
- ▪ Values
- ▪ Intentions
- ▪ Goals
- ▪ Strategies
- ▪ Design
- ▪ Power relations

Evolution of social context

Meaning

F.Capra

- ➲ Being able to hold mental images of material objects (meanings) enables us to choose among several alternatives, which is necessary to formulate values and social rules of behavior

- ➲ Concept of autopoiesis is valid in the social networks. Communications in multiple feedback loops, produce a shared system of beliefs, explanations, and values – a common context of meaning – that is continuously sustained by further communications.

- ➲ Through this shared context of meaning individuals acquire identities as members of the social network. This create boundary of expectations, which is continually regenerated by the network itself.

- ➲ Culture's values and beliefs affect its body of knowledge. They are part of the lens through which we see the world. They help us to decide what kind of knowledge is meaningful for us.
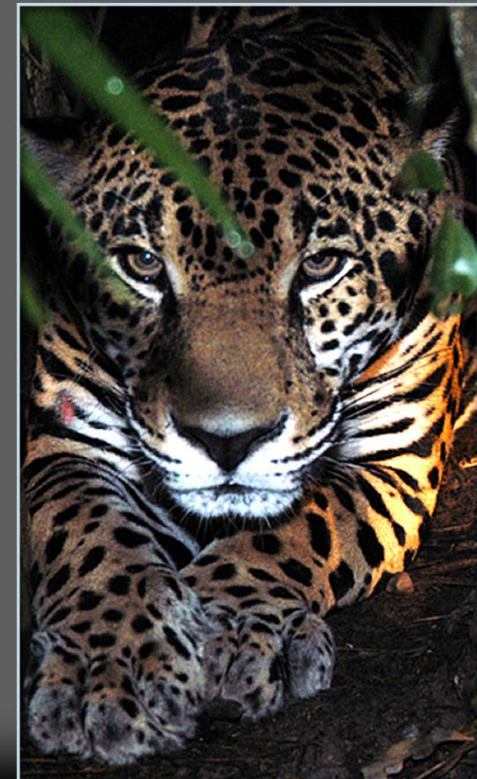
Life in Organizations   *by F.Capra*

Peter Senge

Two dominating metaphors of organizations

➲ Machine for making money

➲ Living being

Machine   *vs*   Living being

- Designed by engineers for a specific purpose

- Owned outside and can be sold

- To run and to achieve efficiency top-down control is needed

- Will eventually run-down; it can not change by itself

- Self-organized to survive

- Ownership is problematic even immoral

- Act autonomously, never be controlled

- Regenerating itself, will naturally change and evolve

The Living Company

Arie de Geus former Shell executive

27 long-lived corporations
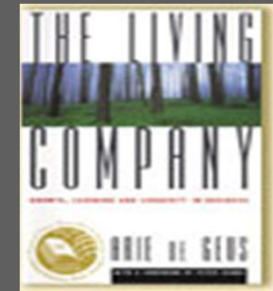that had existed for over a100 years

Two sets of characteristics

➲ Collective identity

  ▪ set of common values

  ▪ community in which all members will be supported in their endeavors to achieve their own goals

➲ Openness to the outside world

  ▪ tolerance for the entry of new individuals and ideas

  ▪ ability to learn and adapt to new circumstances

What way organizations are alive?

- Living social systems are self-generating networks of communications

- Communities of practice   Etiene Wenger
  - Mutual engagement of its members
  - Joint enterprise (shared purpose)
  - Shared repertoire of routine (tacit rules)

- Dynamics of culture
  - Creation of boundary of meaning hence of an identity among the members of the social network

Formal and informal networks
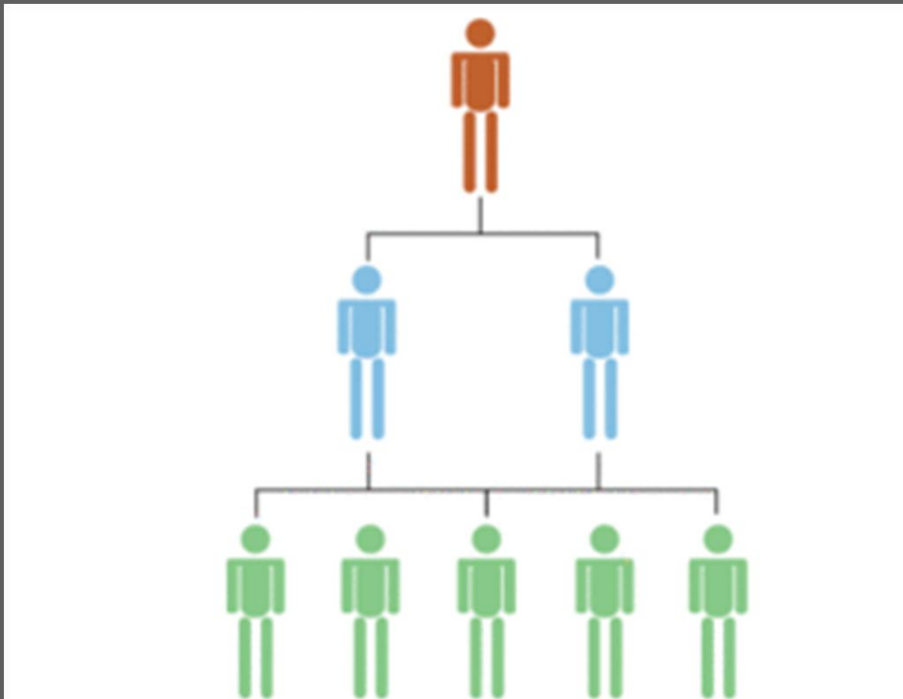
Formal and informal networks

Designed structures

- Set of rules, regulations that define relationship between people and tasks and determines distribution of power
- Boundaries are established by contracts
- Formal structures are depicted in official documents, charts, manuals, budgets etc.
- Functions are more important than people

Self-generated network

- Fluid,fluctuating network of communication
- Mutual engagement, where tacit knowledge is generated
- Flexible boundaries of meaning that are often unspoken
- Informal conversation, common practice, knowing the latest gossip
- Network is changing with new people, may even break down

Interplay between formal structures and informal networks

- In every organization there is continuous interplay between its informal networks and formal structures
- Formal policies and procedures are filtered and modified
- Flexibility and learning capability of organization resides in its informal communities of practice
- Typically formal structures handle the routine work, while informal can help with tasks, that go beyond the usual routine

Learning from life

- Living network responds to disturbances with structural changes
  - It chooses which disturbances to notice and how to respond
    - It depends on who people are as individuals
    - It depends on the cultural characteristics of communities of practice

- Machine can be controlled, living system can be only disturbed
- Meaningful disturbances can trigger structural changes
- Involved people will "choose to be disturbed" because process is meaningful to them
- Shift from domination to partnership (symbiotic relationship)

Organizational learning

Ikujiro Nonaka

➲ Knowledge is created only by individuals. Organizational knowledge is amplification of knowledge created by individuals

Michael Polanyi

➲ There is explicit knowledge (which can be documented) and tacit knowledge (intangible)

➲ In organizations tacit knowledge is transformed into explicit knowledge through social processes

Emergence of novelty

- An event triggering
- Meaningful, thus it disturbs the community
- Circulate and amplified until can not be integrate in existing order or beliefs
- Point of instability is reached (confusion, uncertainty)
- New order around new meaning emerges (as a result of collective creativity).

Emergence of novelty
Characterization
of main features

- Open organization, willingness to be disturbed

    (flow of mater, energy, information and ideas)

- Communication network, multiple feedback loops, amplification

- Point of instability, crisis (system may either *break down* or *break through*)

- New state of order (magic; often different from the phenomena out of which it emerge). New order is created within the context of particular organizational culture.

Emergence and Design

- All <u>living structures</u> are emergent structures

- Emergent structures provide novelty, creativity and learning capability

- They are adaptive, changing and evolving

- <u>Designed structures</u> are created for a purpose to embody some meaning

- Designed structures provide effective functions and enable optimization of the work

- Designed structures provide stability

We need both. There is a tension between them.
The challenge is to find right balance between creativity of emergence and the stability of design.

To Overcome Crisis (1)

➥ **Managers need to shift priorities from managing companies to optimize capital to managing companies to optimize people**
Arie de Geus

To Overcome Crisis

⮕ **optimize people**   Arie de Geus

- Living organizations are adaptive, changing and evolving
- Maintain openness of the system (learning capability, adaptation capability)
- Changes in the personal can remarkably alter or even destroy social networks that are carriers of tacit knowledge
- People as individuals are in a nonequilibrium state. They can act unpredictably. Communication, transparency, common values. People react not on information, but on meaningful impulses
- Shift from domination to partnership, symbiosis
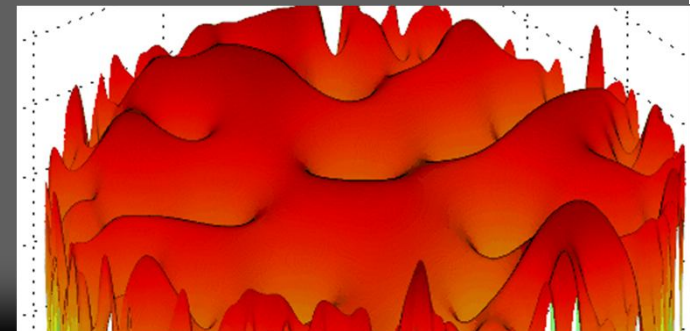
Crisis
New Opportunities

危機

Danger　　Opportunity

Chinese word for **crisis**

⮑ At critical points of instability new structures emerge

- Living systems react on disturbances by change in their own structure
  - balance between designed and emergent structure
- Environmental surrounding undergo dramatic changes
  - Learning, adaptation, changes
  - New opportunities

Gustave Doré's illustration to "Don Quixote" by Cervantes

Pablo Picasso's drawing Don Quixote and Sancho Panza