

Relationality in social systems

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1 Building blocks

Nicholas of Cusa: „Ex omnibus partibus relucet totum“

1 Building blocks

Leibniz: *harmonie universelle*, Kompossibilität, *commune bonum* – „Their [the relations‘] reality comes from the divine understanding“; after Mugnai, this means relations result from two acts of God: a) the creation of the substances and b) the mutual coordination of the ‚representational‘ states internal to all substances; „[...] diese Anpassung aller erschaffenen Dinge an jedes einzelne von ihnen und jedes einzelnen an alle anderen bewirkt, daß jede einfache Substanz in Beziehungen eingeht, die alle anderen ausdrücken [...] Dies ist das Mittel, um so viel Mannigfaltigkeit wie möglich, jedoch verbunden mit der größtmöglichen Ordnung zu erhalten, die es geben kann“ – nach Holz eine Harmonie in Kompossibilität.

1 Building blocks

Hegel: „Totalität der relativen Beziehungen der Individuen [...] aufeinander“, „**System allseitiger Abhängigkeit**“, in dem „die Subsistenz und das Wohl des Einzelnen [...] in die Subsistenz, das Wohl [...] aller verflochten [...] und nur in diesem Zusammenhange wirklich und gesichert ist“.

1 Building blocks

Marx: „Dies Dritte ist [...] die durch die jetzigen gesellschaftlichen Verhältnisse bedingte Stellung der Individuen zueinander.“

„Das einmal historisch entwickelte Kapital schafft seine Existenzbeziehungen selbst [...] (nicht als Bedingungen seines Entstehens, sondern als Resultate seines Daseins)“;

1 Building blocks

Marx: „Wenn im vollendeten bürgerlichen System jedes ökonomische Verhältnis das andere in der bürgerlich-ökonomischen Form voraussetzt und so jedes Gesetzte zugleich Voraussetzung ist, so ist das mit jedem organischen System der Fall. Dies organische System selbst als Totalität hat seine Voraussetzungen, und seine Entwicklung zur Totalität besteht eben [darin], alle Elemente der Gesellschaft sich unterzuordnen, oder die ihm noch fehlenden Organe aus ihr heraus zu schaffen. Es wird so historisch zur Totalität.“

1 Building blocks

Peirce: thirdness –

„Der Begriff eines **Dritten** ist der eines Objekts, das sich so auf zwei andere bezieht, daß sich eines dieser beiden genauso auf das andere bezieht, wie sich auch das dritte auf dieses andere bezieht.“

1 Building blocks

Bertalanffy: unity through diversity –

„[...] necessity of investigating not only parts but also **relations of organisation resulting from a dynamic interaction** and manifesting themselves by the difference in behaviour of parts in isolation and in the whole organism“; „[...] you have to take into account the **relations between the various subordinated systems and the systems which are super-ordinated to them** in order to understand the behaviour of the parts“.

1 Building blocks

Relational Sociology: „Social relations [...] reflect the performance of an emergent reality between two or more people, groups, and even institutions when they act as social subjects“, „this reality is able [...] to feed back onto the subjects [...], since it exceeds their individual as well as their aggregate contribution to it“, „a non-observable but equally real level of reality, where the relation is the tertium“, „the relation in itself, as a mediation or mediator [...] is irreducible to the terms that are connected“ (P. Donati).

2 Emergentist systemism/informationalism

2.1 Relations as part of the dynamic of systems evolution/development

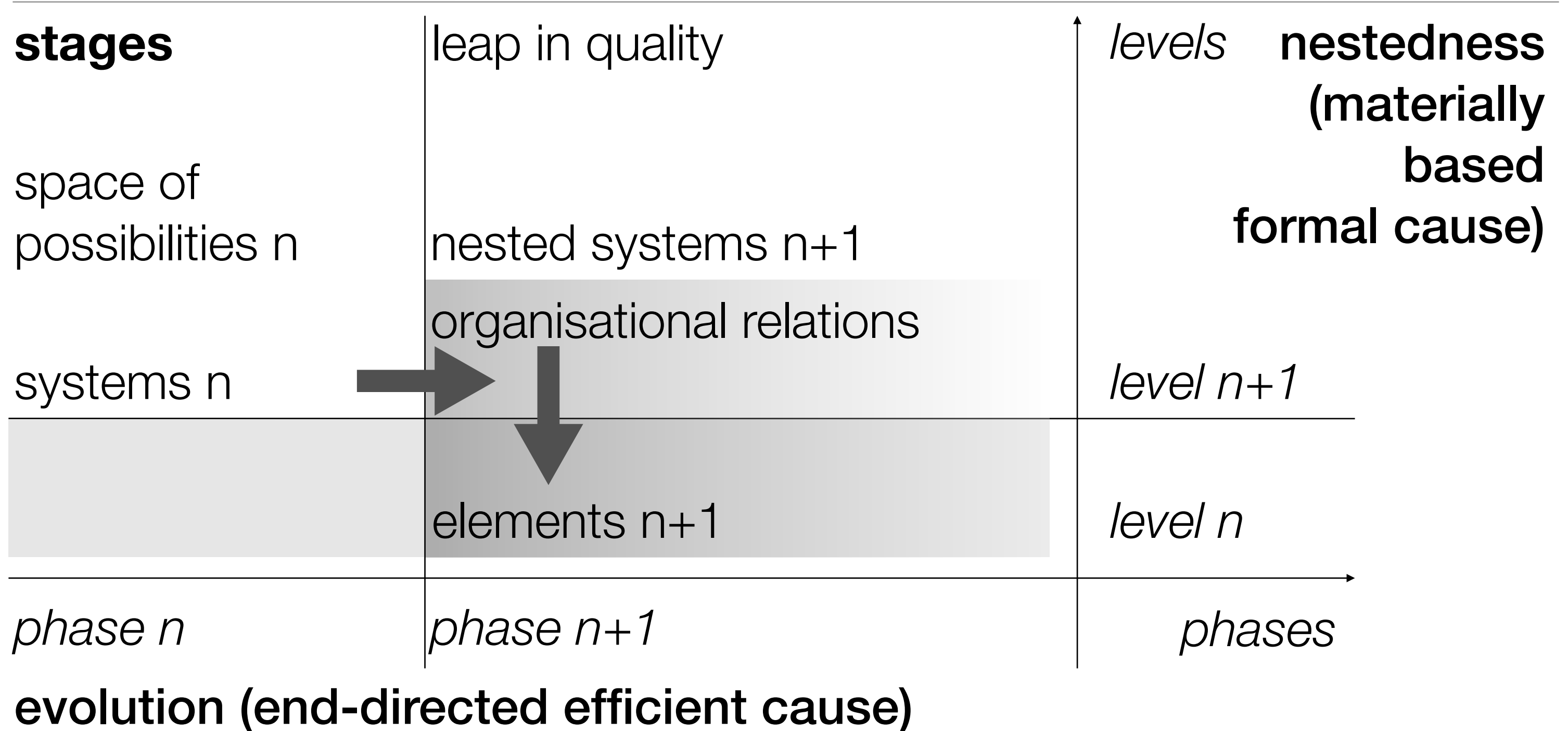
The importance of organisational relations:

everything is matter, progressively organised, from

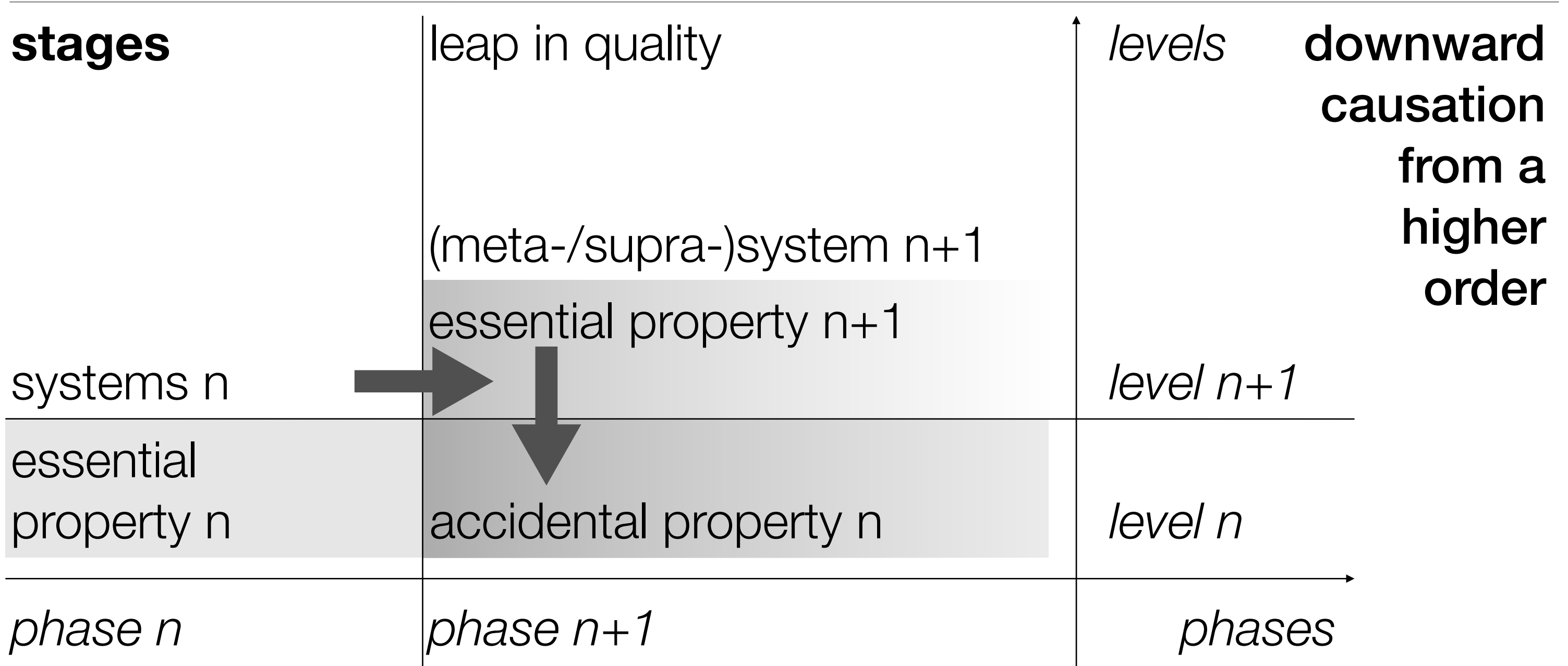
- material systems to
- living material systems to
- social living material systems;

the difference between different manifestations of matter is
different organisation to allow for synergy.

2.1.1 Evolutionary transition



2.1.1 Evolutionary transition



emergence from a necessary condition

2.1.2 Intrasystemic development

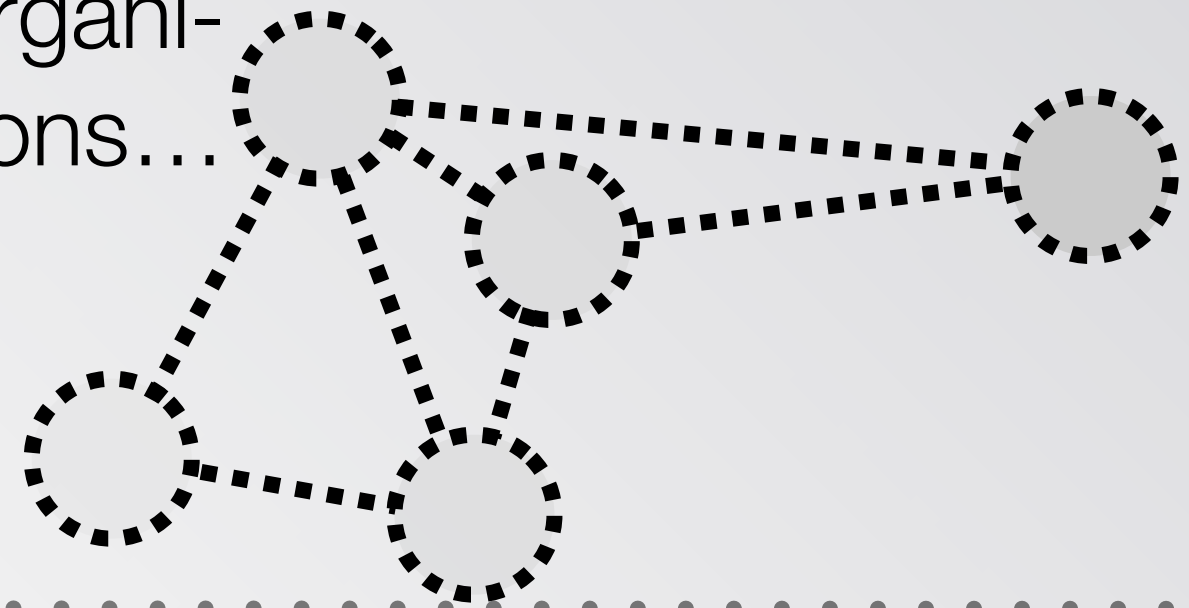
self-organising system

macro-
level
(structure)

micro-
level
(net-
work)

*...reproduce
or/and transform...*

*...organi-
sational relations...*



*...enabling synergy effects
through constraints for...*



element n

*...co-acting
so as to...*



element n+1

2.2 Social relations

The importance of social relations:

any **social system** is a social system by virtue of **organisational relations of production and provision of (the) common(-good)s**
– **relations of commoning.**

2.2 Social relations

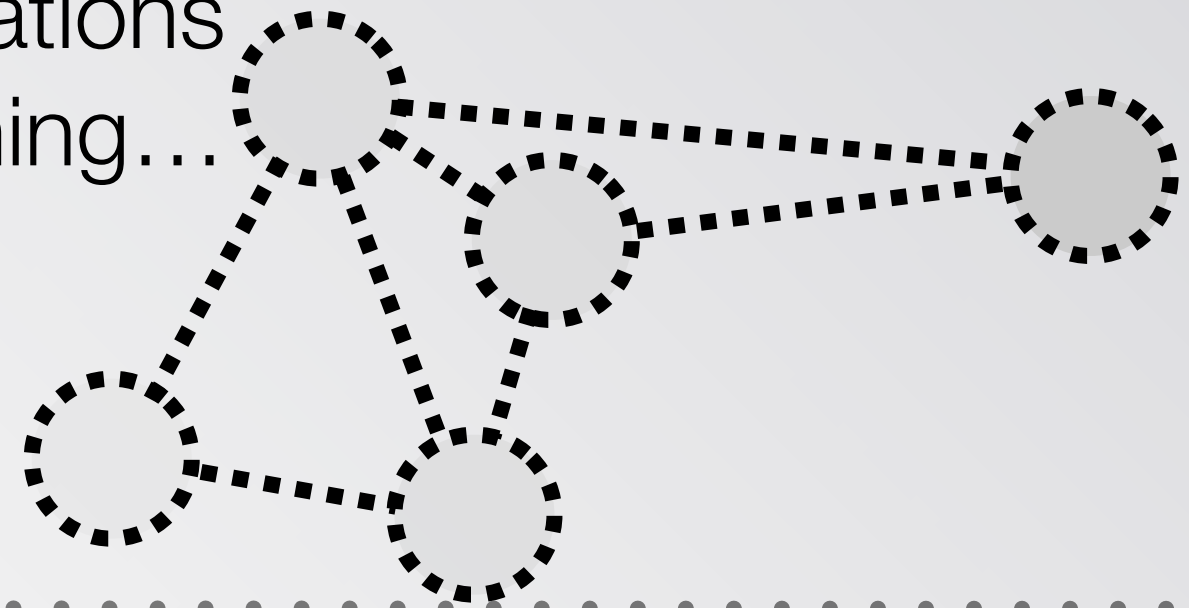
social system

macro-
level
(structure)

micro-
level
(net-
work)

*...reproduce
or/and transform...*

*...relations
of commoning...*



*...enabling good life
through constraints for...*



commons
co-producer n

*...co-acting
so as to...*



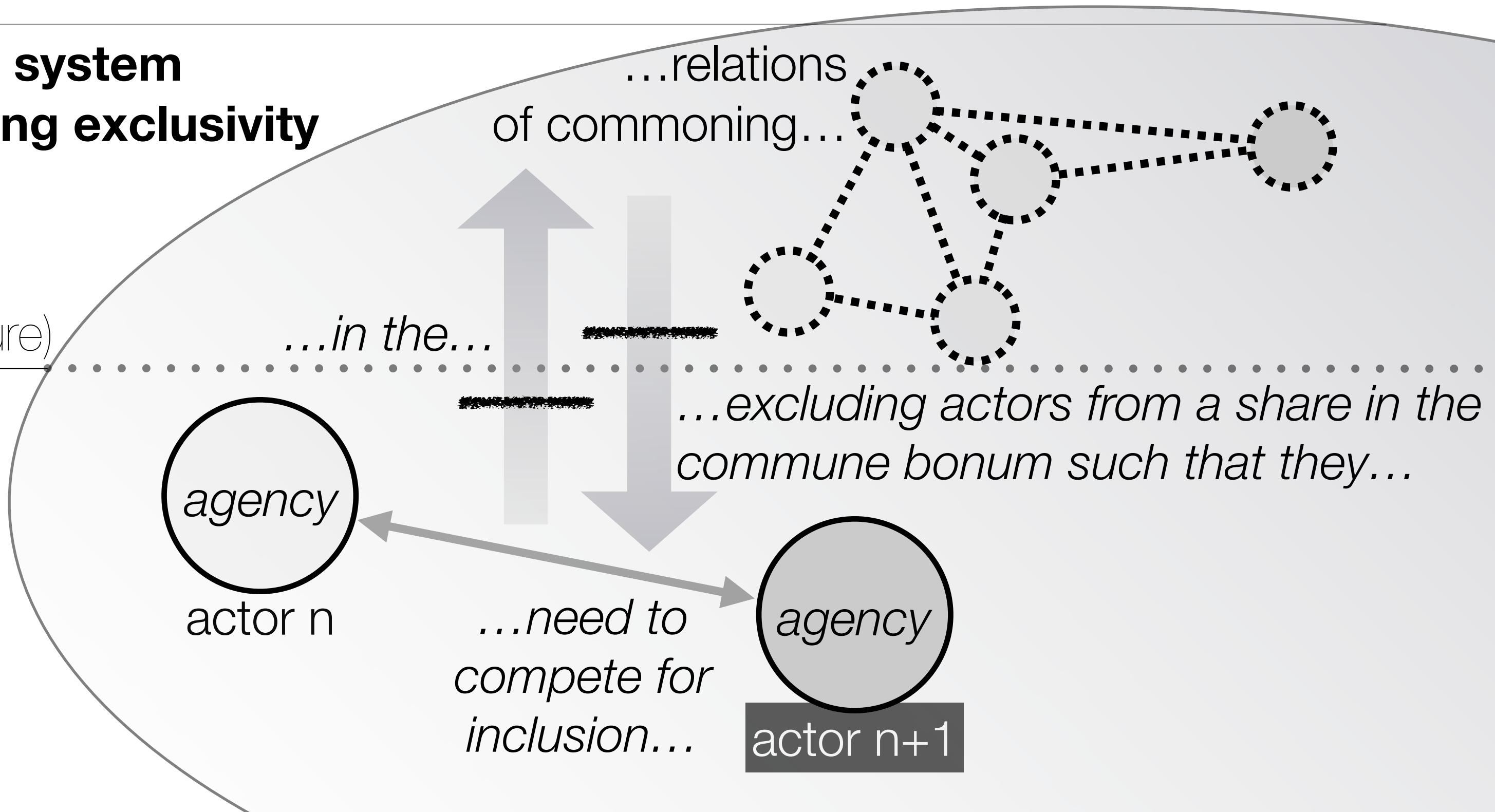
commons co-producer n+1

2.2 Social relations

social system showing exclusivity

macro-
level
(structure)

micro-
level
(net-
work)



2.2 Social relations

Essential types of social relationships (appearing in social action):

- antagonisms (Marx)
- agonisms (Mouffe)
- synergisms (Corning)

2.2 Social relations

	social relation	dealing with the one and the many	
universalism		contradictoriness: conflict of mutually exclusive positions (contrapositions)	negation of any difference
particularism			antagonism
relativism	agonism	contrariness: co-existence of oppositions	juxtaposition of every difference in their own right
unity-through- diversity view: <i>harmonie universelle</i>	synergism	complementariness: convergence of mutually supporting propositions	composition made up by all compossible differences

2.3 Information as relations

The role of information as organisational relations:

the organisation of matter (order) is produced by **informational agents** (self-organising systems) according to the information generation/utilisation capabilities they possess, evolving from primordial capabilities to human/social ones.

2.3 Information as relations

The role of information as organisational relations:

information is a systems-relative (agent-relative) term;

information is a triadic relation between

(1) an **agent**(ial disposition),

(2) its (interior or exterior) **environment**, and

(3) the emergent **structure** – the organisational relations – it adopts when being perturbed.

2.3 Information as relations

The role of information as organisational relations:

the generation(/utilisation) of information is a process in which

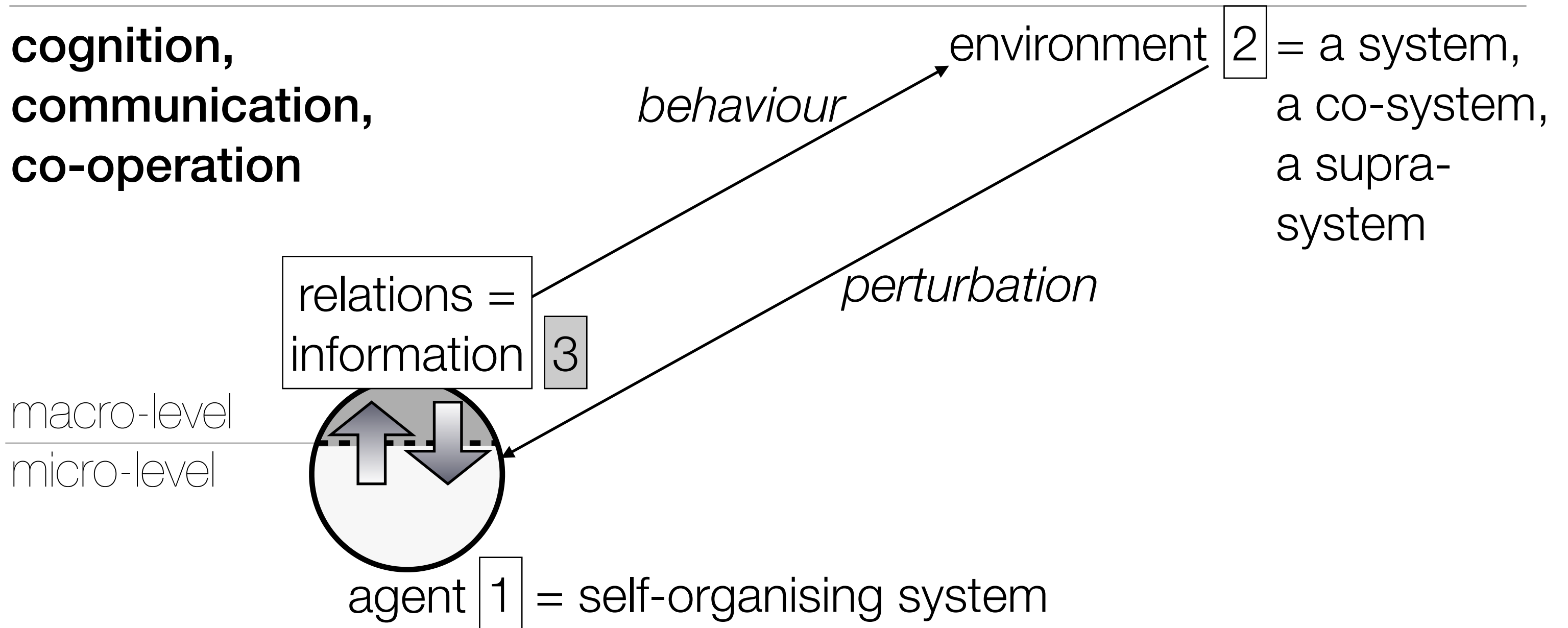
(1) an **agent** positions itself

(2) to a perturbation from its **environment**

(3) through the mediation of the **structure** that emerges from the agent's own activity.

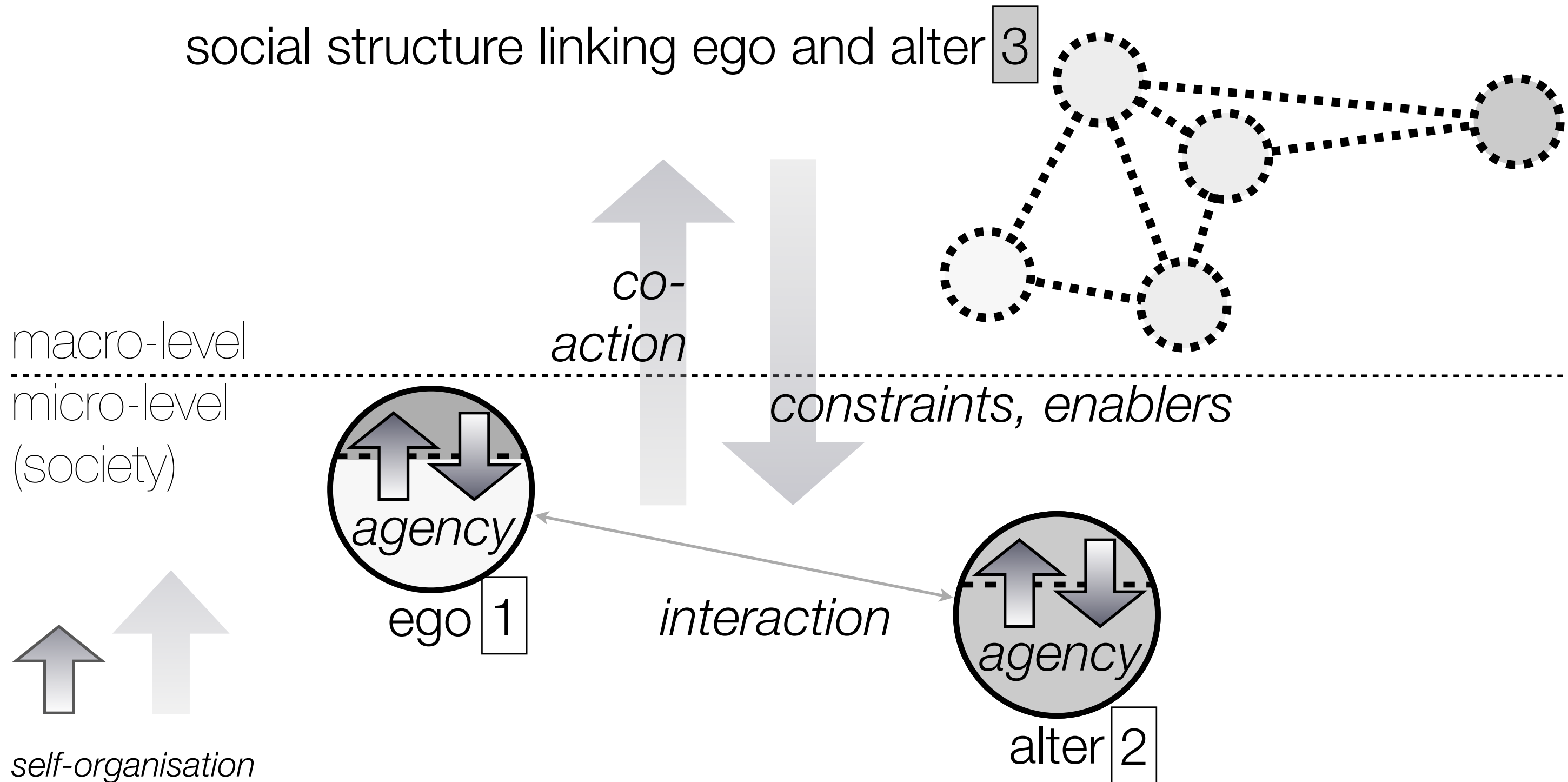
2.3 Information as relations

**cognition,
communication,
co-operation**

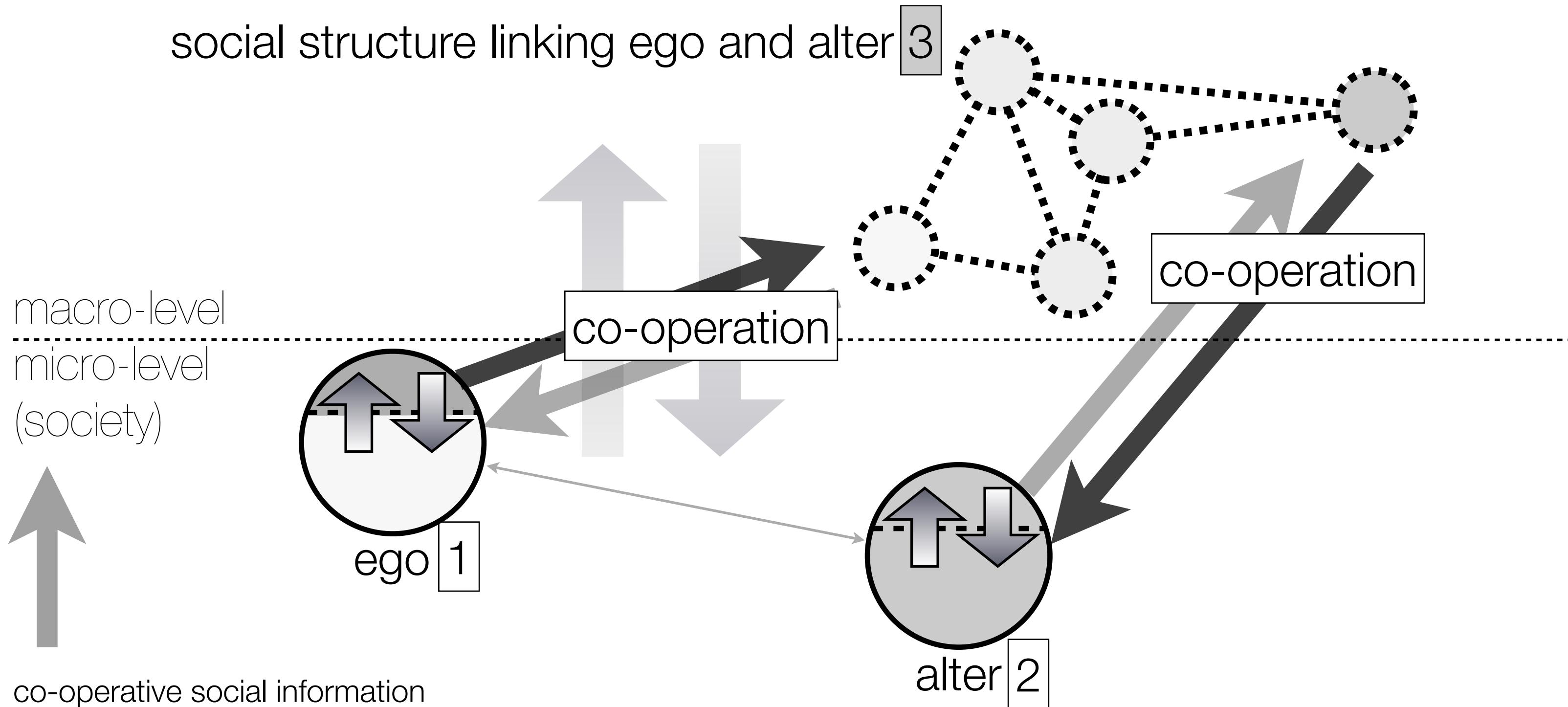


self-organised order = generated/utilised information

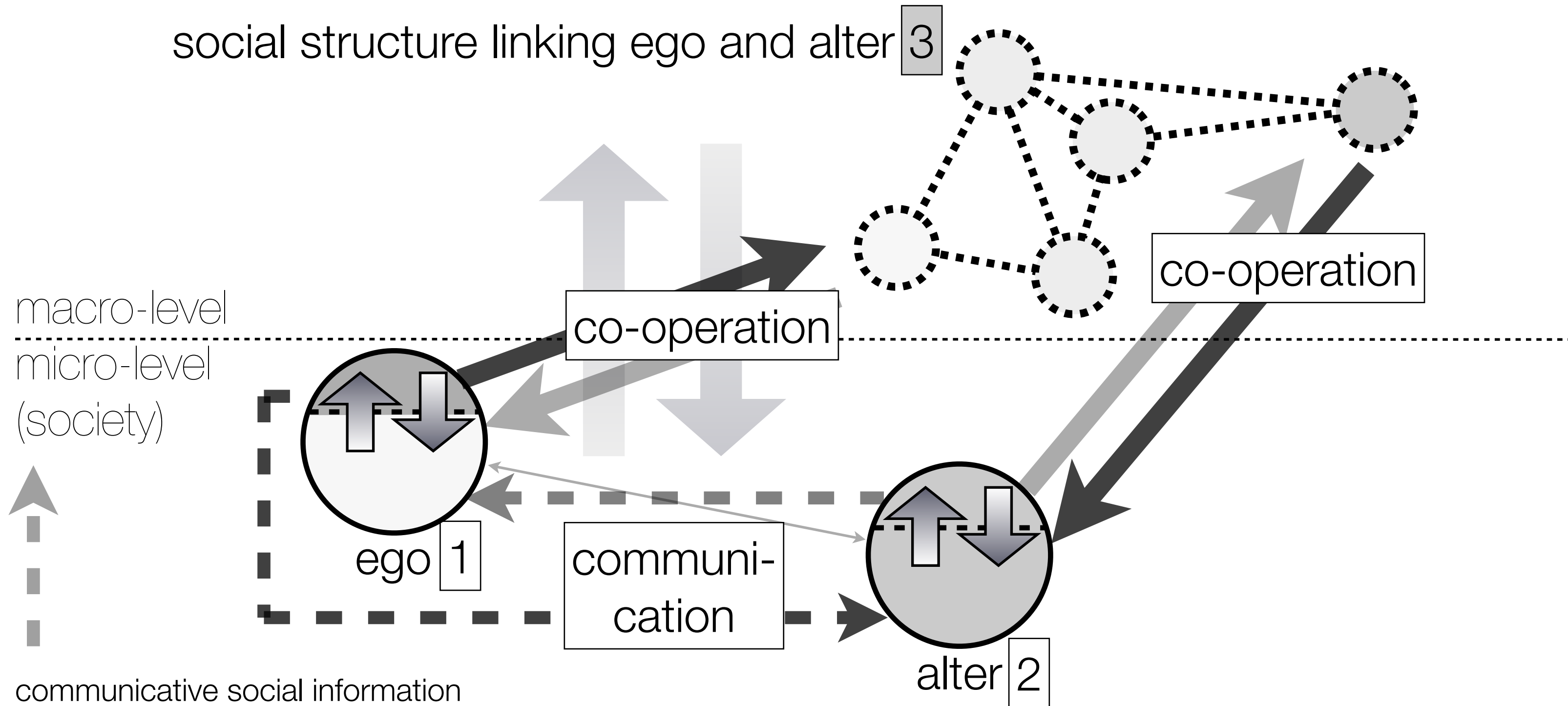
2.4 Social information as social relations



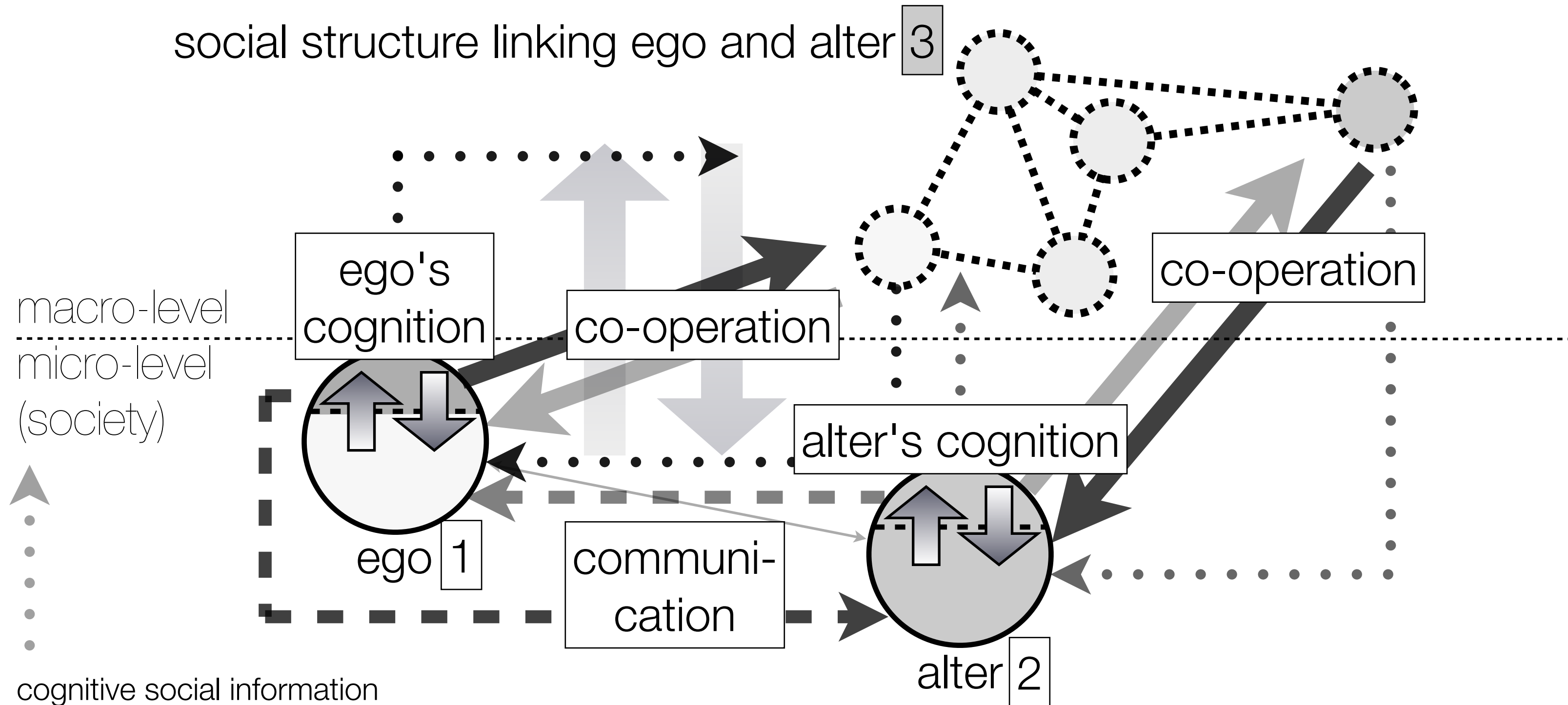
2.4 Social information as social relations



2.4 Social information as social relations



2.4 Social information as social relations



3 Relations and information in the age of global challenges

The importance of information in the global age:

in order to avoid the breakdown of civilisation and to master the breakthrough to another step of its evolution, the actors of today need to be capacitated to **catch up with the growing complexity** of social systems' interaction.

This is in accordance with W. Ross Ashby's Law of Requisite Variety 1956: in cybernetics, a system R in order to be able to compensate different disturbances D needs to have a variety (of appropriate counteractions) at least as great as the variety of D.

3 Relations and information in the age of global challenges

	evolution of complex systems	social evolution in the global age
state of intelligence	when increased complexity of an enclosed system puts performance or maintenance at risk, increasing the complexity by an enclosing system can solve the problem: collective intelligence can catch up, surpassing individual intelligences	governance cannot be achieved unless systemic dysfunctions are reflected (underpinned by a proper information infrastructure)

3 Relations and information in the age of global challenges

The ultimate cause of those systemic dysfunctions that threaten society is the enclosure of the commons:

the enclosure of the commons has become **ubiquitous**. Private property of means of production has kicked off the enclosure of commons (Marx). Today it is not only material wealth growing masses are deprived of, but any field of social life has become subject to the enclosure of commons (Zizek).

3 Relations and information in the age of global challenges

A global sustainable information society is needed:

this is the only way **to accomplish**

(1) for the first time in history, **an integration at the level of all humanity** (globality);

(2) a **reorganisation of the social relations** within and between the interdependent social systems such that sociogenic dysfunctions can be kept below the threshold that would endanger the continuation of social evolution (sustainability);

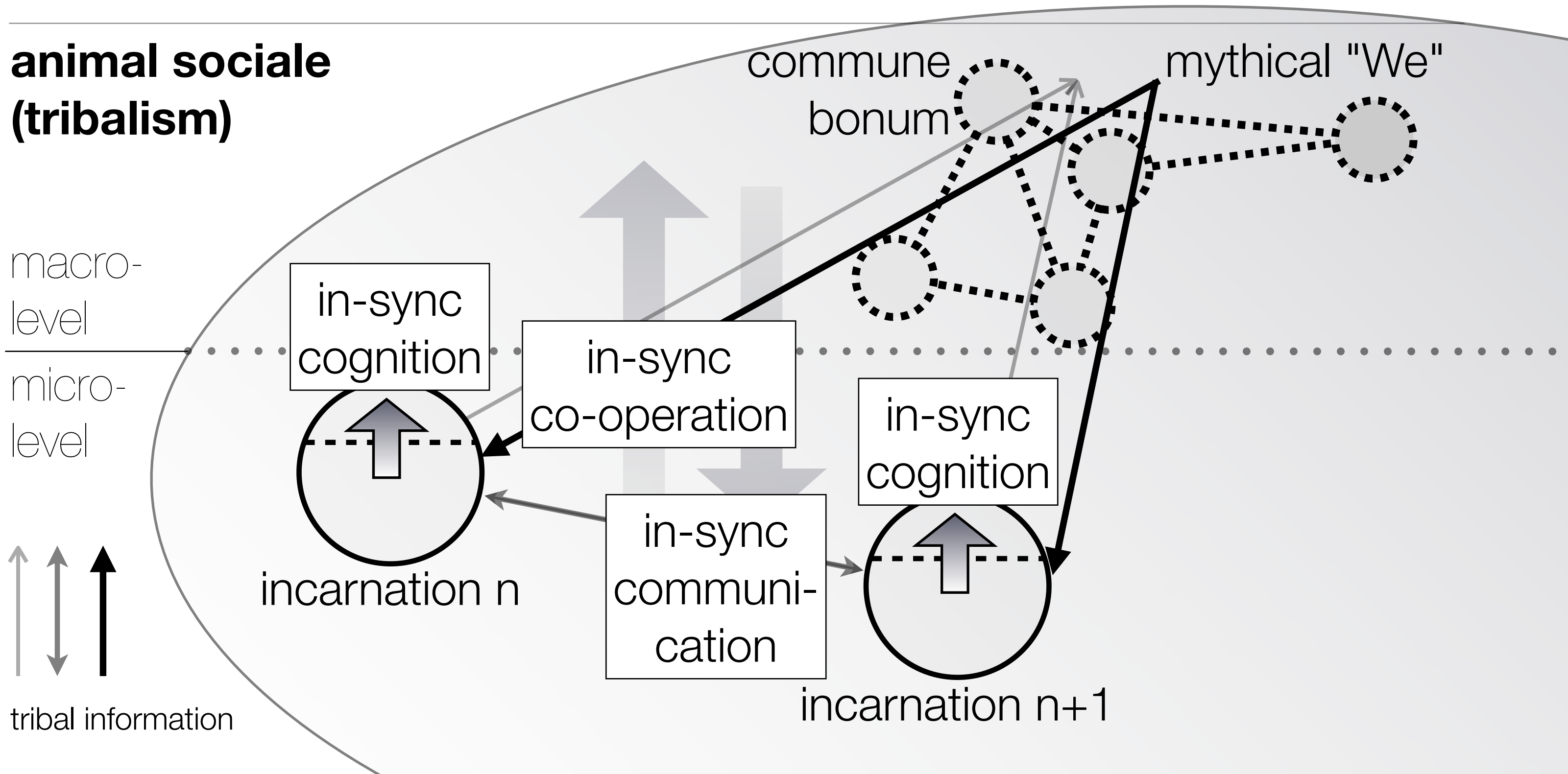
(3) the **creation of requisite knowledge** for the recognition of those dysfunctions (informationality).

3 Relations and information in the age of global challenges

	anthropological features		features required for the global age
co-operative information	consensual	collectively intentional (about the goal, the here and now and the way to the goal)	globally conscientious and conscious: commonist
communicative information	collaborative	consilient (help-, truthful, perspectivist)	globally conversational: all-inclusive
cognitive information	co-ordinative	conceptual (reflexive, able to generalise)	globally concerned: meta-reflexive

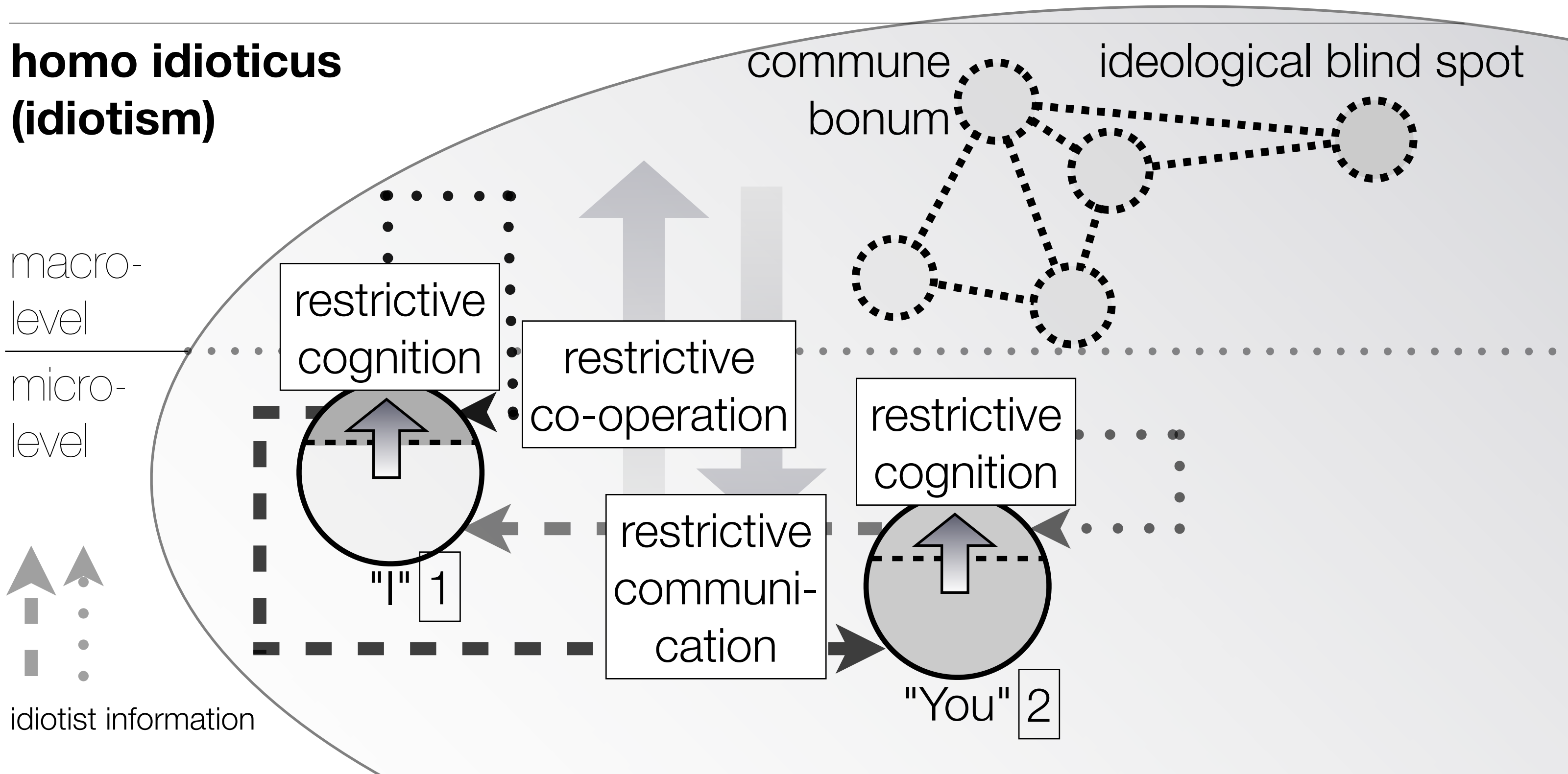
3.1 Excessive collectivism

animal sociale (tribalism)



3.2 Excessive individualism

homo idioticus (idiotism)

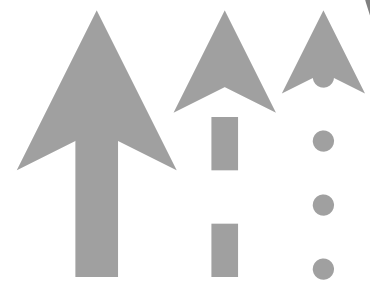


3.3 Harmonie universelle

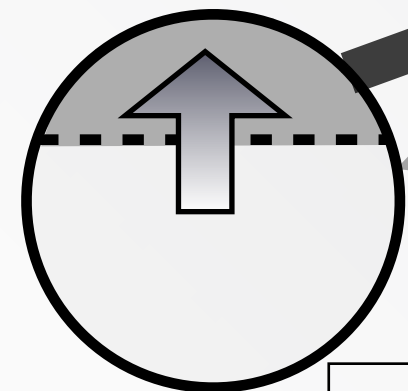
homo socialis (new cosmopolitanism)

macro-level

micro-level

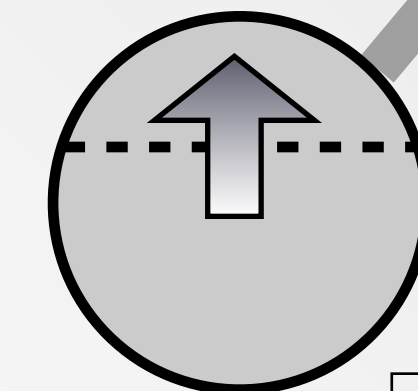


requisite information



"Me" 1

extensive
co-operation

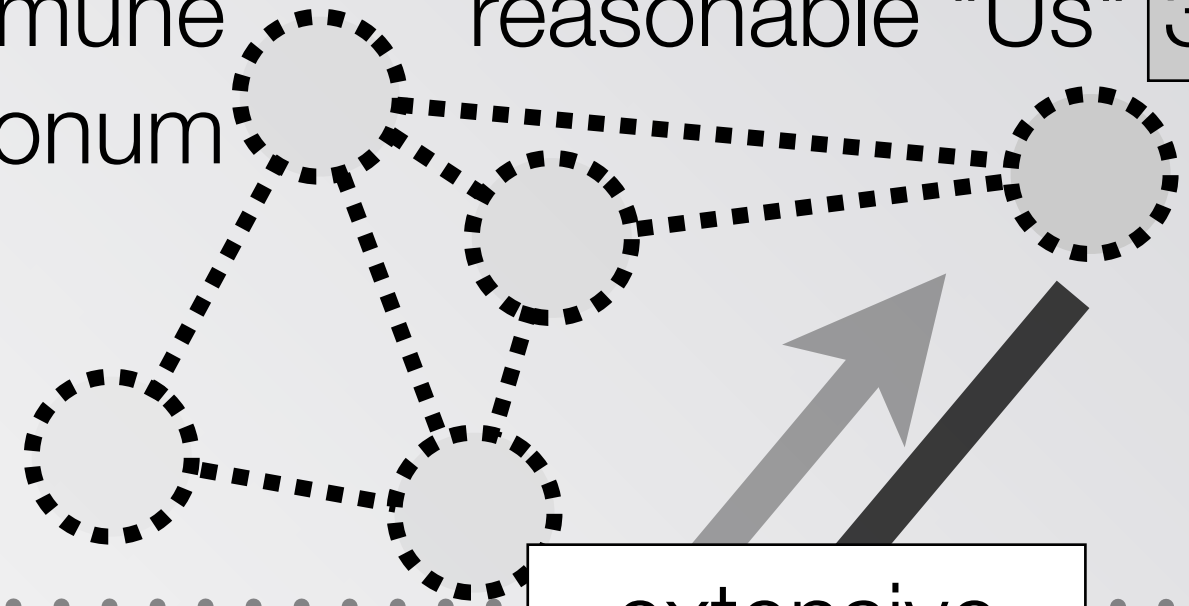


"Thee" 2

extensive
co-operation

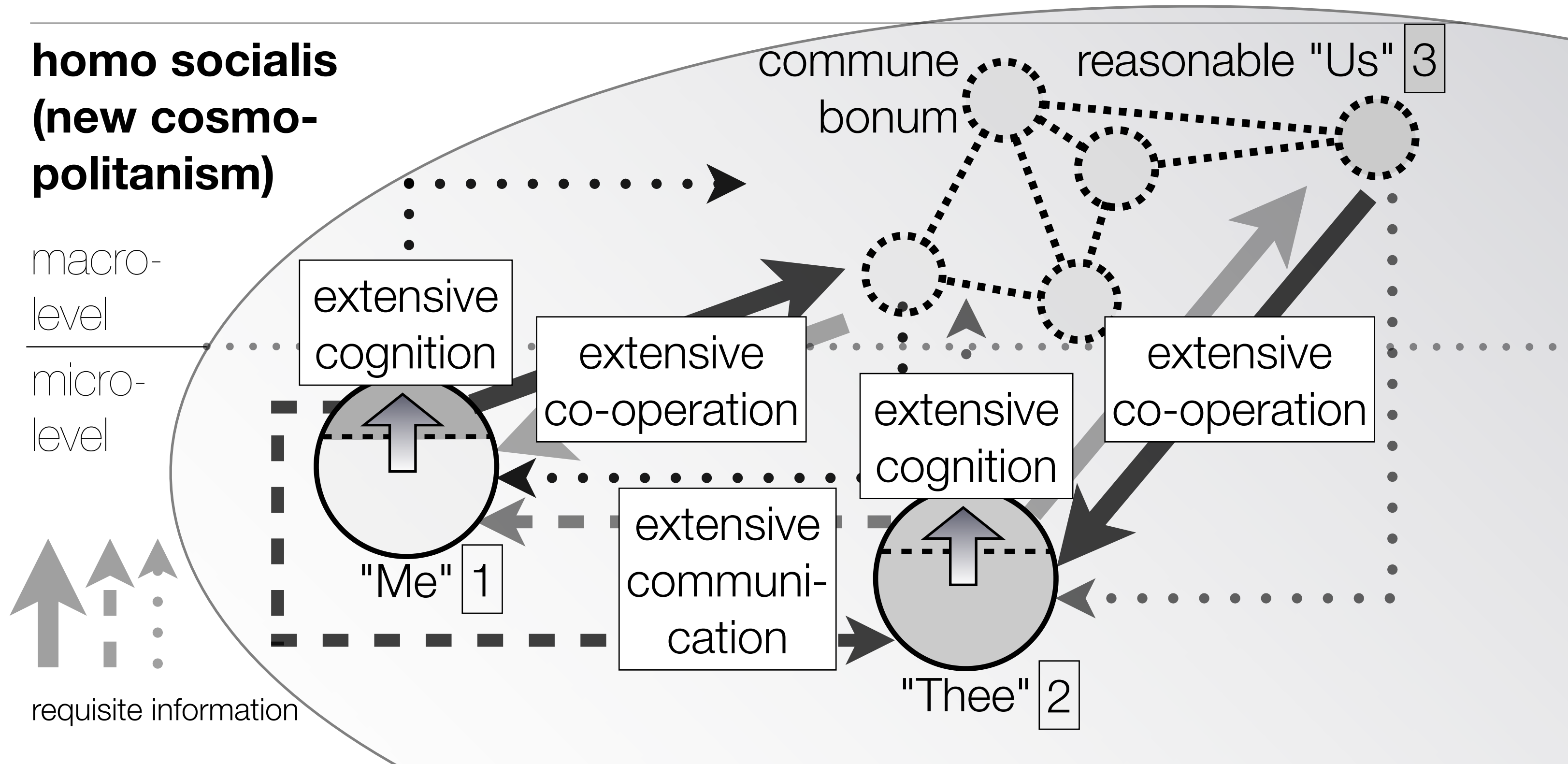
commune
bonum

reasonable "Us" 3



3.3 Harmonie universelle

homo socialis (new cosmopolitanism)



Thank you for your attention!

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