
The responsibility-gap in self-organized social systems

Can empirical approaches in modeling social
science and neuroeconomics help to close it?

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Overview

Roadmap:

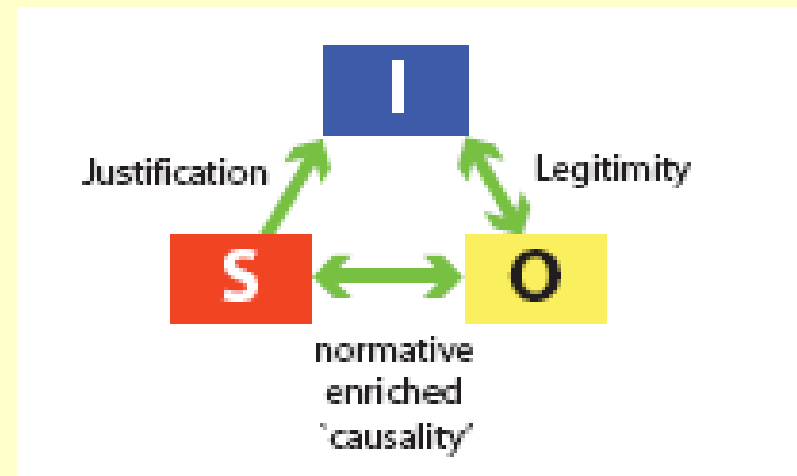
- Definition: responsibility / responsibility gaps
 - Observations
 - Which responsibility gap?
 - Setting the framework: “social network”, “social space”, “space of reasons”, “self-organization”
 - Integrating responsibility as a “moralization function”
 - Limits of responsibility (but not morality)
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Responsibility

Assumption: The minimal conceptual structure of “moral responsibility” involves three entities (that may coincide in their physical realization on a certain level of resolution):

- Responsibility subject (“who?”)
- Responsibility object (“for what?”)
- Responsibility instance (Instanz; “to whom?”)

Using the word “responsibility” in a specific social context can then be understood as an *act of creation* (or an *act of unveiling*) of these three entities.



Responsibility gap

Responsibility gap (1): One of the entities in a responsibility relation is unqualified to do its job (i.e. misses certain criteria in order to become a subject, object or instance of responsibility).

Ways out:

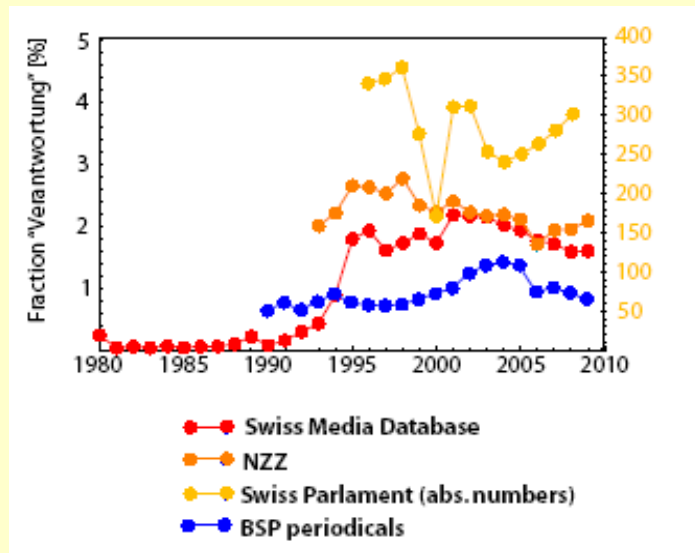
- 1) Change the criteria
- 2) Find a new entity that qualifies
- 3) Understand the problem as a (moral) problem that has nothing to do with responsibility.

Responsibility gap (2): We have a “compliance problem” regarding the responsibility subject/instance toward its responsibility object (maybe caused by the first interpretation of a responsibility gap).

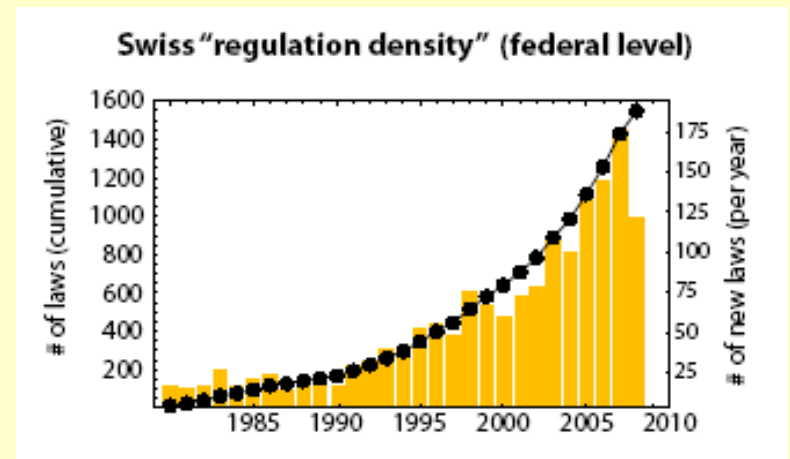
- 4) Enhance the capacity of the entity (mostly S)
 - 5) Reduce the number of Os
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Three observations (mostly Switzerland-based)

1) “Responsibility” in public discourse



2) Addressing “Responsibility” on the legal level



3) Claiming a “lack of responsibility”

Zeitzeichen

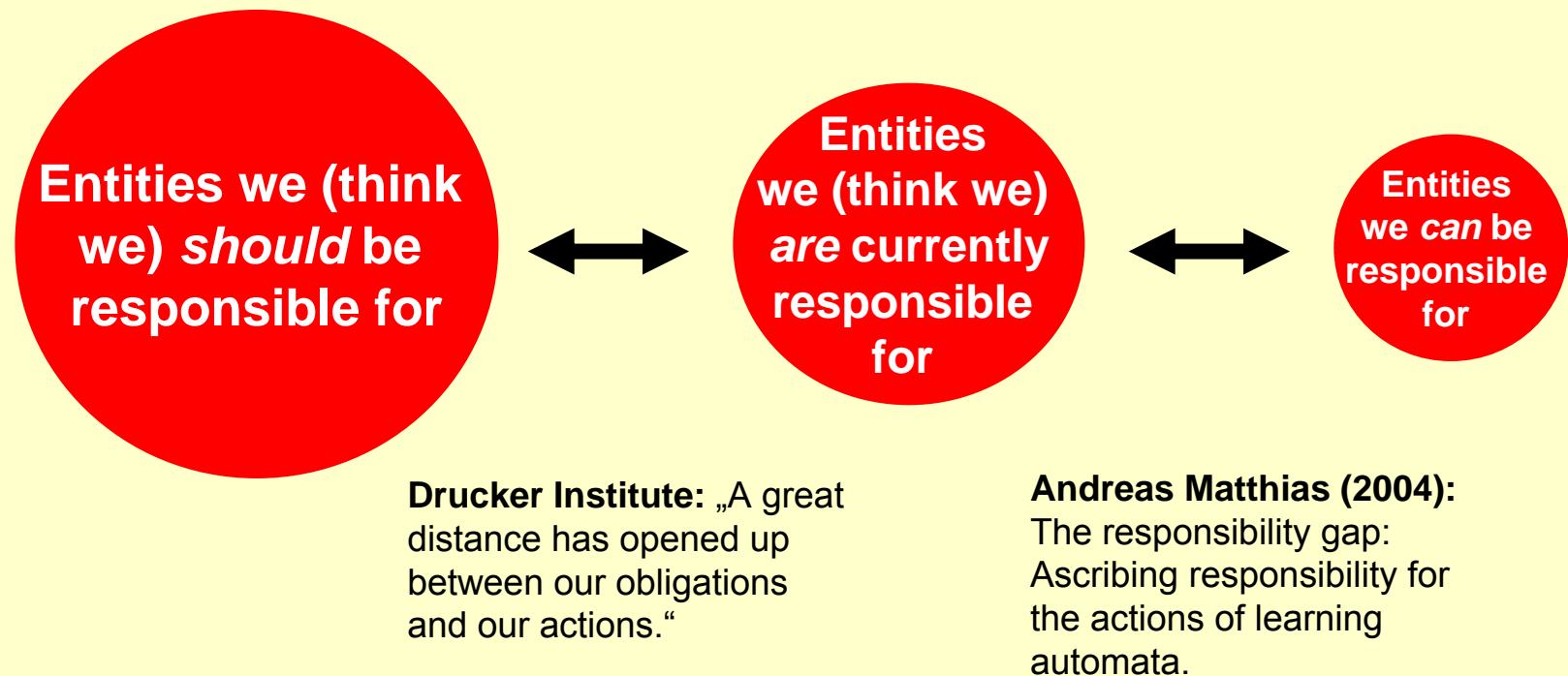
Rede und Antwort stehen

Die Finanzkrise lässt sich auch als Verantwortungskrise begreifen

A responsibility gap?

These observations show conflicting opinions on the size of the set of “responsibility objects” (there I would localize a “gap”).

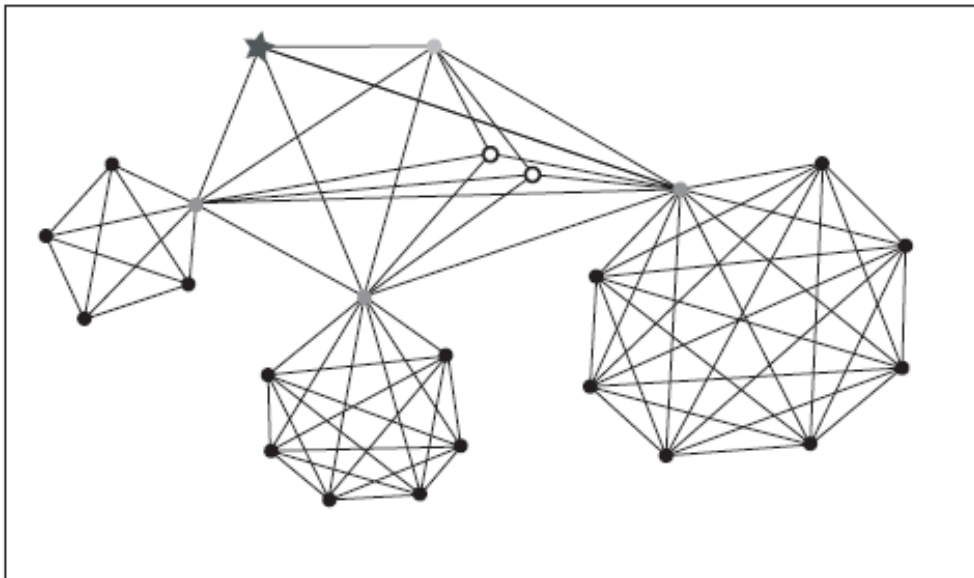
However: there are two different kinds of “gaps” possible:



Setting the framework (1)

Social networks:
(spatio-temporal
dynamics)

- Setting system boundaries
- Individual agent as node
- Choose type of interaction (edge)
- Choose timescale
- differ between descriptive/normative networks



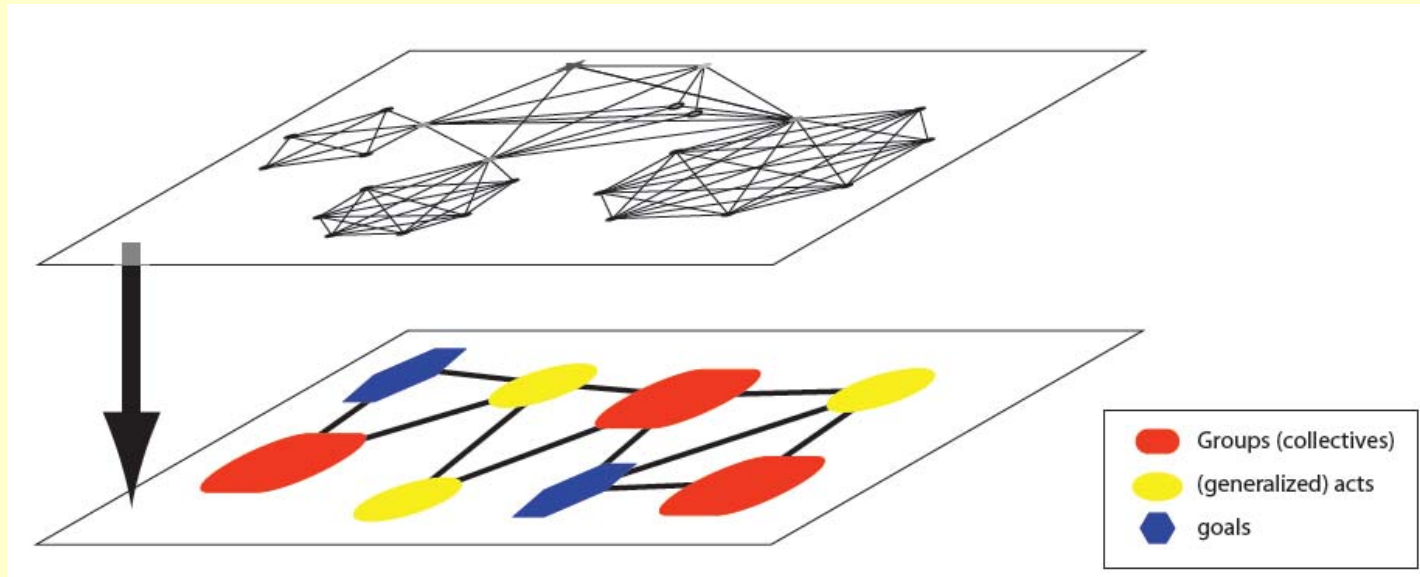
Symbols:

- ★ Customer
- Unit leaders
- Team leaders
- Employees
- Administrative workforce

Setting the framework (2)

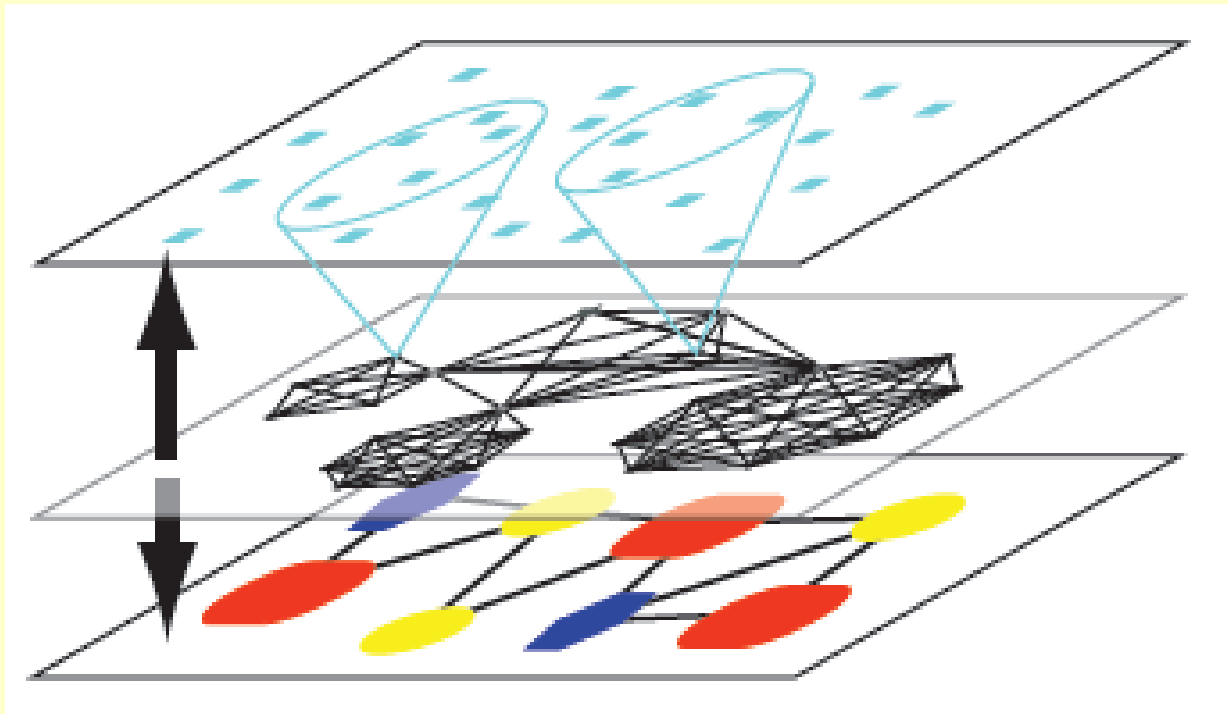
Social space:

- (at least) three types of nodes
- nodes (partly) emerge from clustering of data gained on the social network level
- descriptive and normative “entanglement” in the measurement process (in particular when determining edges)



Setting the framework (3)

- “Space of reason”:**
- (infinite) number of propositions that could serve as reasons in a given context
 - Agent has access to some part of this space
 - Justification-needs turn proposition in reasons



Setting the framework (4)

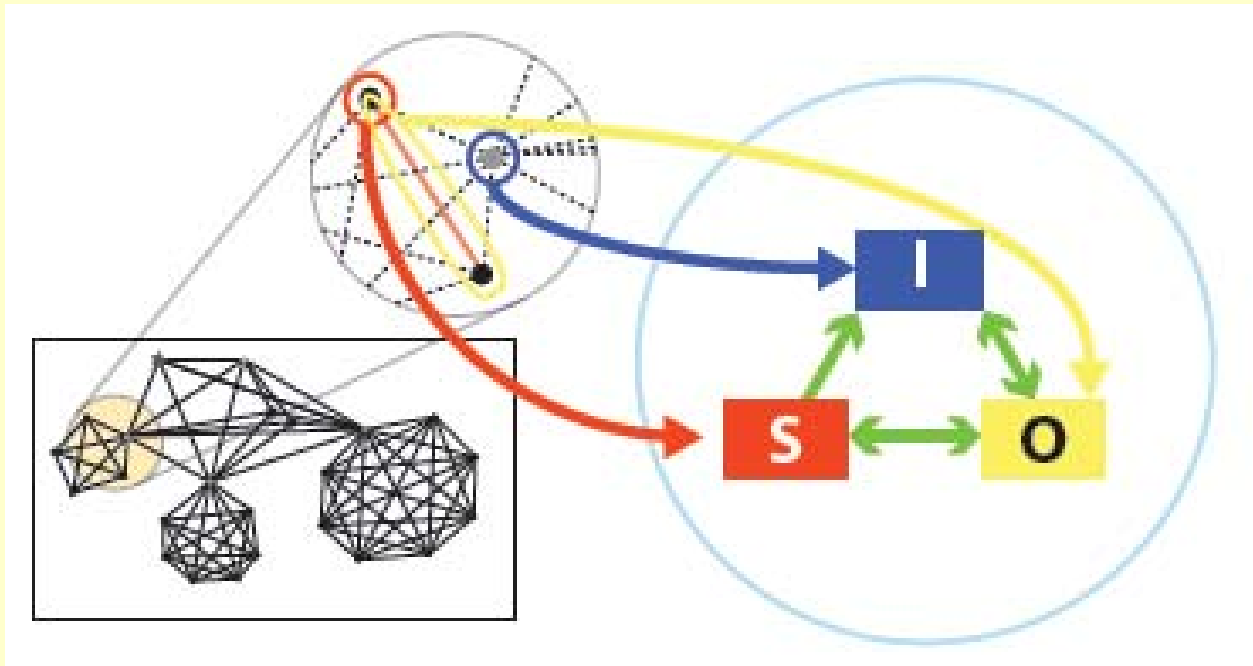
Some notes on “self-organization” (a tricky concept):

- It was defined in a (more or less) precise way in non-equilibrium thermodynamics
 - It turned into a “buzzword” with low explanatory power (“Selbstorganisation des Universums”)
 - But has now become (at least in agent-based modeling and the like) a more or less “stable concept” describing the emergence of “large-scale patterns” (structures, dynamics) out of the interaction of many single agents.
 - And is in social science probably best expressed as the process that may emerge when liberty-rights are used (e.g. founding companies)
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Integrating Responsibility (1)

Responsibility as a “moralization function”:

- $f: \{N \times E \times P\} \rightarrow \{S, O, I\}$
- Psychology of responsibility: local character (an important help to deal with ‘hidden normativity’)



Integrating Responsibility (2)

Possible contributions of (modeling) social science towards the problem of responsibility (non-exhaustive list):

1. **Gap 1:** Understand the formation of candidates for “large-scale” S/O (entities in a social space) using (e.g.) a clustering framework.

But: Problem of ‘hidden normativity’ in this measurement process AND normative status of the fact that these entities form as a result of a ‘self-organization process’.

2. **Gap 2:** Evaluation the effect of causal embedding of single agents in a multitude of activities towards agent’s capacity.

But: Definition of the capacities in the model is a normative act itself.

Limits of responsibility (speculative)

