Systemic Analysis of Democracies and Concept of their Further Human-Technological Development

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Content

Introduction

Introduction I

Motivation and Introduction:

- Democracy has long time not changed
- Democracy seems to emerge from ancient to modern times
- Industry 4.0 seems to increase efficiency of (a) industrial production (cybernetic mass production) and (b) overall societal processes
- There exists no theoretical framework that combines industry 4.0 and modern societal processes (also large scale etc.)

Method and Goal:

- General systemic analysis and natural language axiomatisation
- Further development of democracy, industry (industrial production) and related systems

Introduction II

Research Question:

How can power be divided further in democratic or decentral systems to decrease system absolute individual power and increase potentially order beyond the previous system state?

Analysis of Democracy

old and new

Analysis of Democracy I

Classical Democracy Axioms:

Axiom 1

Continued division (decoupling) is a necessary prerequisite for "fractal" (distributed) increase of order.

Axiom 2

Personal power is increasing. This is partly due to Axiom 1.

...Distribution d Theorem...

Axiom 3

Principle of circular economy[a] or principle of non-exploitation[b].

[a] environment embedding and process efficiency - material d-dimension

[b] equality - human d-dimension

Analysis of Democracy II

New Democratic Axioms:

Axiom 4

The **valued elements** *of the* **state** *or* **system** *are the decision precondition for the individuals' valuing process or condition.*

Axiom 5

The state (s) or nation or system applies to citizens (c) for being their state, etc. and not citizens apply to the state or nation or system to be their citizens (phase reversal principle)$(s \rightarrow c \wedge \neg(c \rightarrow s))$.

Axiom 6

The "Völkerbewegung" (movement of people) is (increasing) virtual.

Analysis of Democracy III

Axiom 7

The state or system can be divided in the functional parts: territory, state-contract and individual.

Axiom 8

The ethics of the world, and individuals is increasing by applying increasing **personalization** *of decisions.*

Axiom 9

Legal or system mandats have to be avoided as human understanding has to be increased[a].

[a] $\rightarrow$ free will increase

Analysis of Democracy IV

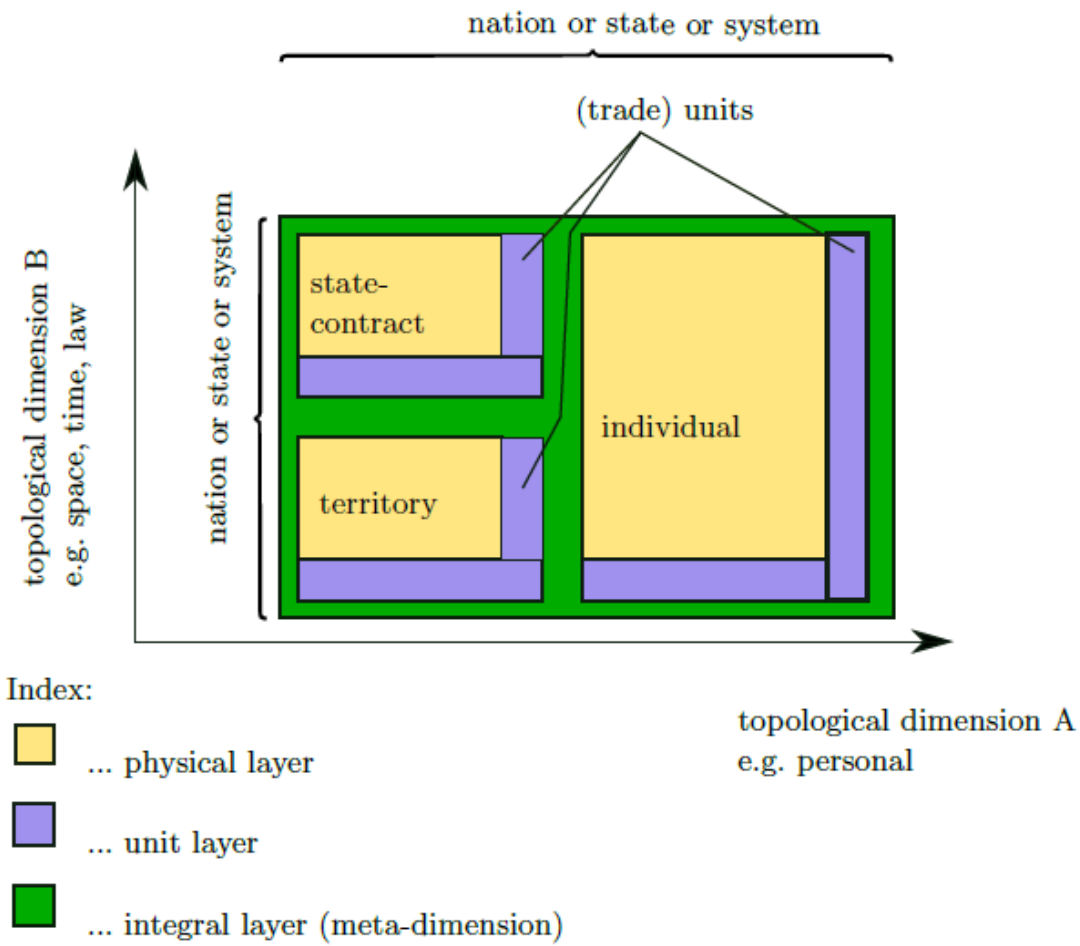

Figure 1: World Nation Trade Map - Basic Elements and Composition Principle.

Analysis of Democracy V

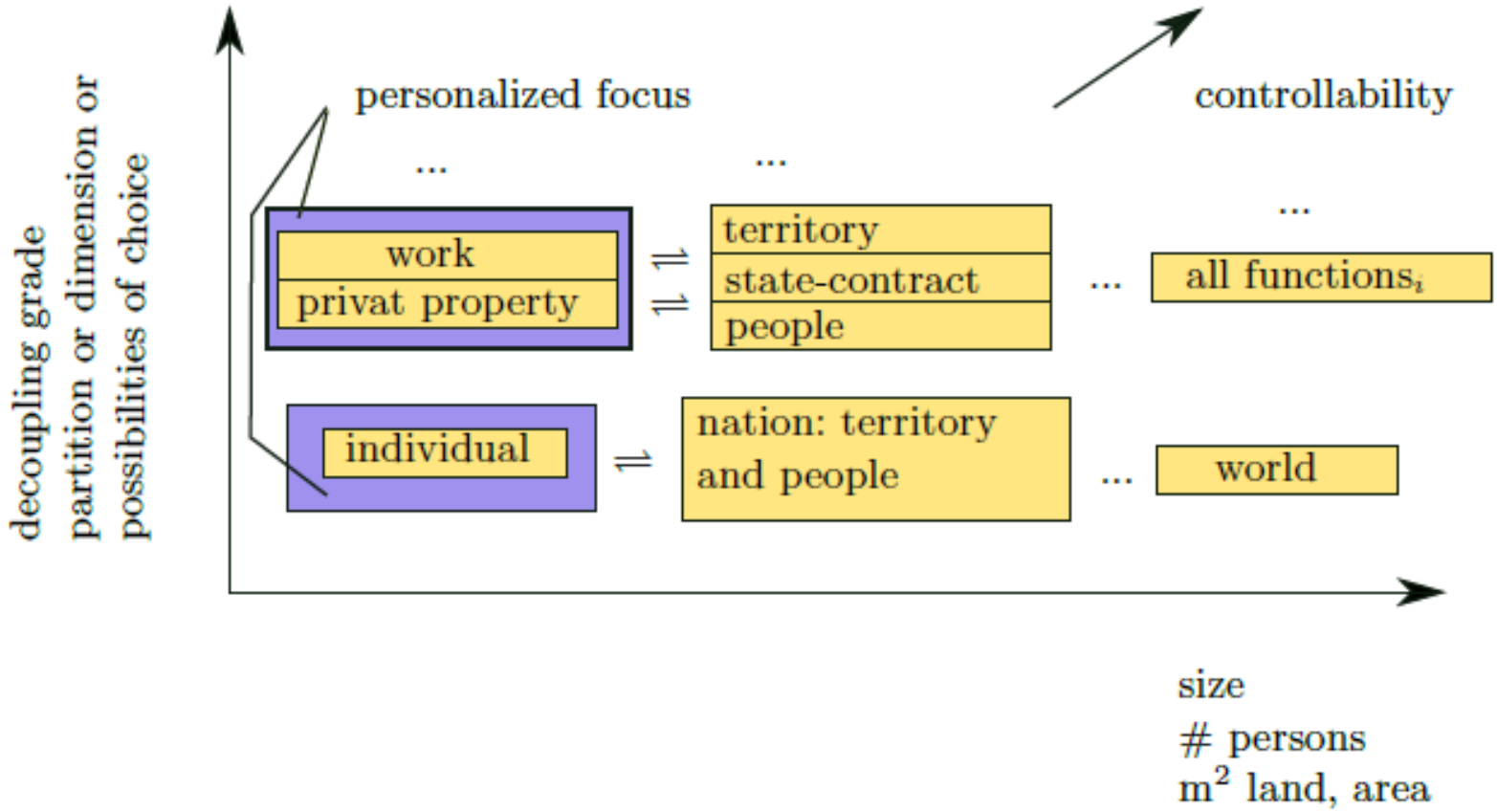

Figure 2: Individual-Nation-World; $\rightleftharpoons$ indicates bidirectionality grade.

Summary

Summary

- (1) Division $\rightarrow$ order $\uparrow$
- (2) Decision $\rightarrow$ order $\uparrow$
- (1)$\wedge$(2) $\rightarrow$ individual power $\downarrow$ (relatively) $\wedge$ overall power $\uparrow$

ad (1): is precondition;
ad (2): takes place by **personalization** (number of potentially increased personal decision processes) and **unit-ification** - number of basic laws (Grundrechte) that allow for a **market of states or systems**

Conclusion and Outlook

Limits, Conclusions and Outlook I

Limits:

- Technical limit of small set of basic ideas for new democracy $\rightarrow$ as it is general applicable
- Sketch of applications

Conclusion:

- New Democracy Principles enhance potentially order
- Order and Logicity need new and future technology
- Technology enhanced processes need enhanced control strategy, not only in technology but also in society as a whole in symbiosis of human-science-technology

Limits, Conclusions and Outlook II

Outlook:

- **New Democracy Principles** have to be further elaborated
- They need to be **tested** whether and when order is increased or decreased with regard to parameter settings in small an big systems
- The general role of **decentralisation** as well as **human rights** conditions has to be further investigated, especially in conjunction with new technologies, like big data, industry 4.0 etc.

Thank you cordially for your attention!

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PS.: The presentation can later also be found at:

http://www.dr-heiden.com/Vortraege.htm

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