Information for a Global Sustainable Information Society – The Great Bifurcation Imperative

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1 The Great Bifurcation

1.1 Theory of self-organisation:
The multi-stage model of systems evolution

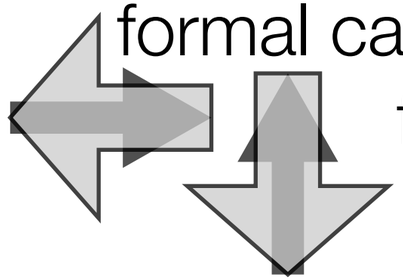
1.1 Theory of self-organisation:
The multi-stage model of systems evolution

Superposition of efficient and final cause as well as material and formal cause

syn-chrony

formal cause

efficient cause, end-directed

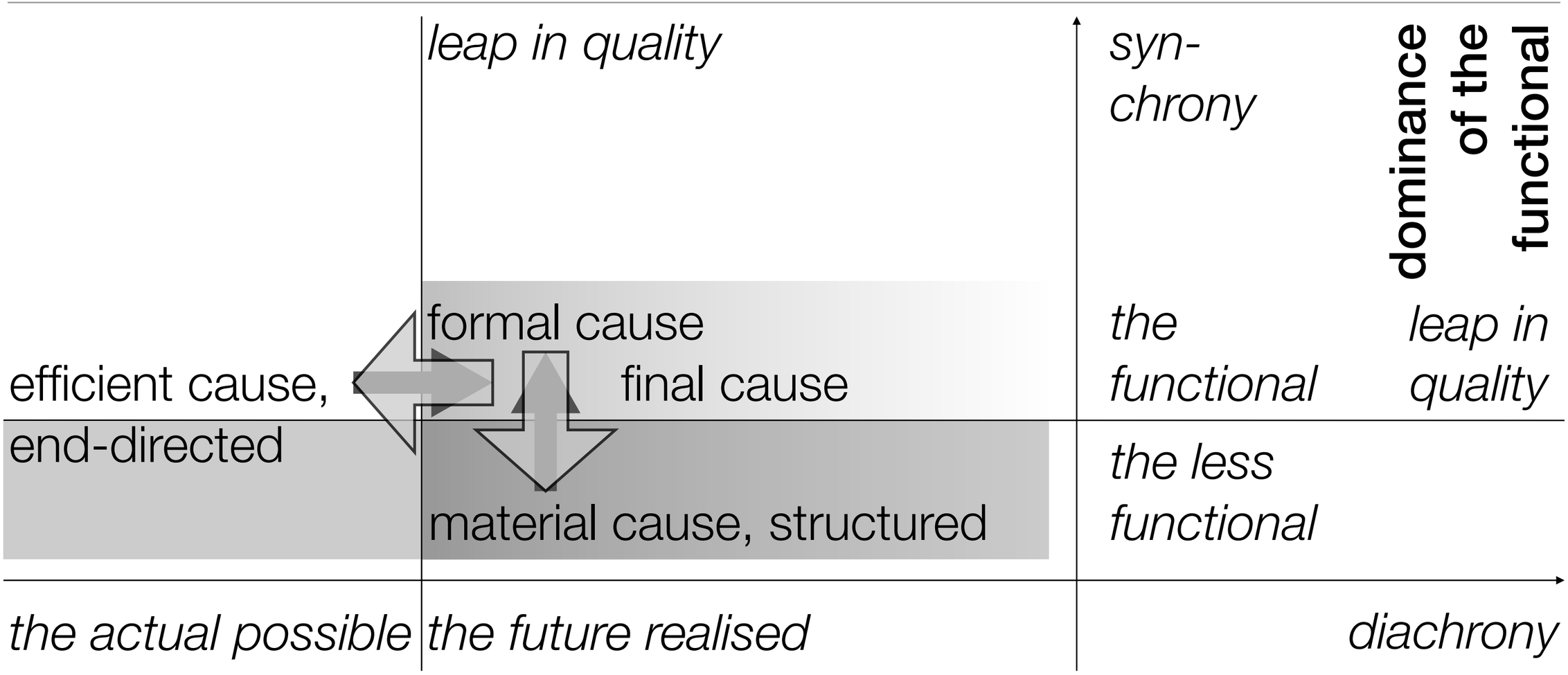


final cause

material cause, structured

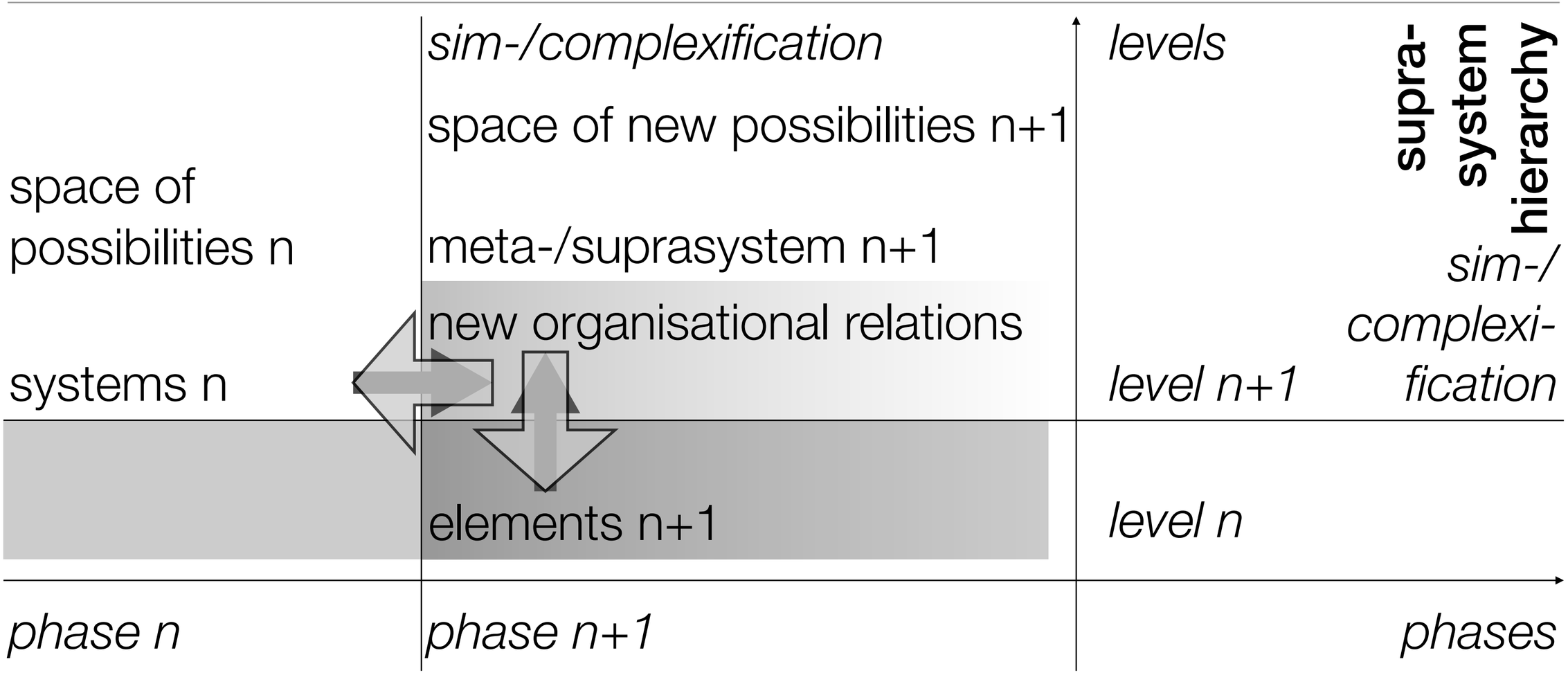
diachrony

1.1 Theory of self-organisation:
The multi-stage model of systems evolution



emergence of the realised from the possible

1.1 Theory of self-organisation:
The multi-stage model of systems evolution



meta-system transition

1.2 The current stage of social systems evolution

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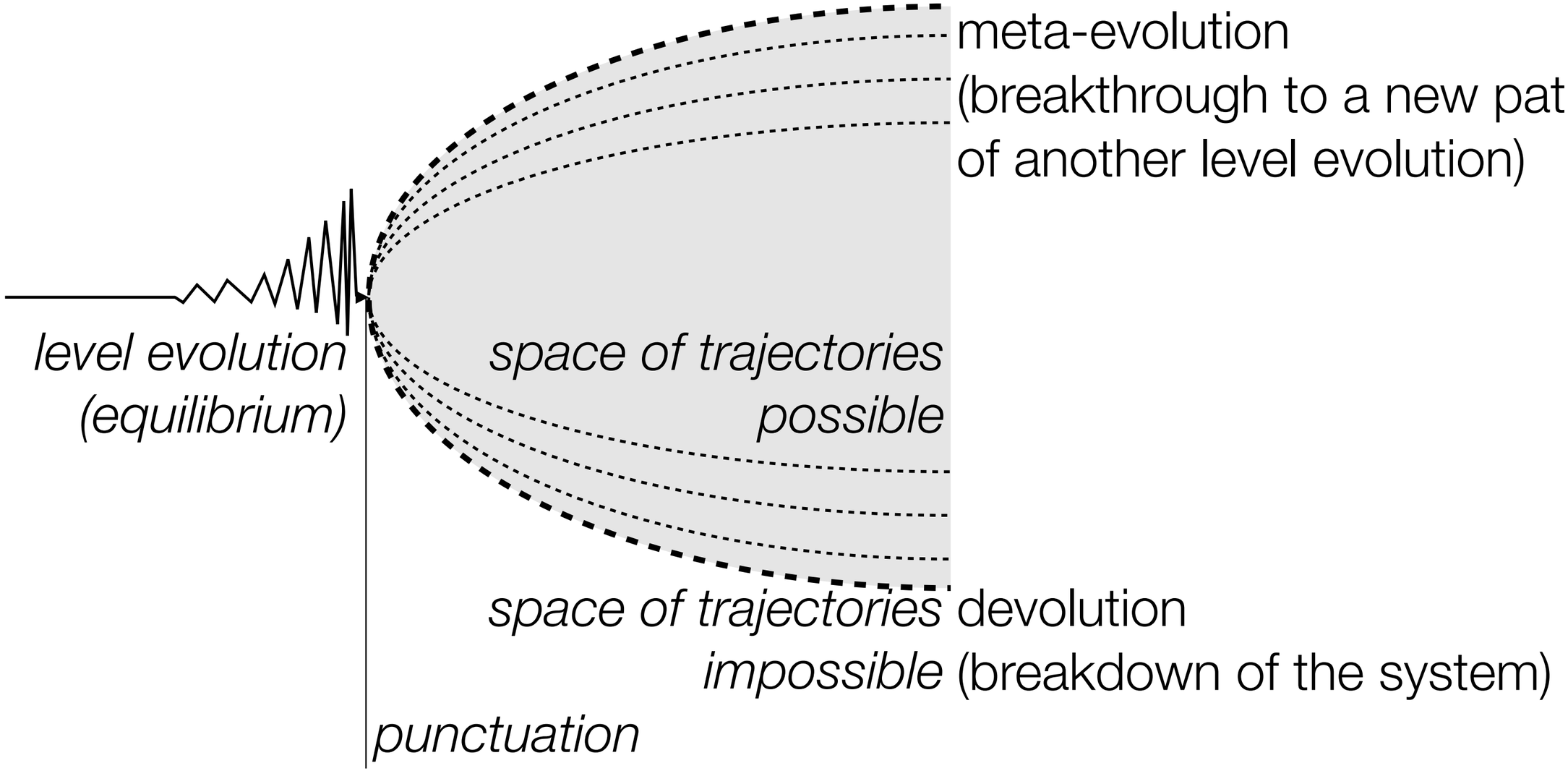
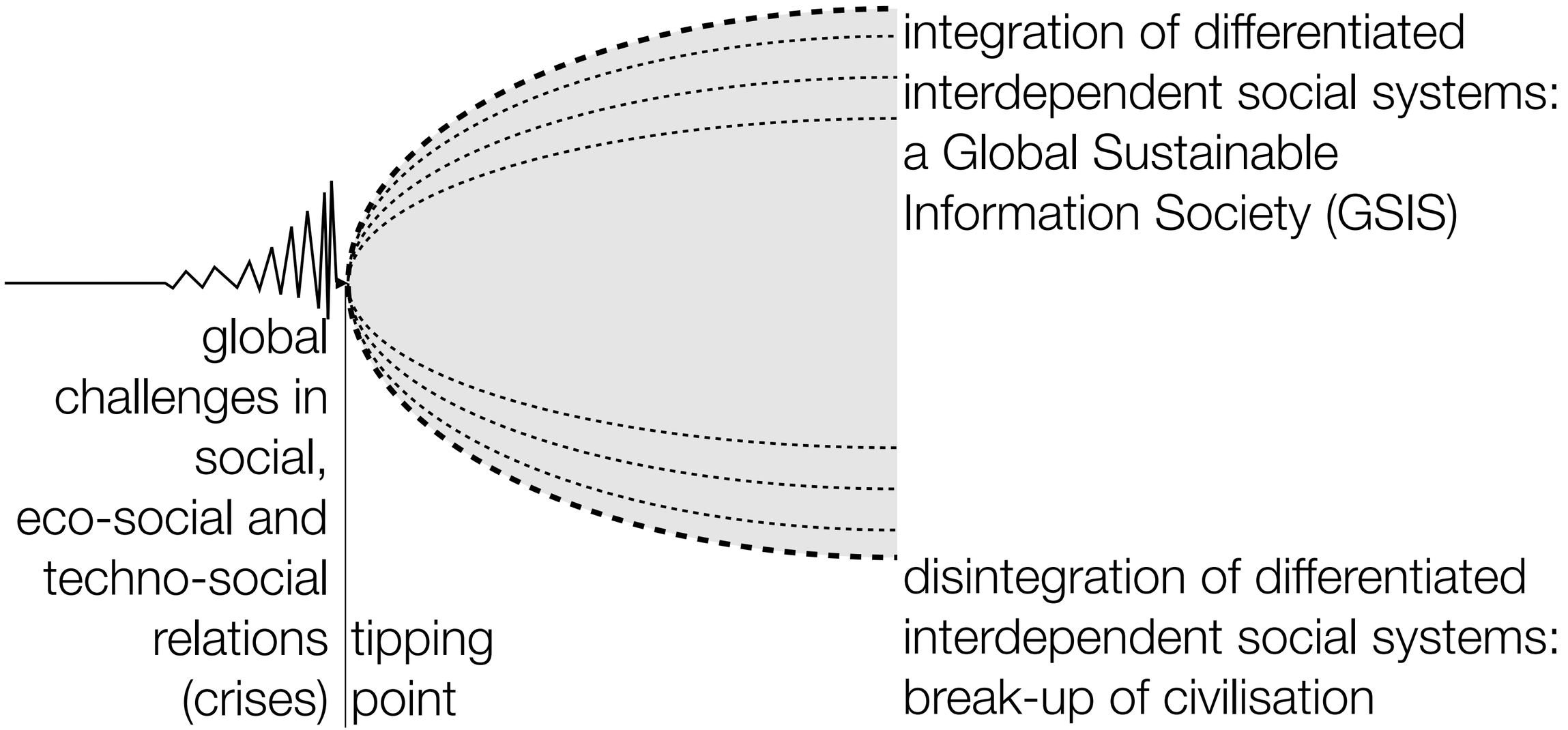


1.2 The current stage of social systems evolution



1.2.1 Wholeness

self-organisation	**metasystem transition/ supra-system hierarchy**	**breakthrough to GSIS**
wholeness	a supra-system can emerge from formerly independent systems that have become interdependent: level evolution is superseded by a leap in meta-evolution onto a higher level of organisation	globality: the partitions of humanity cannot survive and thrive without becoming parts of a new whole (world society) – can come true only if and when sustainability is achieved

1.2.2 Integration

self-organisation	**metasystem transition/ supra-system hierarchy**	**breakthrough to GSIS**
integration	the new structure can enable and constrain the interaction of the new co-systems for the sake of both the supra-system and the co-systems‘ maintenance and performance: unity through diversity is being approached	sustainability: world society cannot be governed without rectifying and preventing anthropogenic dysfunctions (emerging from inside the social systems) – can come true only if and when informationality is achieved

1.2.3 Information

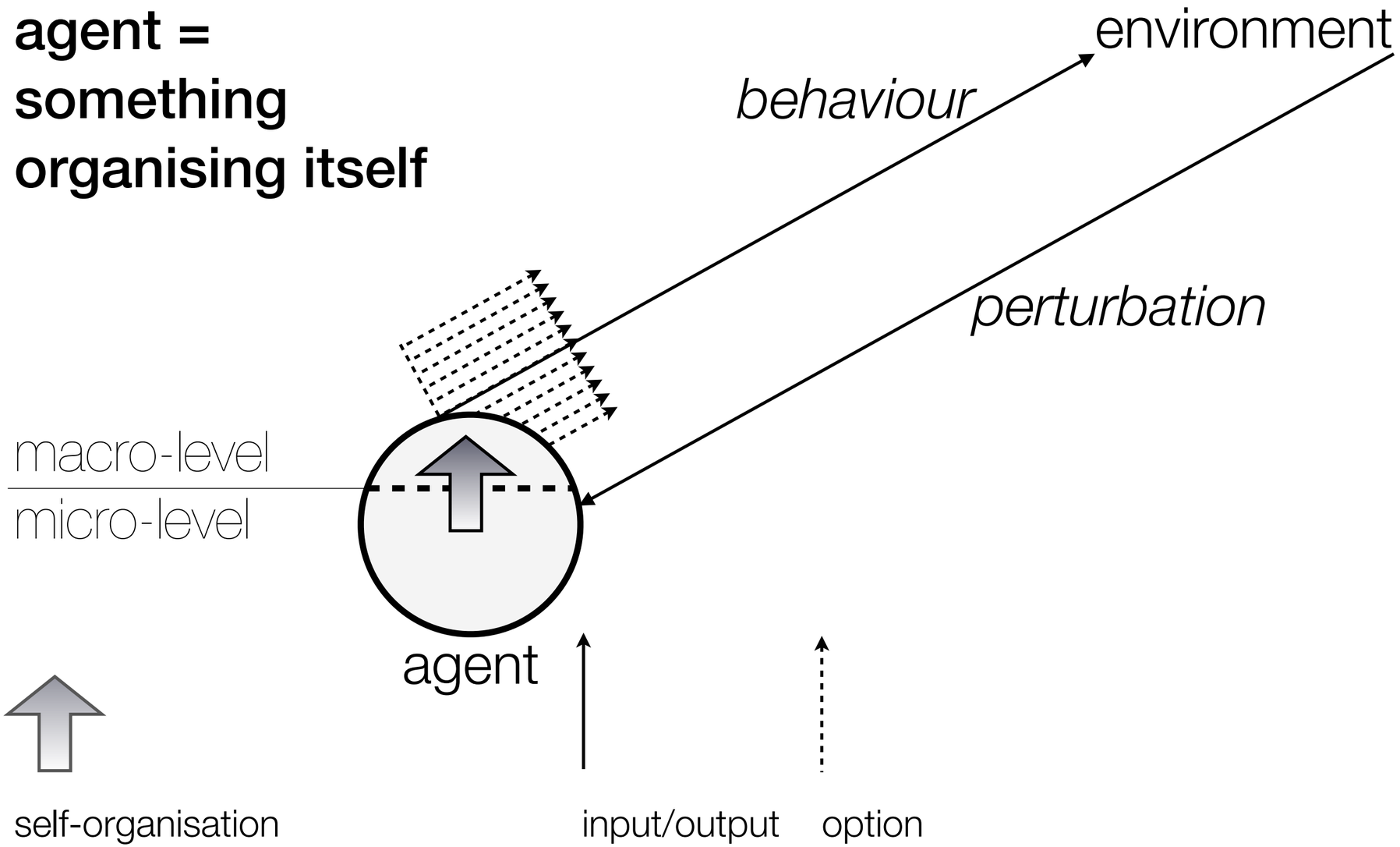
self-organisation	metasystem transition/ supra-system hierarchy	breakthrough to GSIS
information	the supra-system‘s collective intelligence that emerges from the co-systems‘ individual intelligences can catch up with increased complexity that threatens systems maintenance and performance: complexification	informationality: informatisation – that is, the diffusion of I(C)T(s) through society – needs to be underpinned by informationalisation – that is, the creation of that information (data, knowledge, wisdom) that is required for sustainabilisation

2 The imperative

2.1 Theory of information: The triple-c model

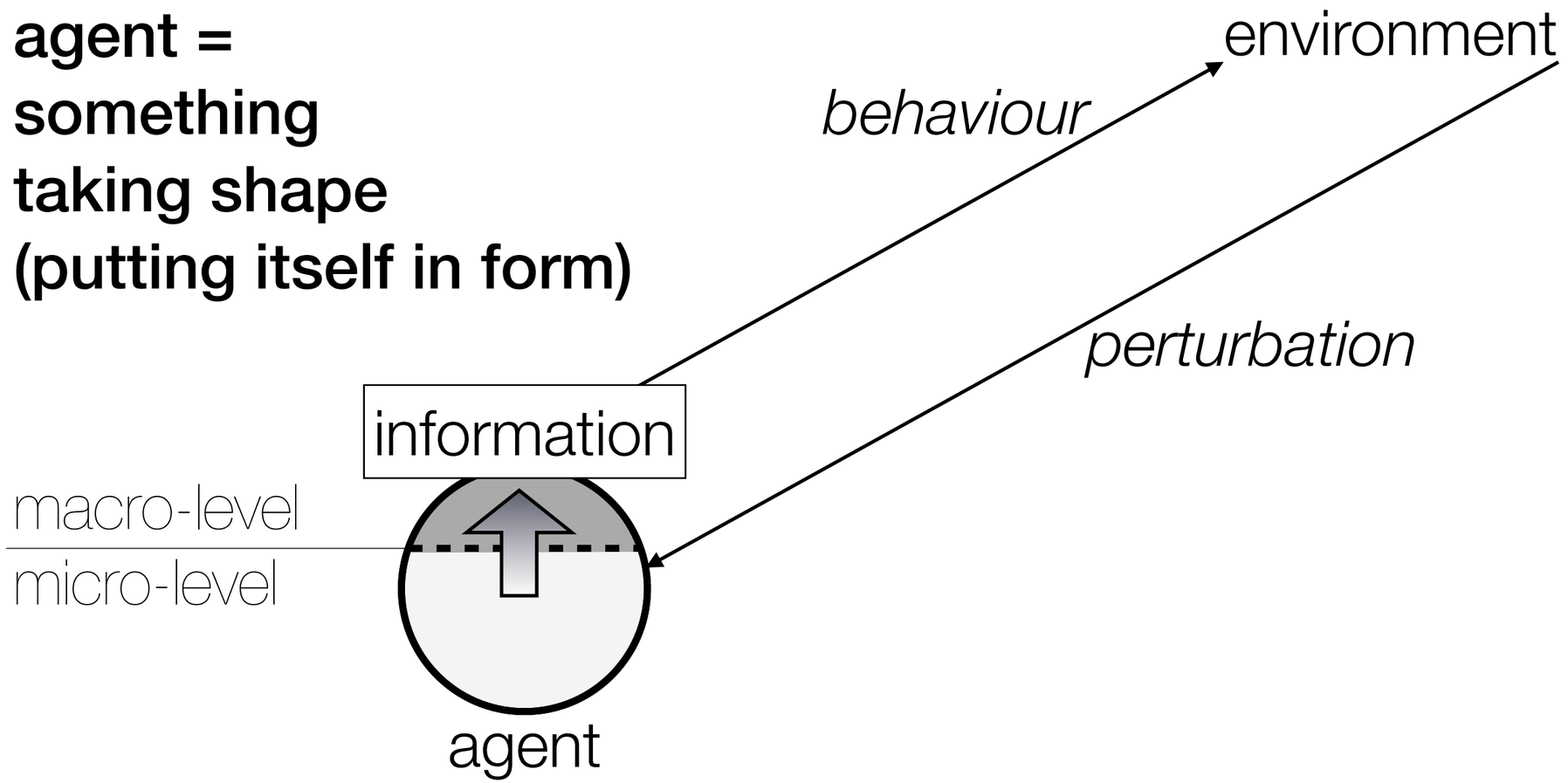
2.1 Theory of information: The triple-c model

agent =
something
organising itself



2.1 Theory of information: The triple-c model

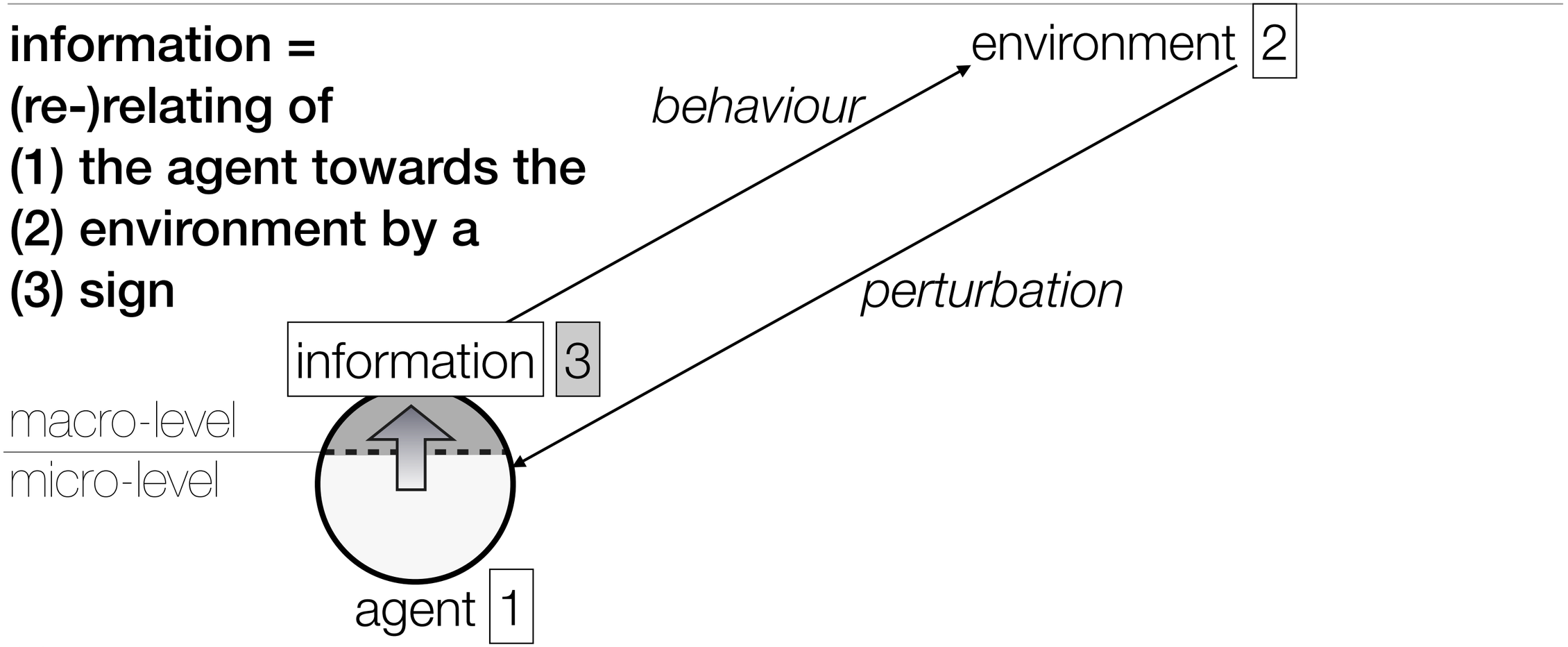
agent =
something
taking shape
(putting itself in form)



self-organised order = generated/utilised information (sign)

2.1 Theory of information: The triple-c model

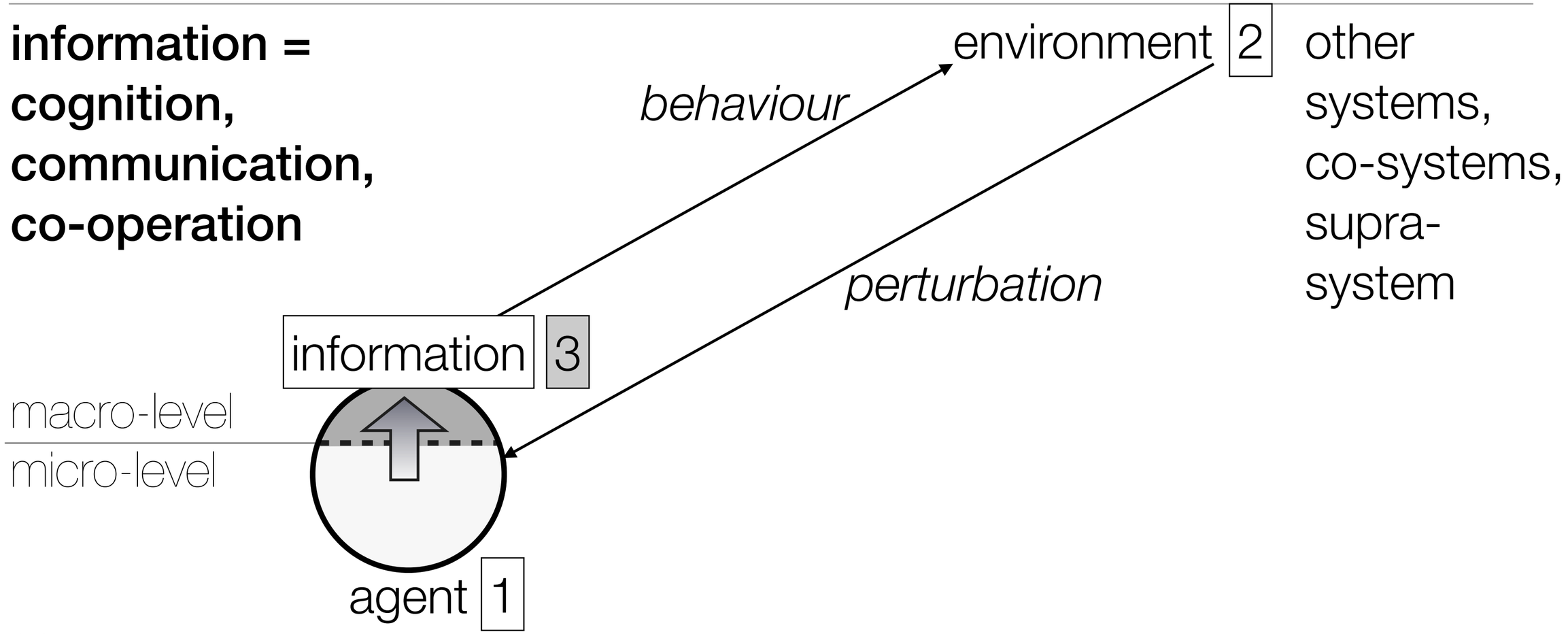
information =
(re-)relating of
(1) the agent towards the
(2) environment by a
(3) sign



self-organised order = generated/utilised information (sign)

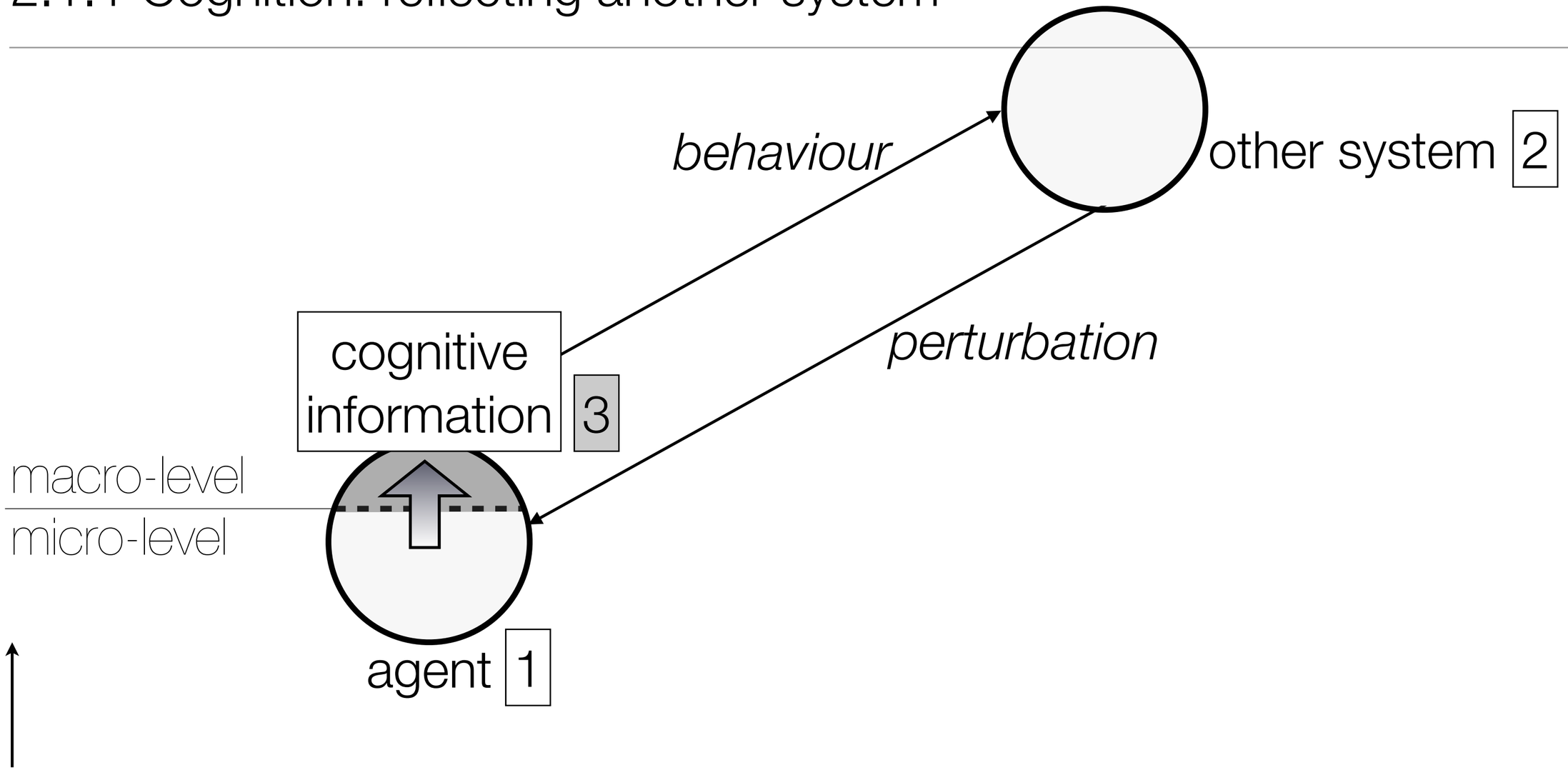
2.1 Theory of information: The triple-c model

information =
cognition,
communication,
co-operation

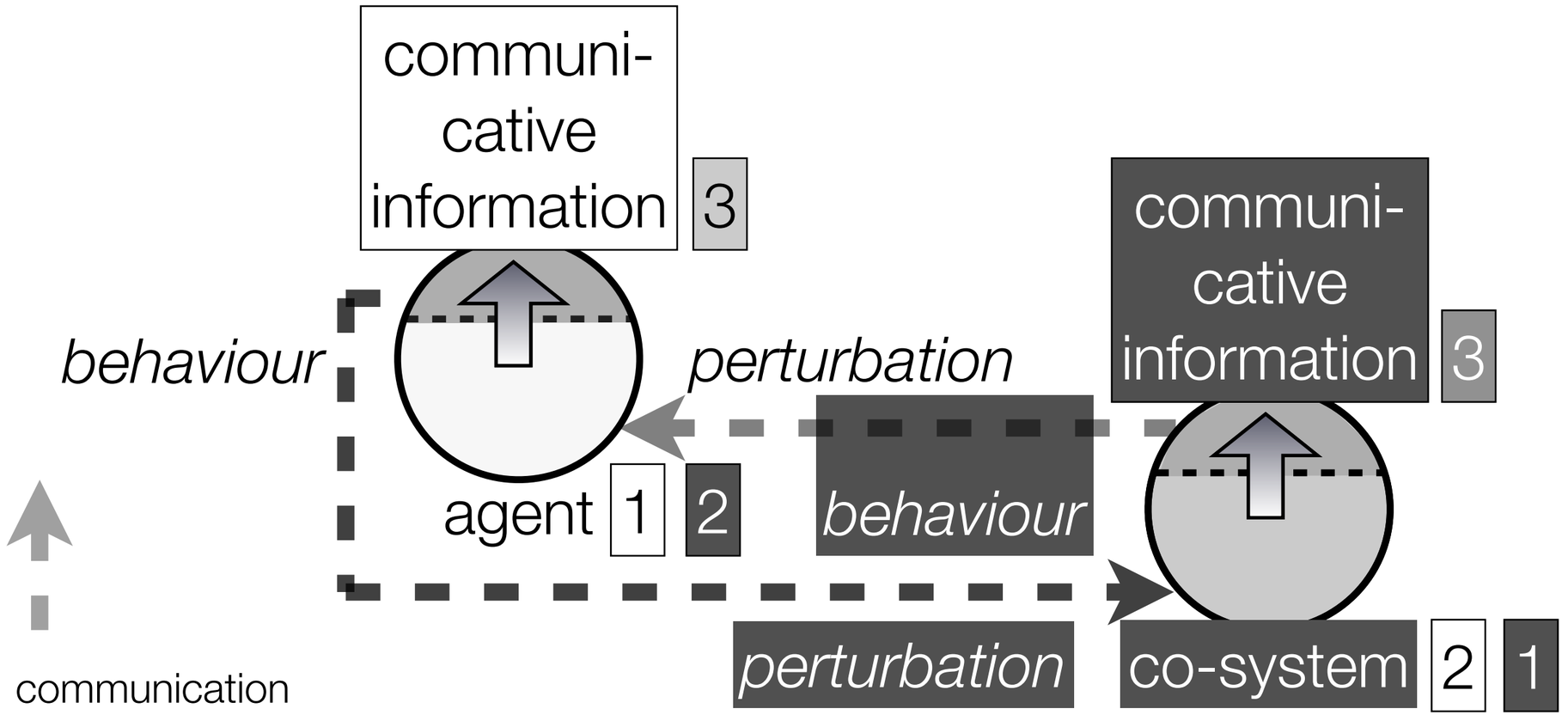


self-organised order = generated/utilised information (sign)

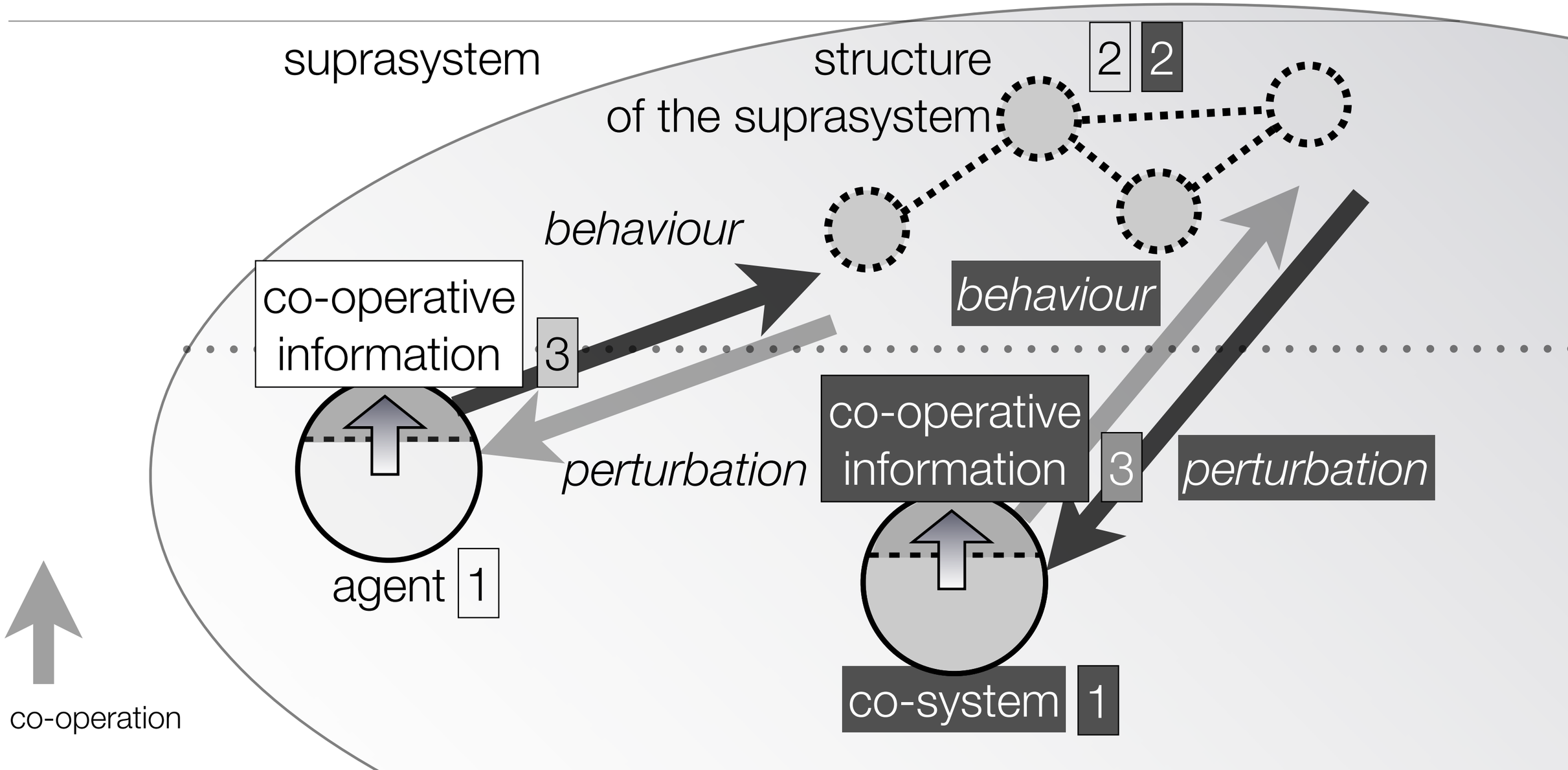
2.1.1 Cognition: reflecting another system



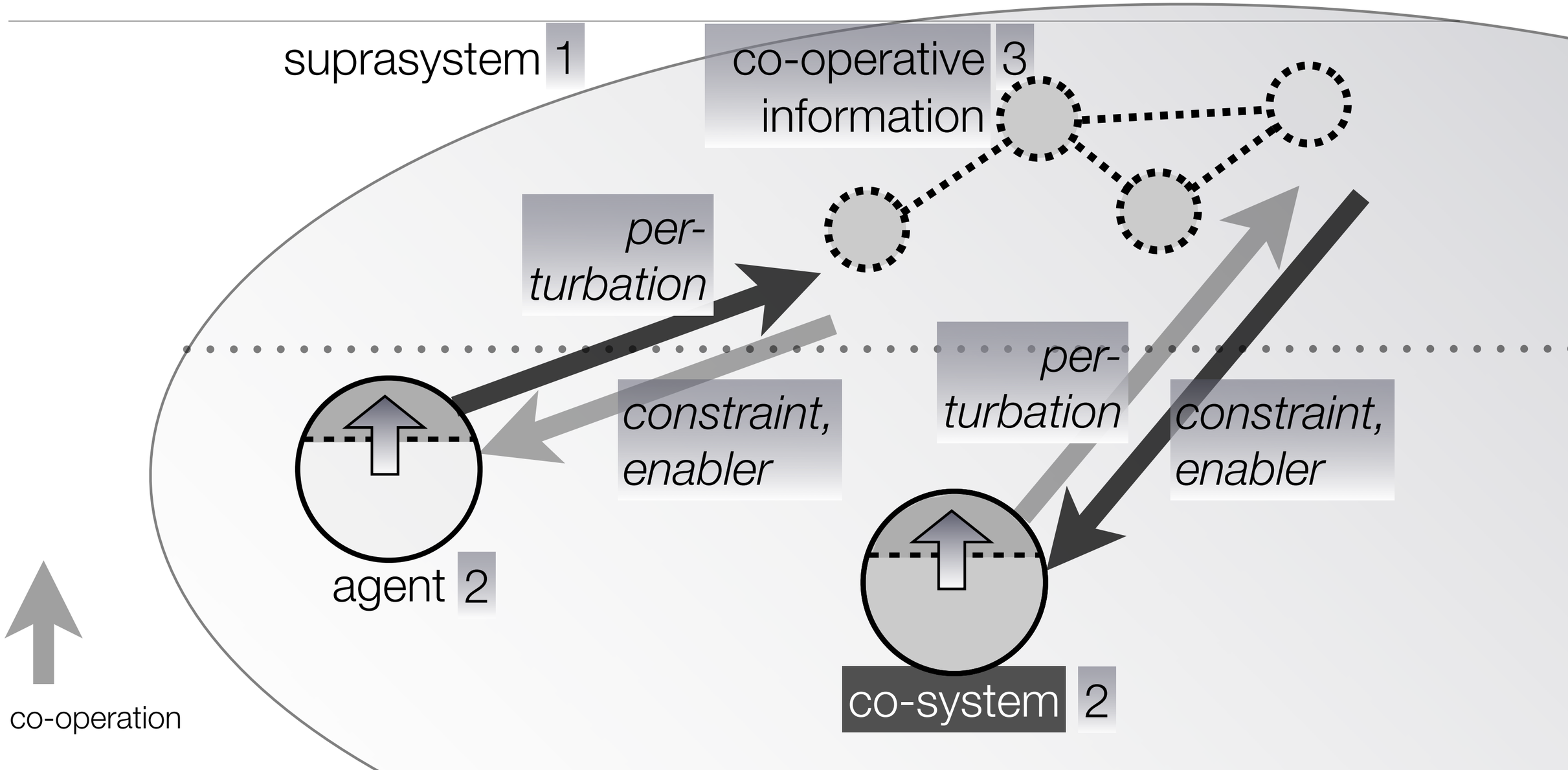
2.1.2 Communication: coupling cognitive co-systems



2.1.3 Co-operation: entangling communicative co-systems I (elements view)



2.1.3 Co-operation: entangling communicative co-systems II (systems view)



2.2 The current stage of social information evolution

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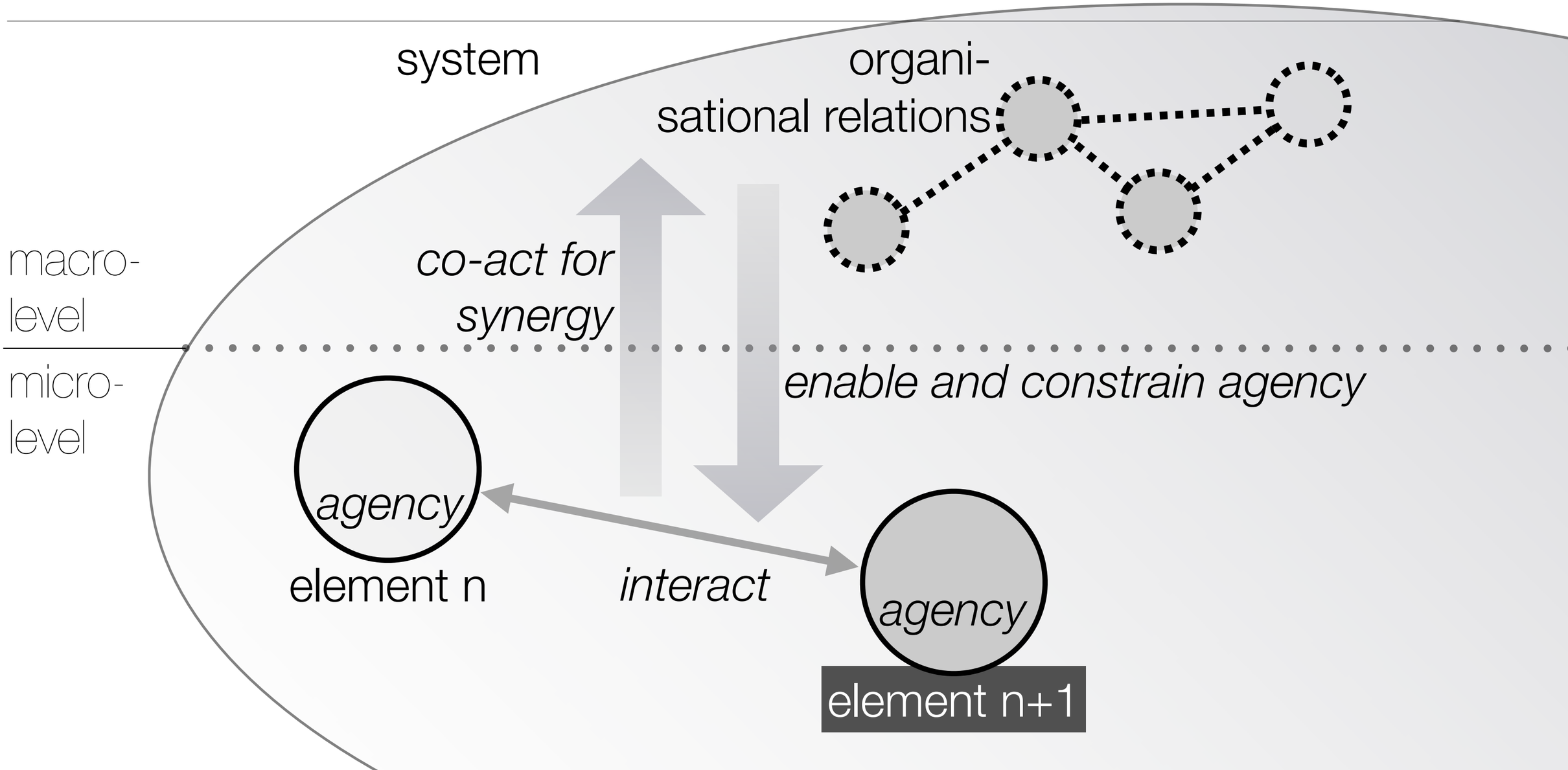
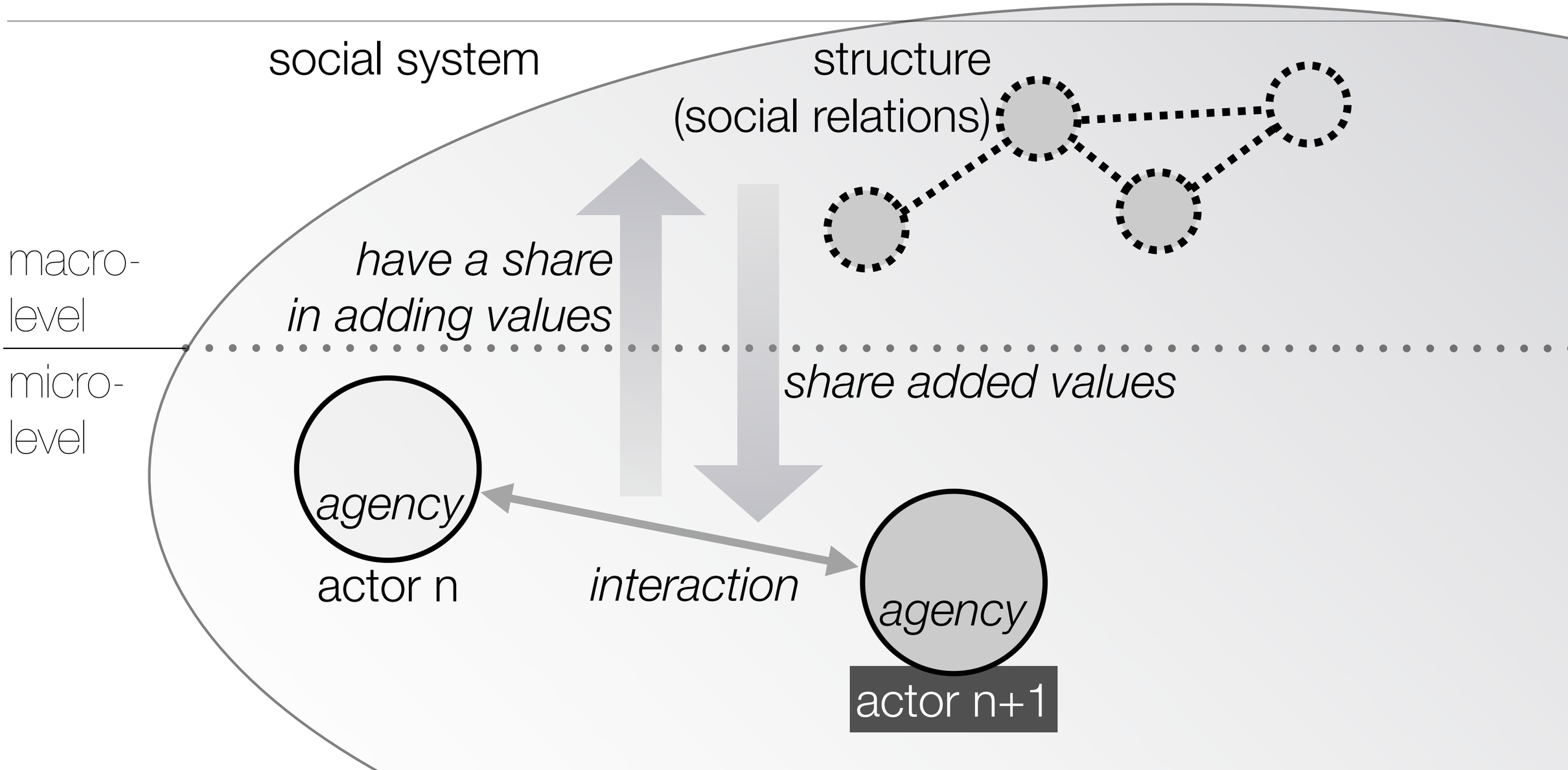
information	**anthropological features**		**features required for GSIS**
co-operative information	collectively intentional	consensual about the goal, the here and now and the way to the goal	commons-oriented (globally conscientious and conscious)
communicative information	consilient	collaborative (help-, truthful, cross-perspectivist)	all-humanity inclusive (globally conversational)
cognitive information	conceptual	reflexive (co-ordinative)	meta-reflexive (globally concerned)

2.2.1 A commons-oriented co-operative information: A global conscience and consciousness

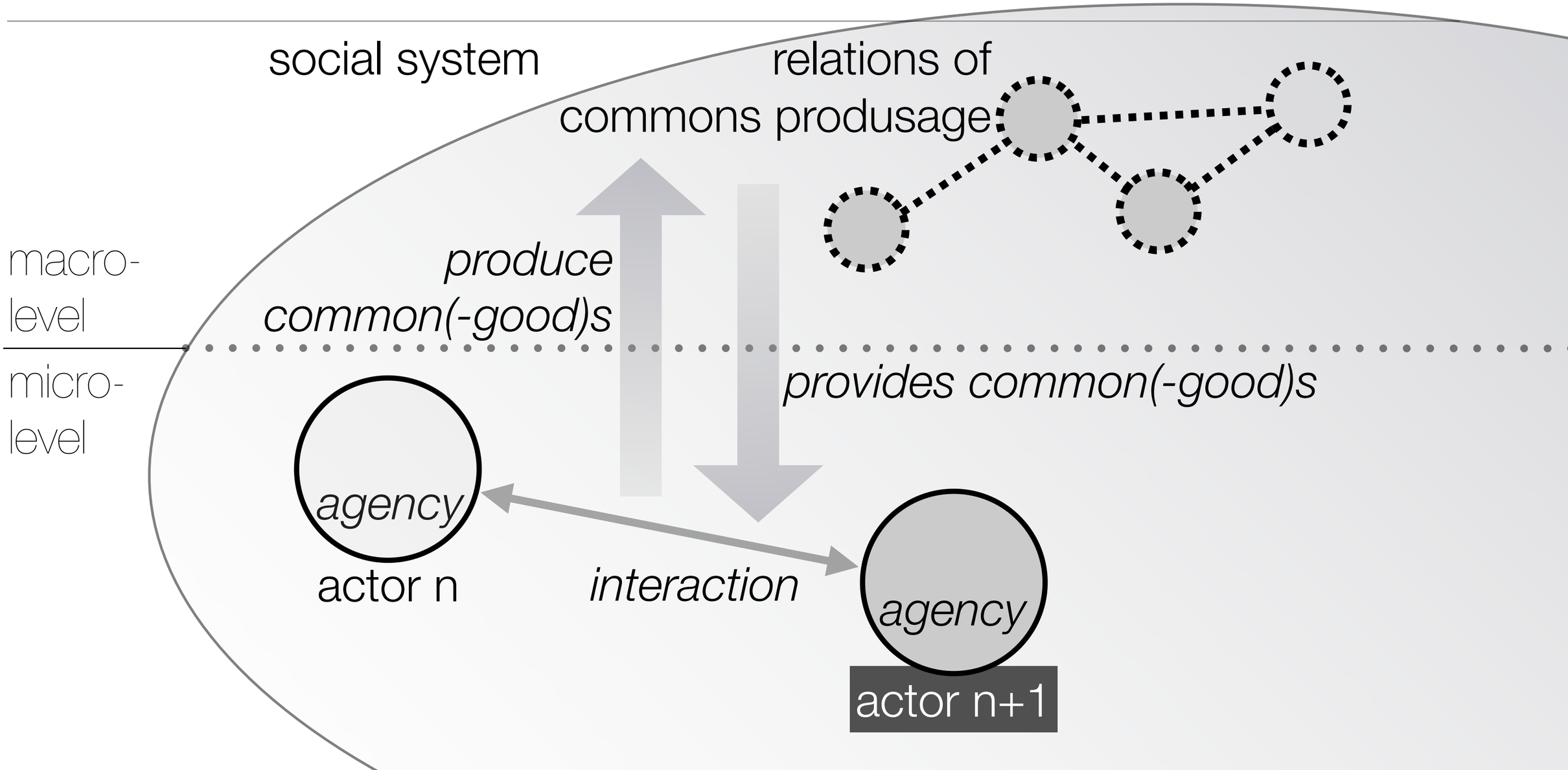
2.2.1.1 Systems: synergy



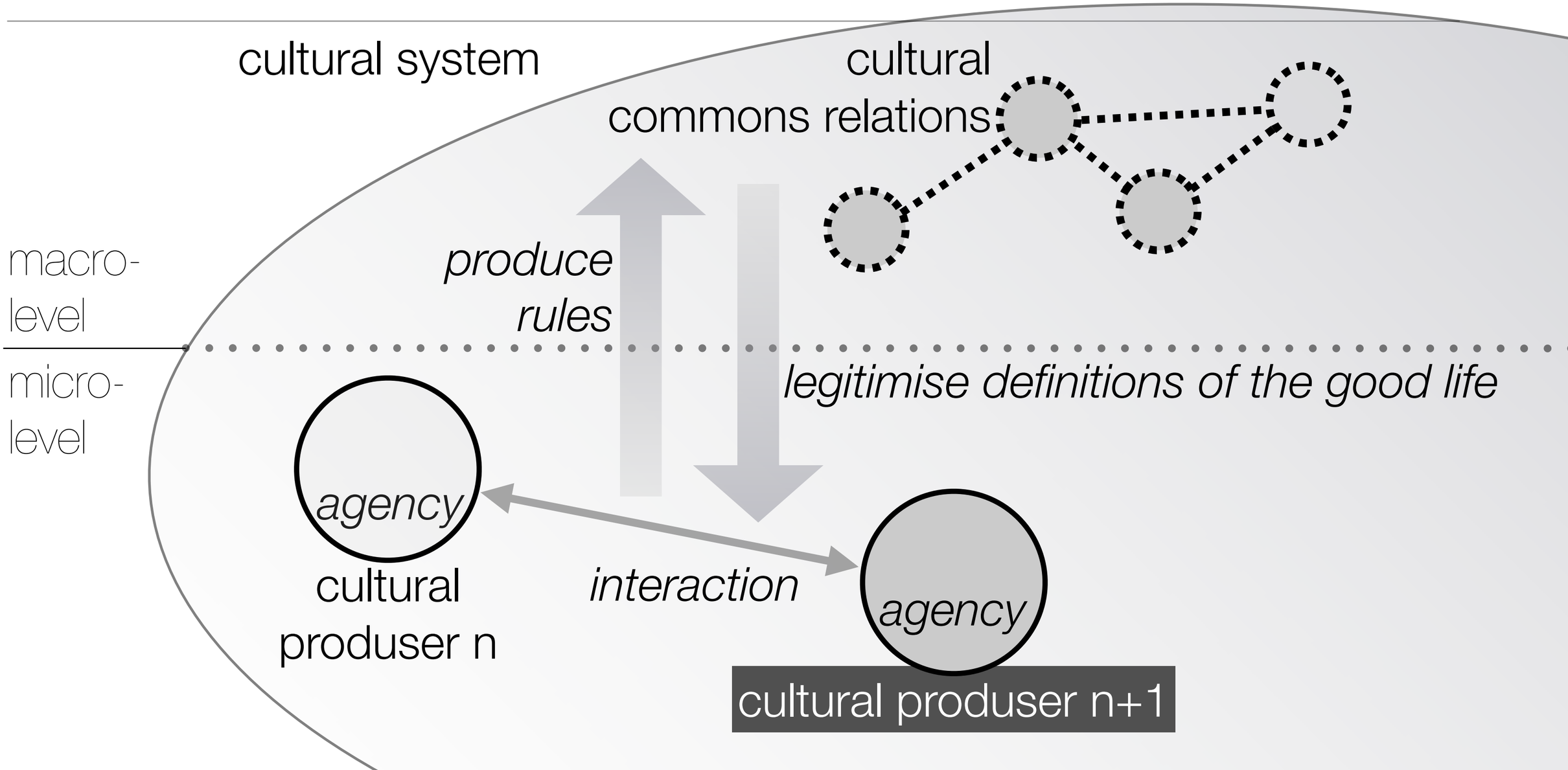
2.2.1.2 Social systems: synergy yields added values yields commons



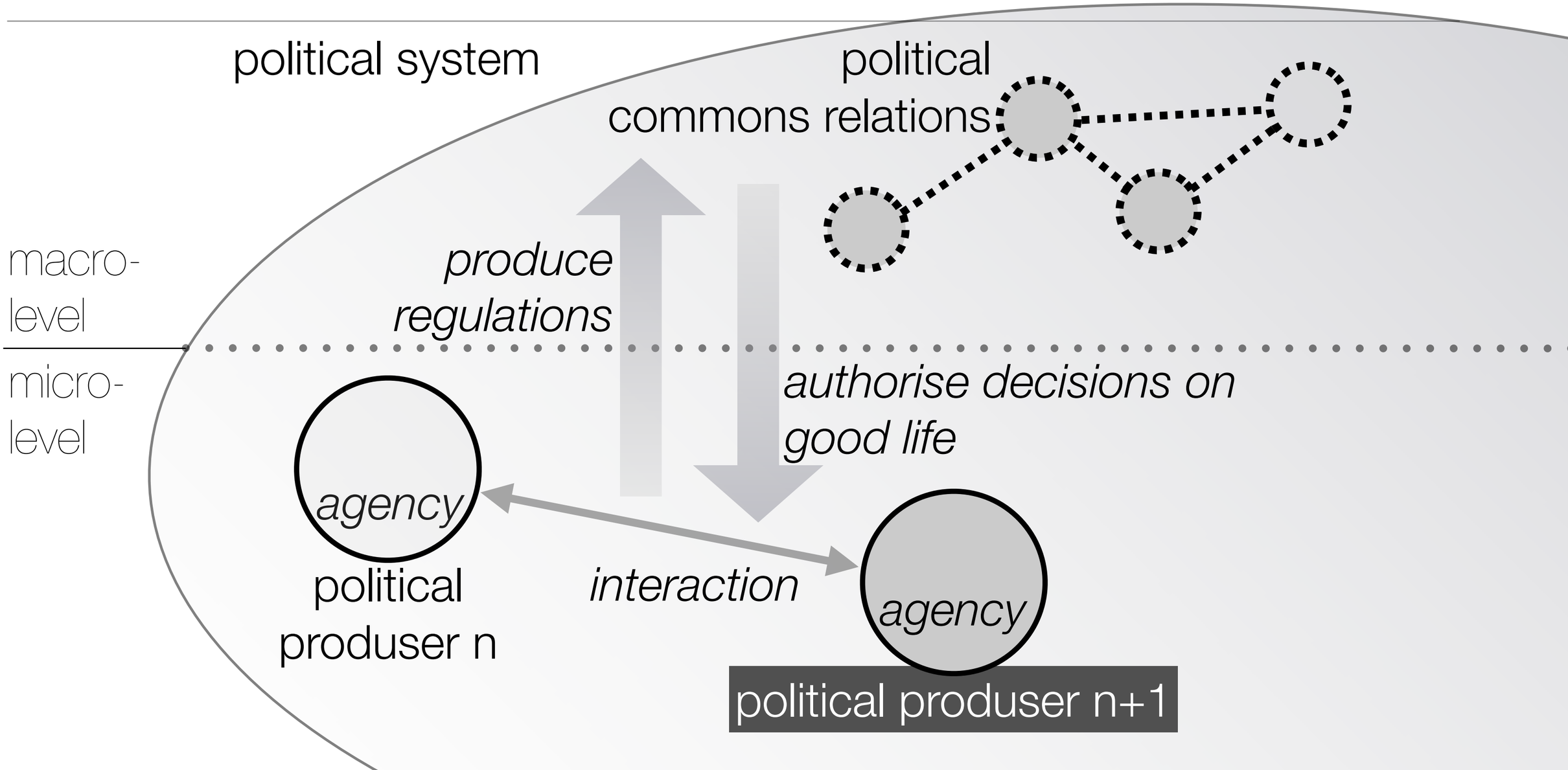
2.2.1.3 Objective: Justice in commons produsage



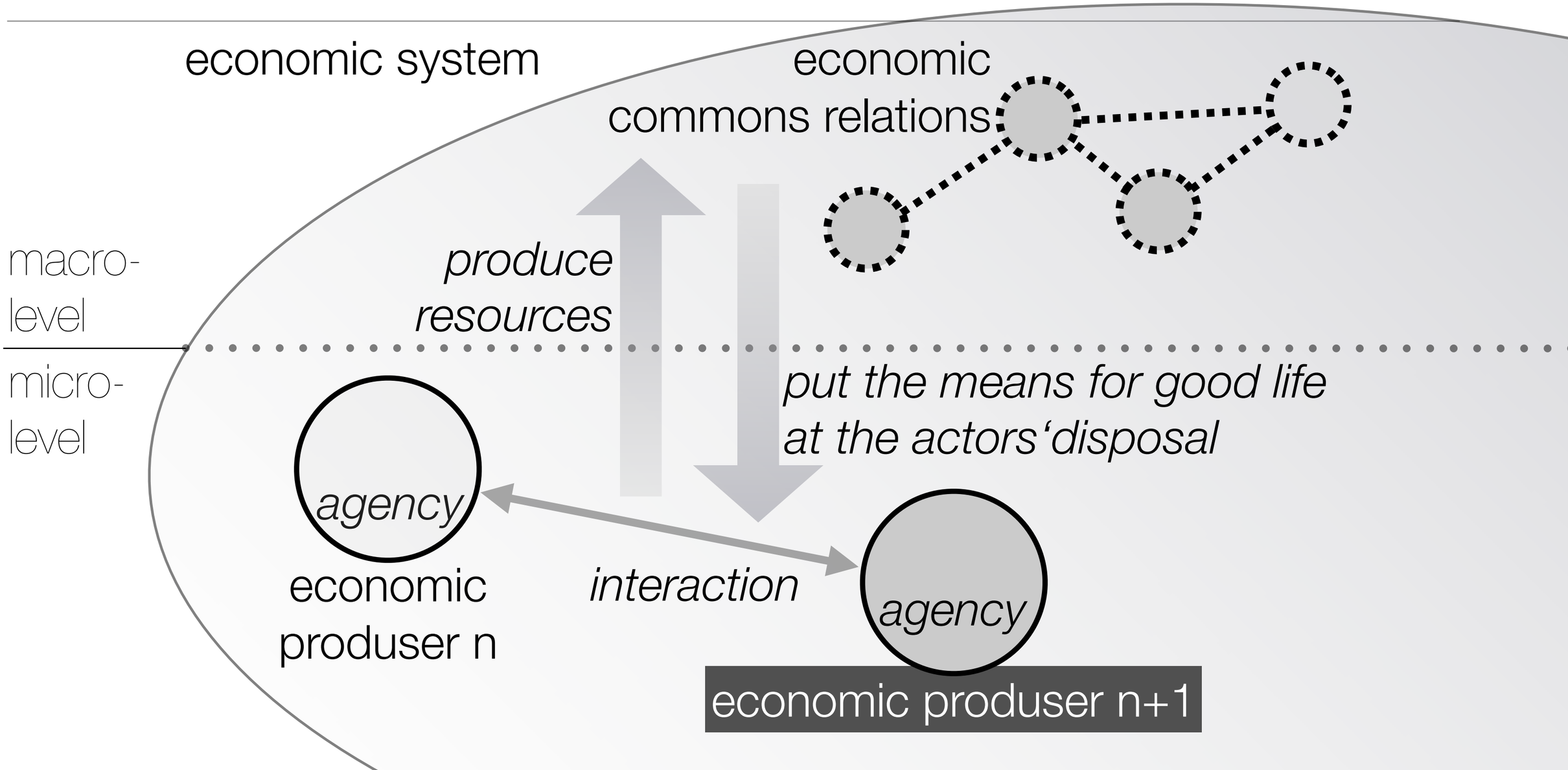
2.2.1.4 Objective: Equality in cultural commons produsage



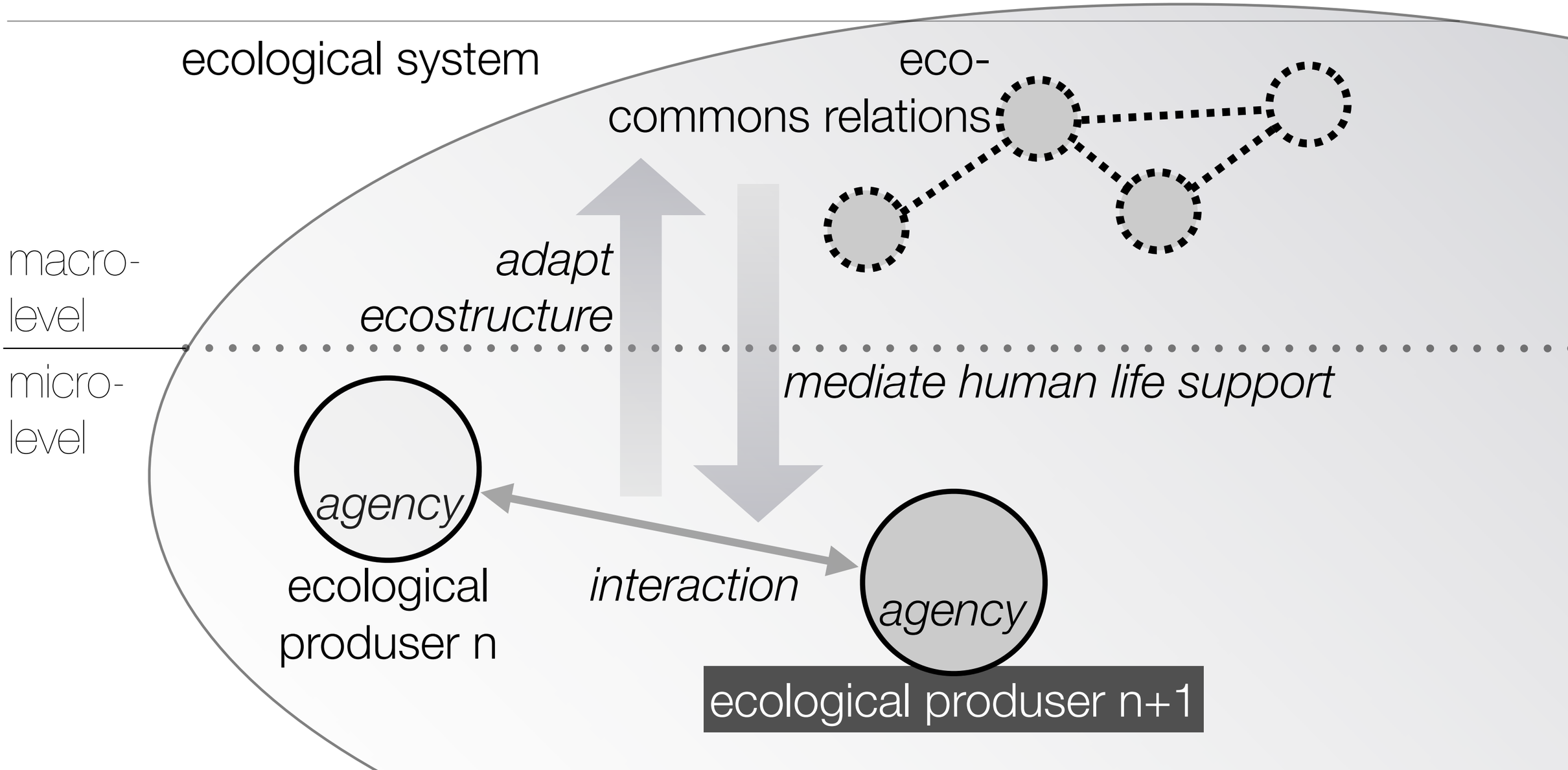
2.2.1.5 Objective: Freedom in political commons produsage



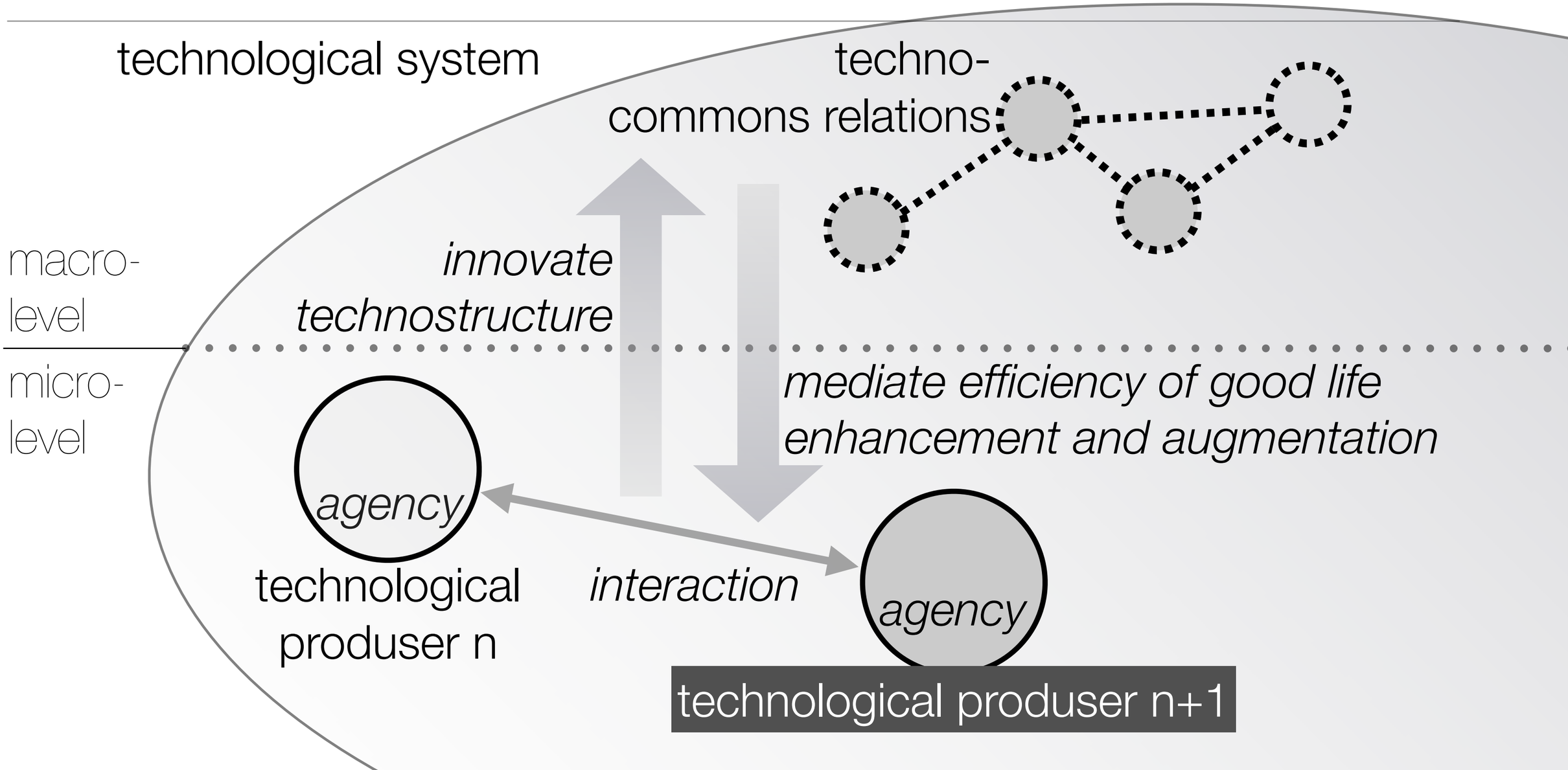
2.2.1.6 Objective: Solidarity in economic commons produsage



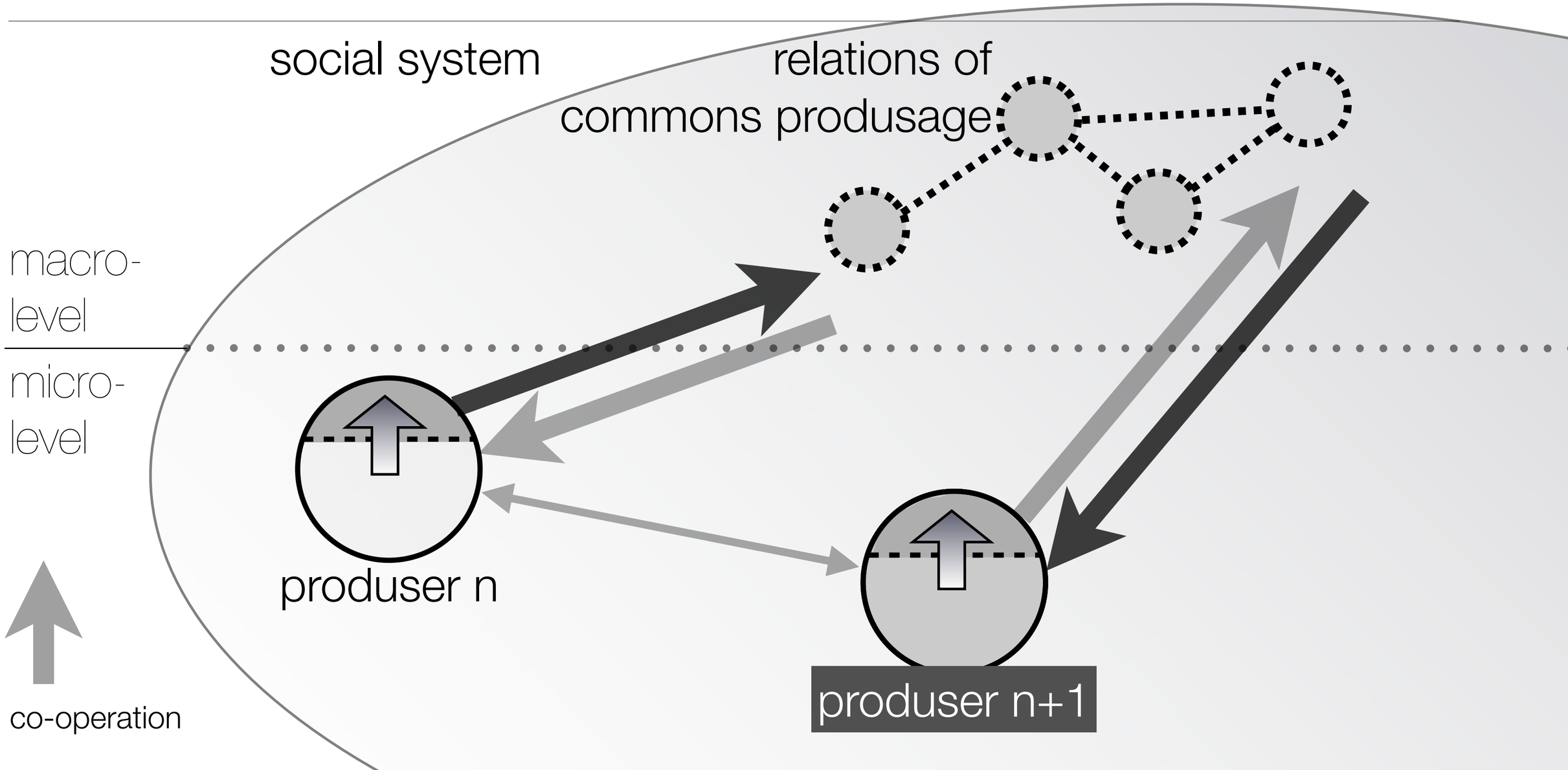
2.2.1.7 Objective: Survivability in eco-commons produsage



2.2.1.8 Objective: Effectivity in techno-commons produsage

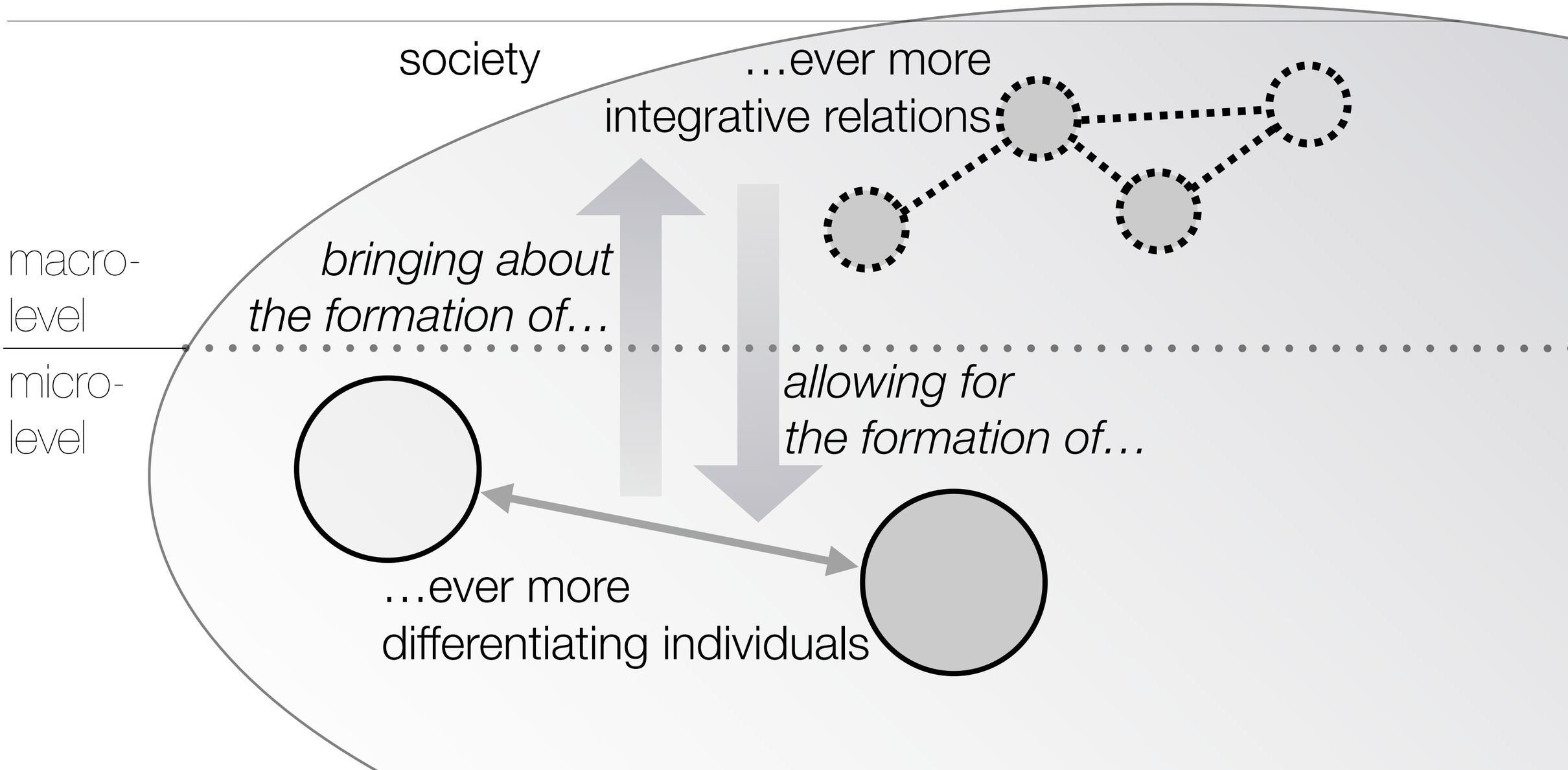


2.2.1.9 GSIS information 1: Commons-oriented

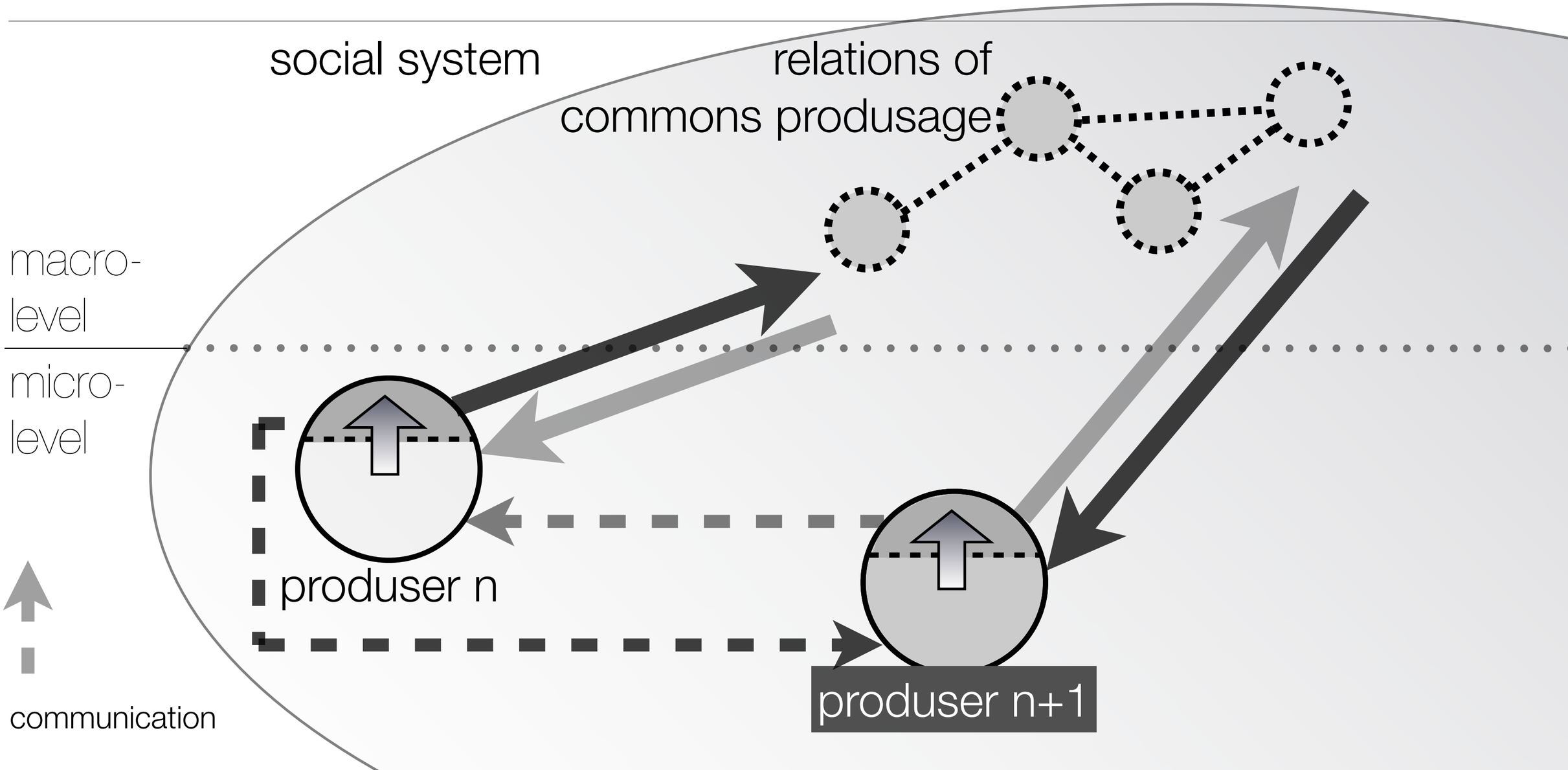


2.2.2 An all-humanity inclusive communicative information: A global conversation

2.2.2.1 Unity through diversity

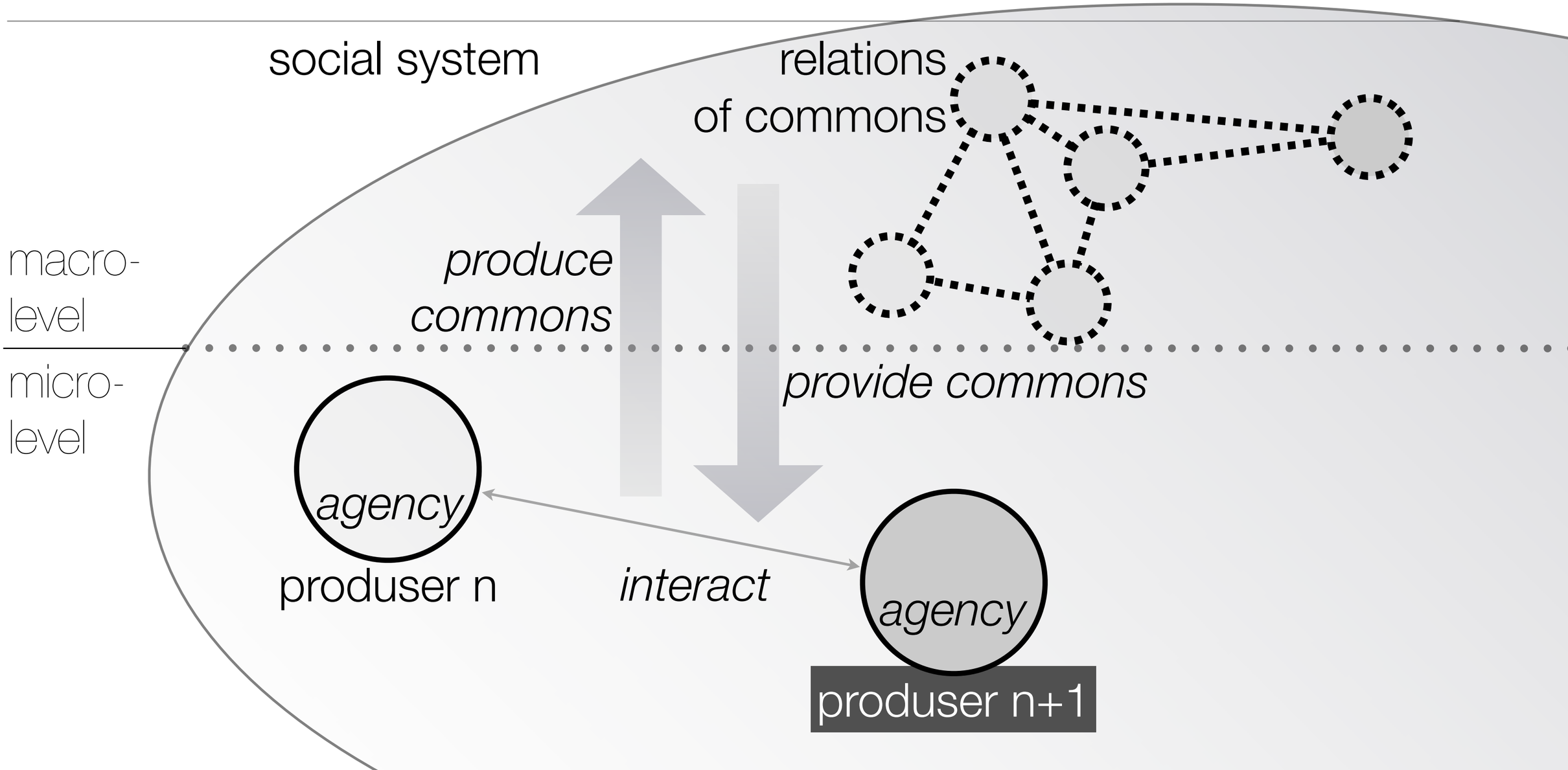


2.2.2.2 GSIS information 2: All-humanity inclusive

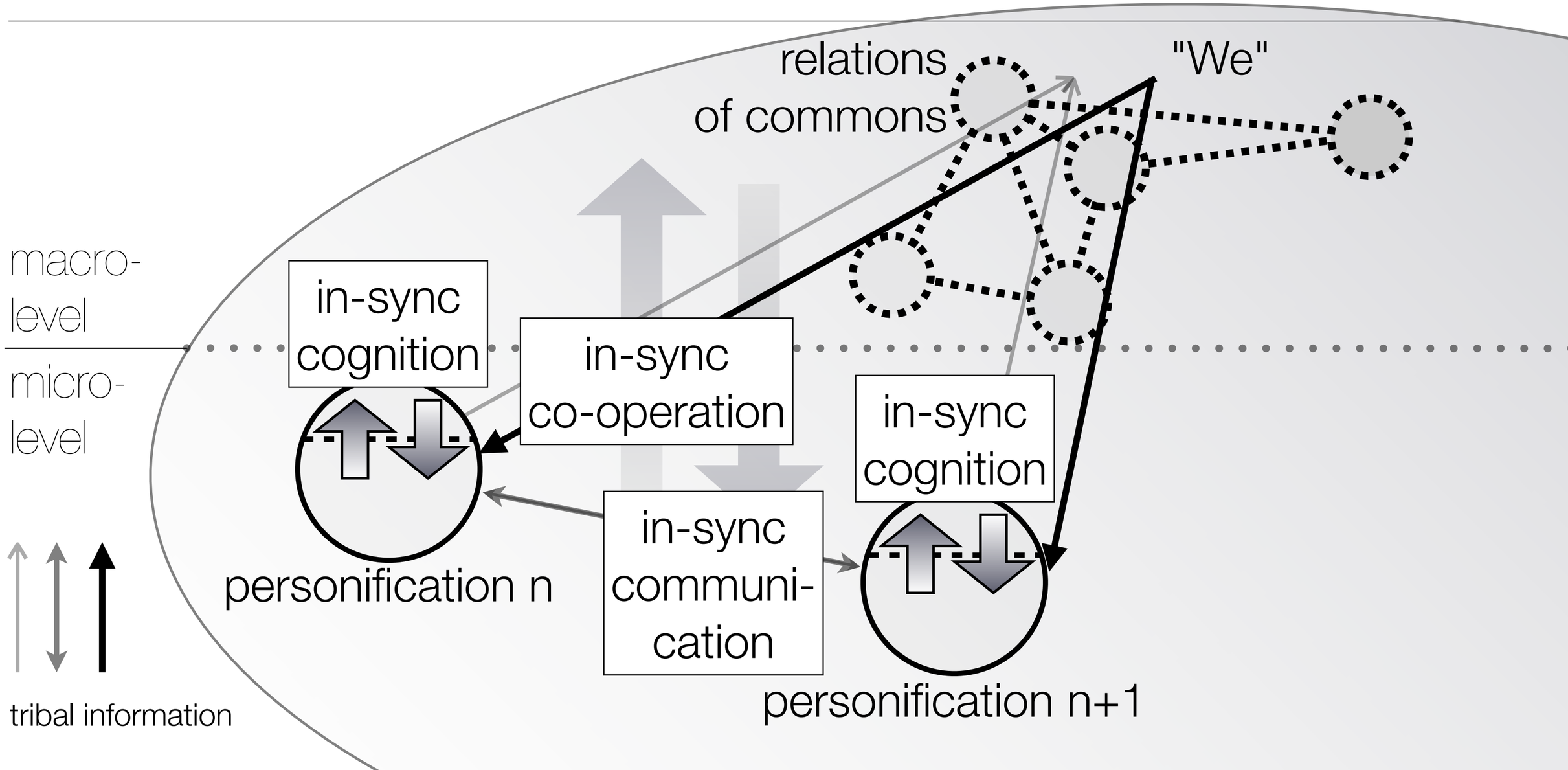


2.2.3 A meta-reflexive cognitive information:
From self-concern to the concern for the global other („Us“)

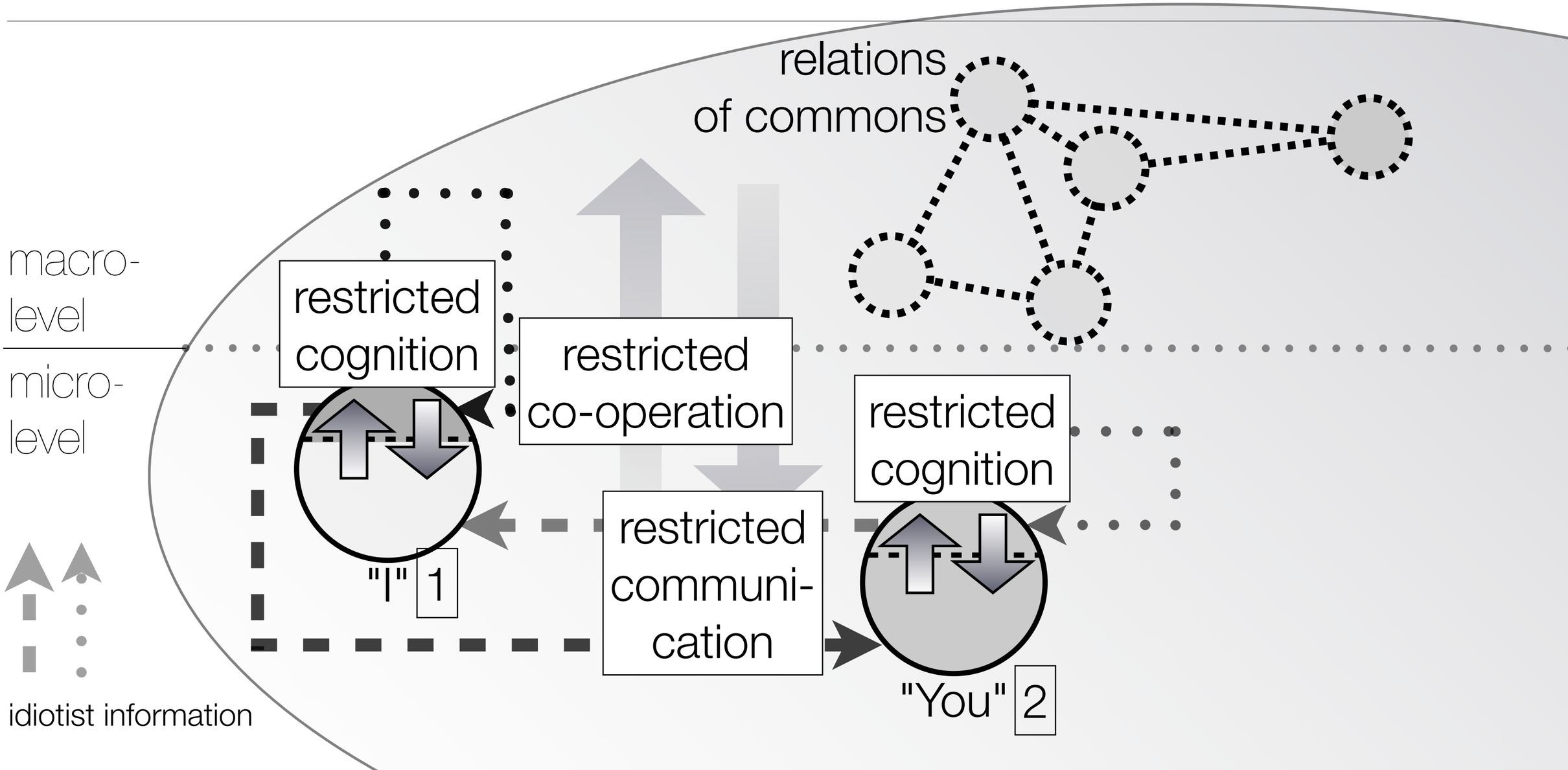
2.2.3.1 Three stages of reflexivity



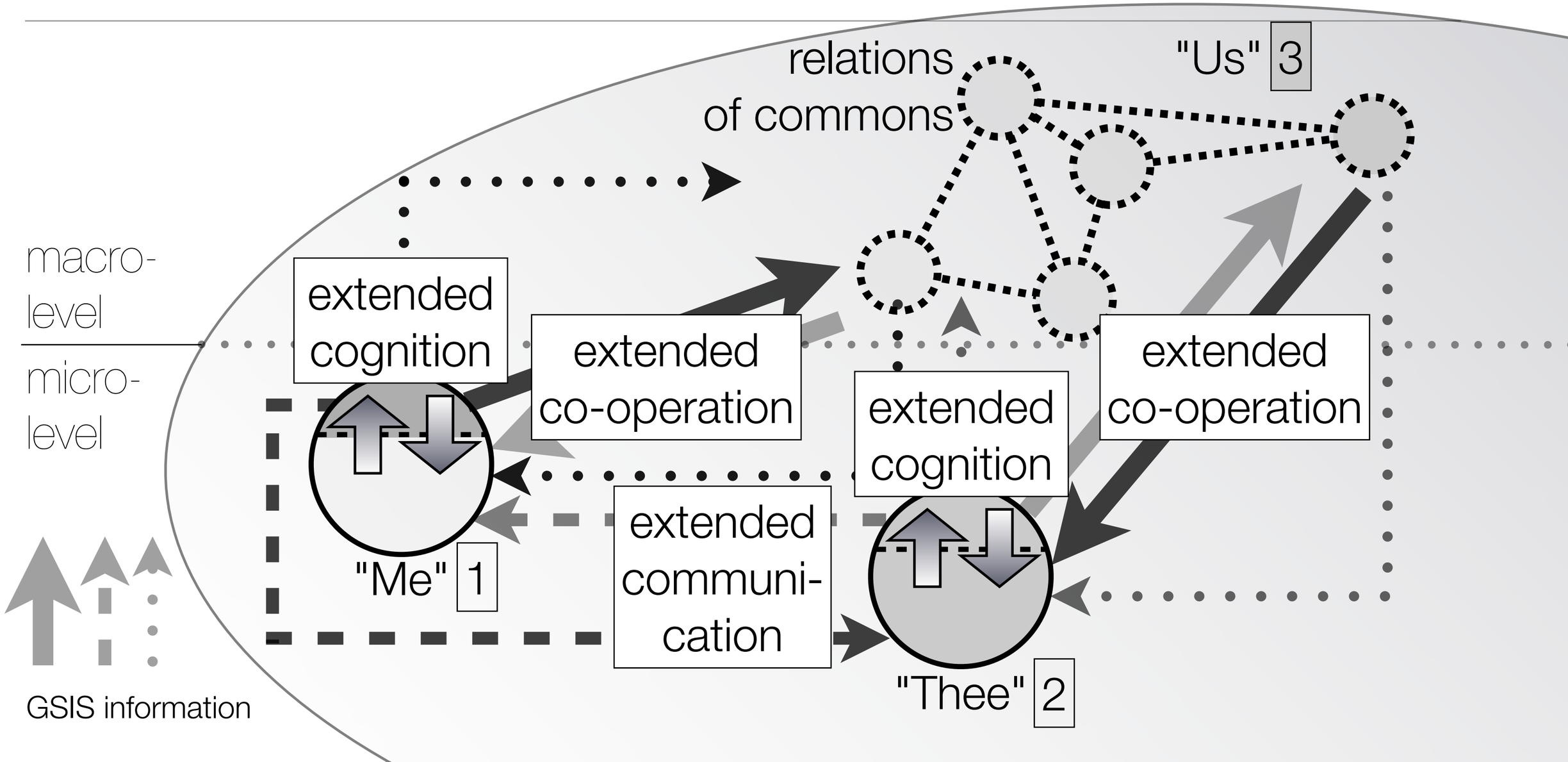
2.2.3.2 Three stages of reflexivity: Stage 1 (collectivism – tribalism)



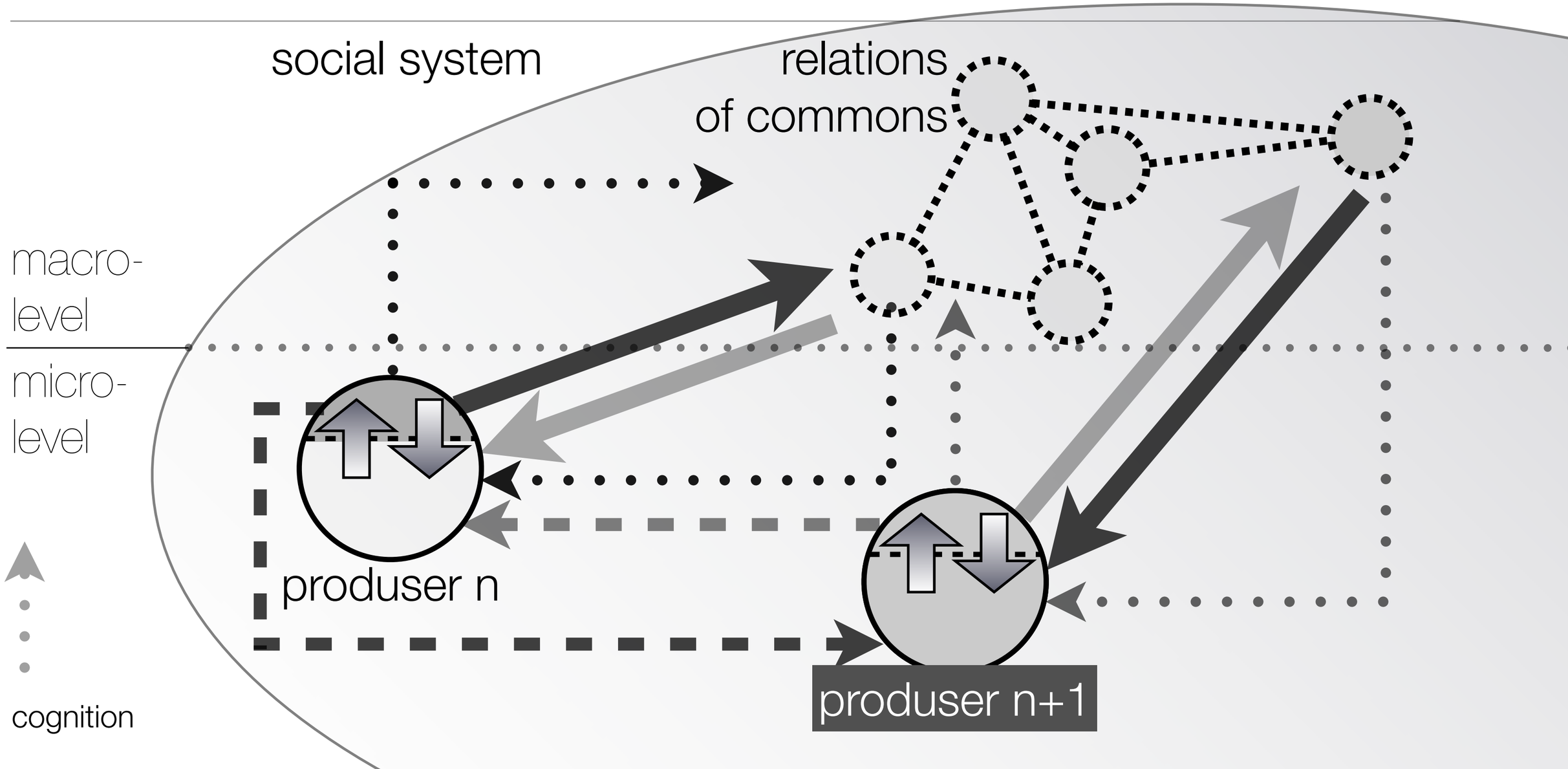
2.2.3.3 Three stages of reflexivity: Stage 2 (individualism – idiotism)



2.2.3.4 Three stages of reflexivity: Stage 3 (new cosmopolitanism)



2.2.3.5 GSIS information 3: Meta-reflexive



3 Conclusions

- Criteria for practical recommendations have been derived: Evaluations are based upon analyses by means of a self-organisation- and information-theoretical methodology

- A Science of Information (including Philosophy of Information) is possible that bases an understanding of problems of social information processes upon an understanding of fundamentals of generic information processes

- It‘s the noble task of those working in the field to agree upon an ever better fit of use-inspired basic research