

reflections on change management:
general and biomatrix systems approach

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talk outline

part 1 introduction

part 2 essence of general systems thinking and change management

part 3 key concepts of biomatrix systems theory and change management

part 1

introduction

types of systems theories

systems thinking is a conglomerate of concepts, models and tools derived from cybernetics, operations research, general systems theory, complexity theory, chaos theory and field theory, amongst others

systems approaches are system dynamics and ideal system design

biomatrix systems theory is a meta systems theory

biomatrix systems approach is a methodology for managing personal, organisational and societal change

results of organisational change interventions

65% of major organisational changes fail

89% of interventions are not successful, say executives

(Mc Lagan, 2005)

WHY?

because of non-systemic intervention design and management

“patching is the name of the devil” (Gharajedaghi)

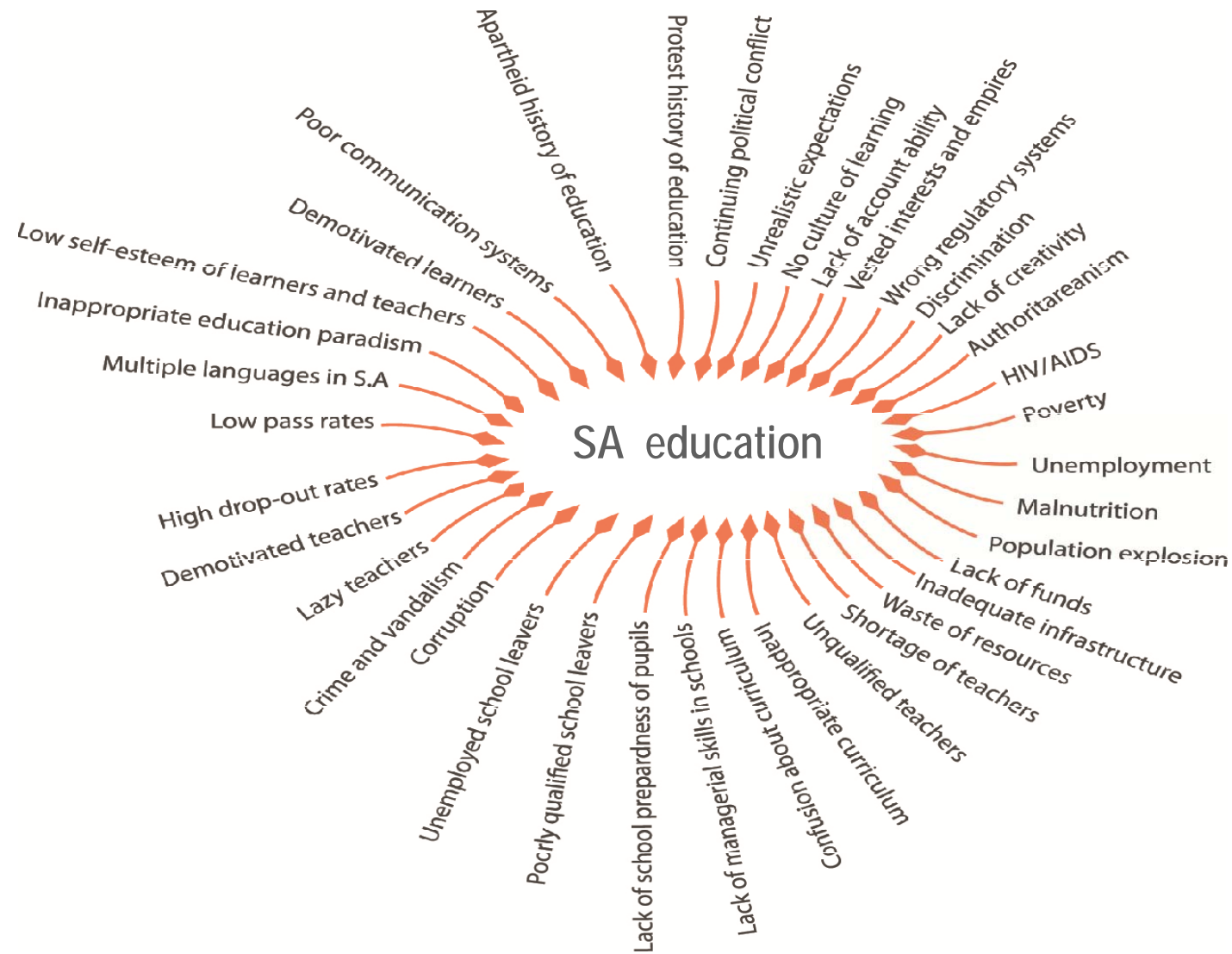
part 2

essence of general systems thinking and
change management

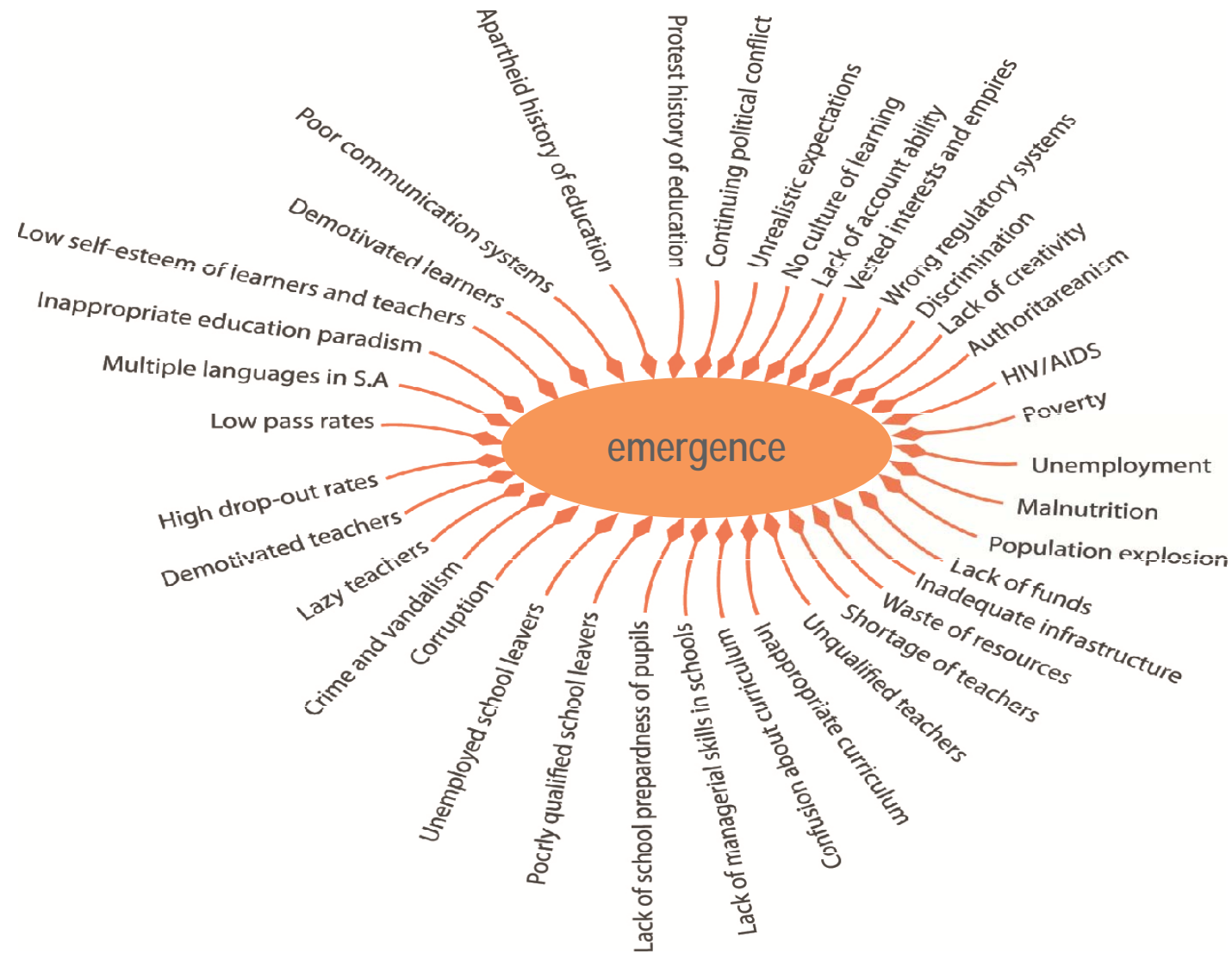
essence of general systems theory

- co-production
- emergence
- impact
- levels

key-concept: co-production



key-concept: emergence



key-concept: emergent problems

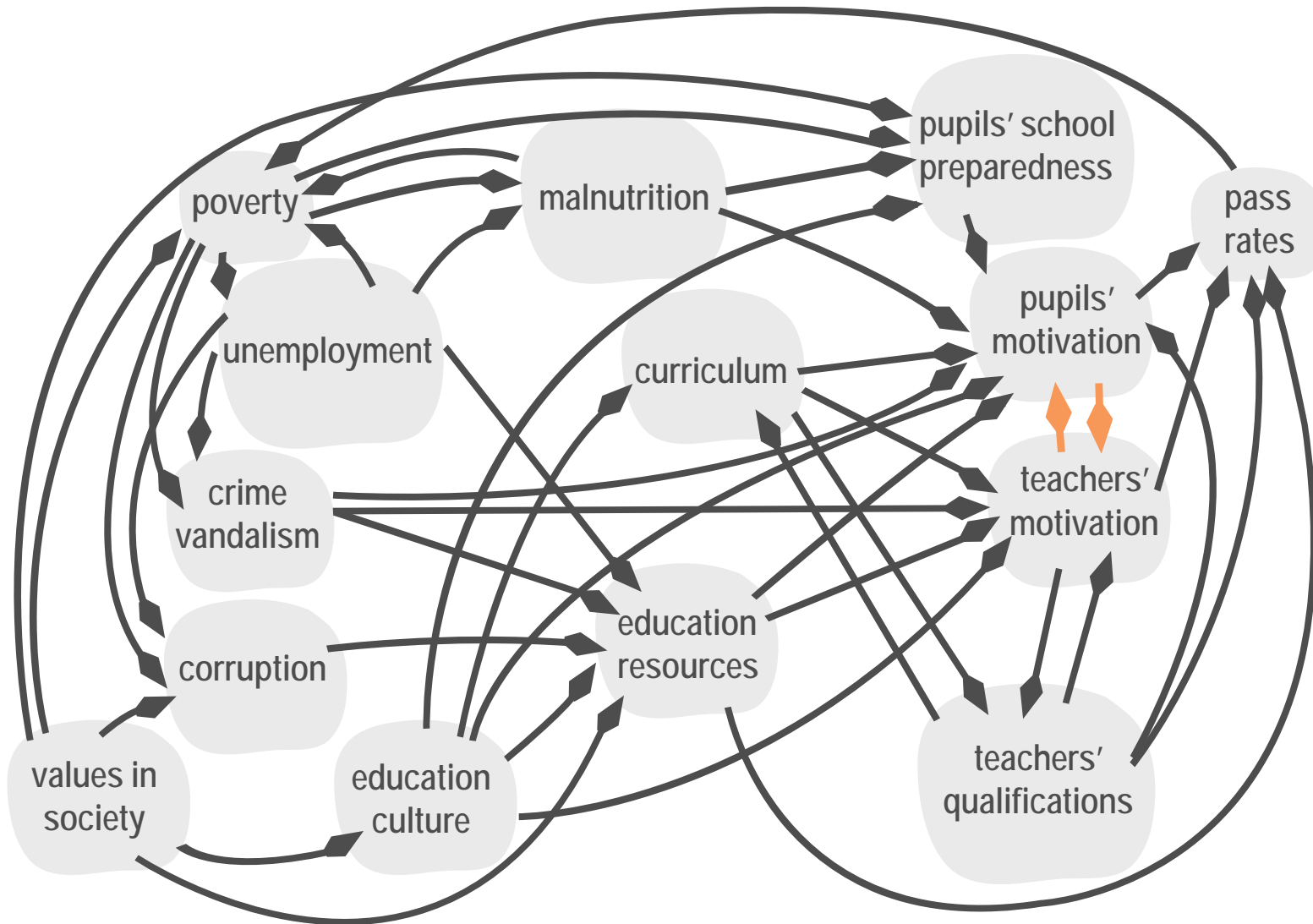


- interacting and mutually co-producing **"messes"** (*Ackoff*)

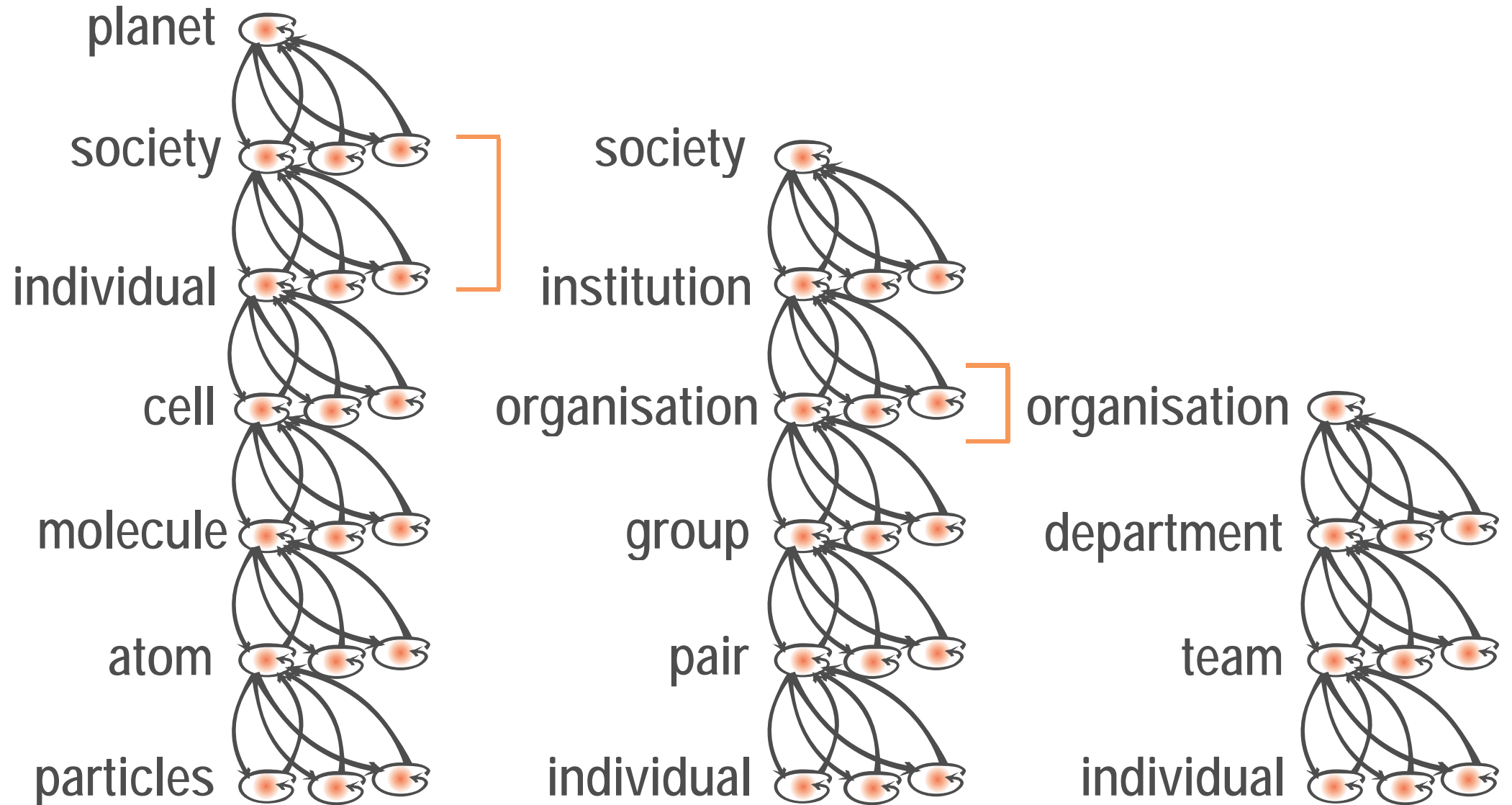
change management principle

- a mess cannot be solved
- it must be dissolved through redesigning the systems involved

key-concept: impact (feed-forward, feedback, dynamics)



key concept: containing systems hierarchy (levels)



co-production



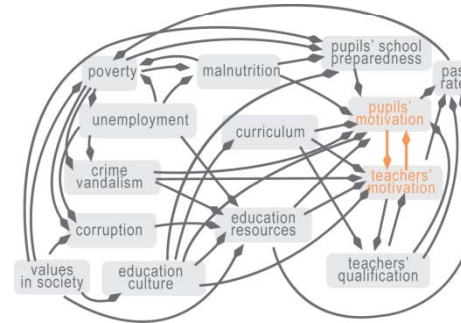
- multi-dimensionality
- stakeholders

emergence



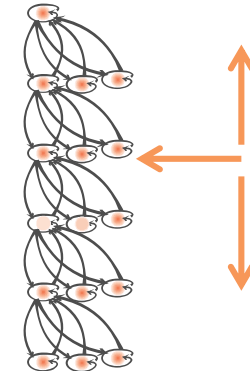
- ideal design
- stakeholder alignment
- stakeholder co-production

impact



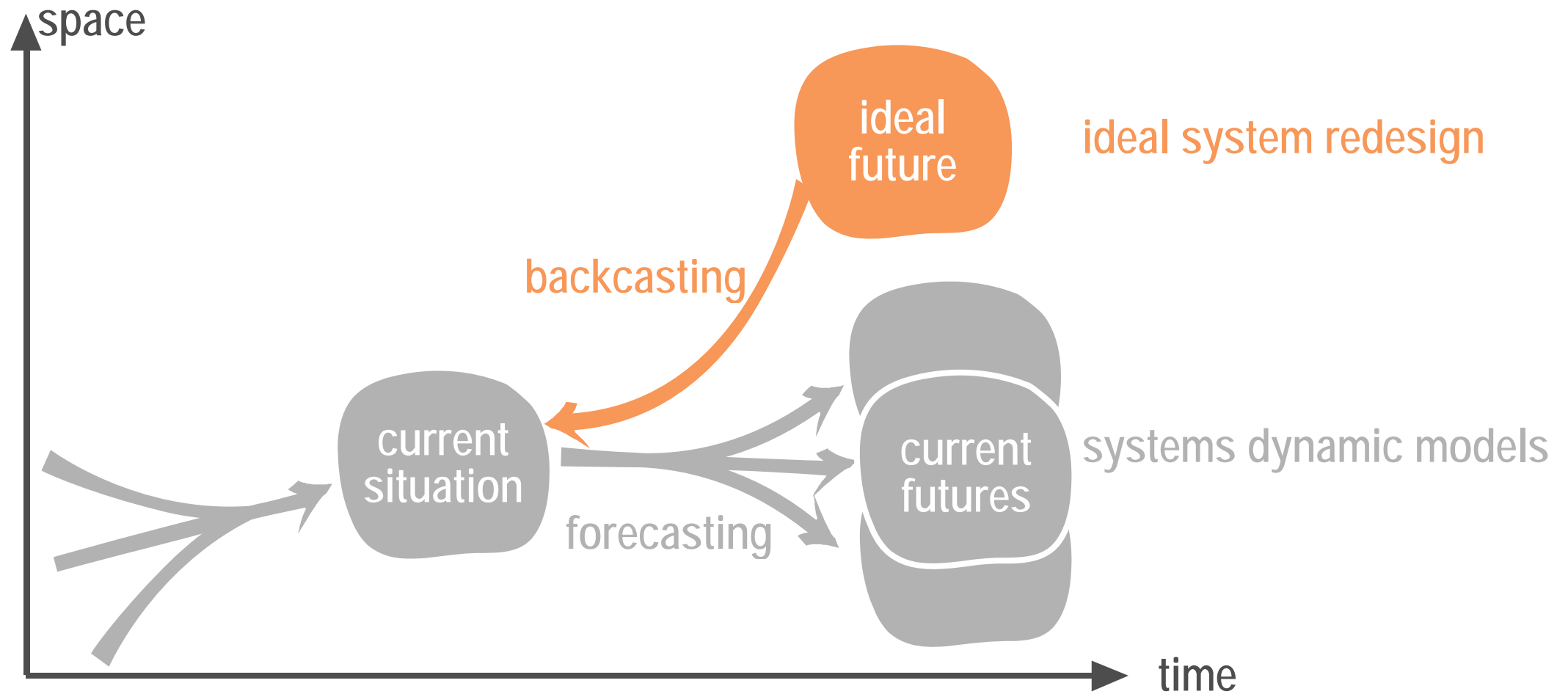
- iteration
- self-referral

levels



- three levels
- paradox
(integration - differentiation)

temporal key concepts: current versus ideal future



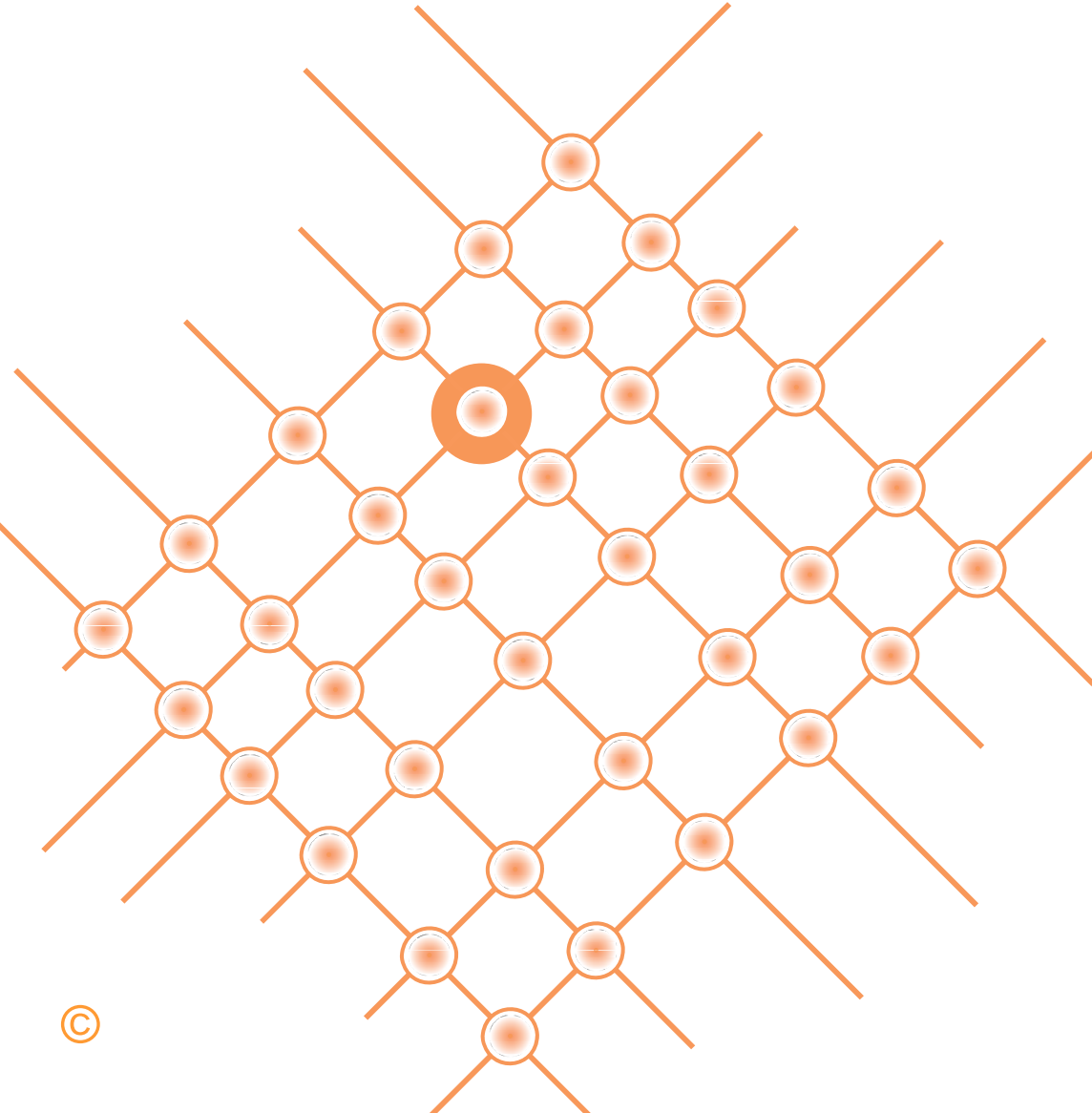
change management principle:

the logic of the problem is not the logic of the solution

part 3

key concepts of biomatrix systems theory and change management

key concept: biomatrix



biomatrix: the web of life

analogy: fishing net

change management principles

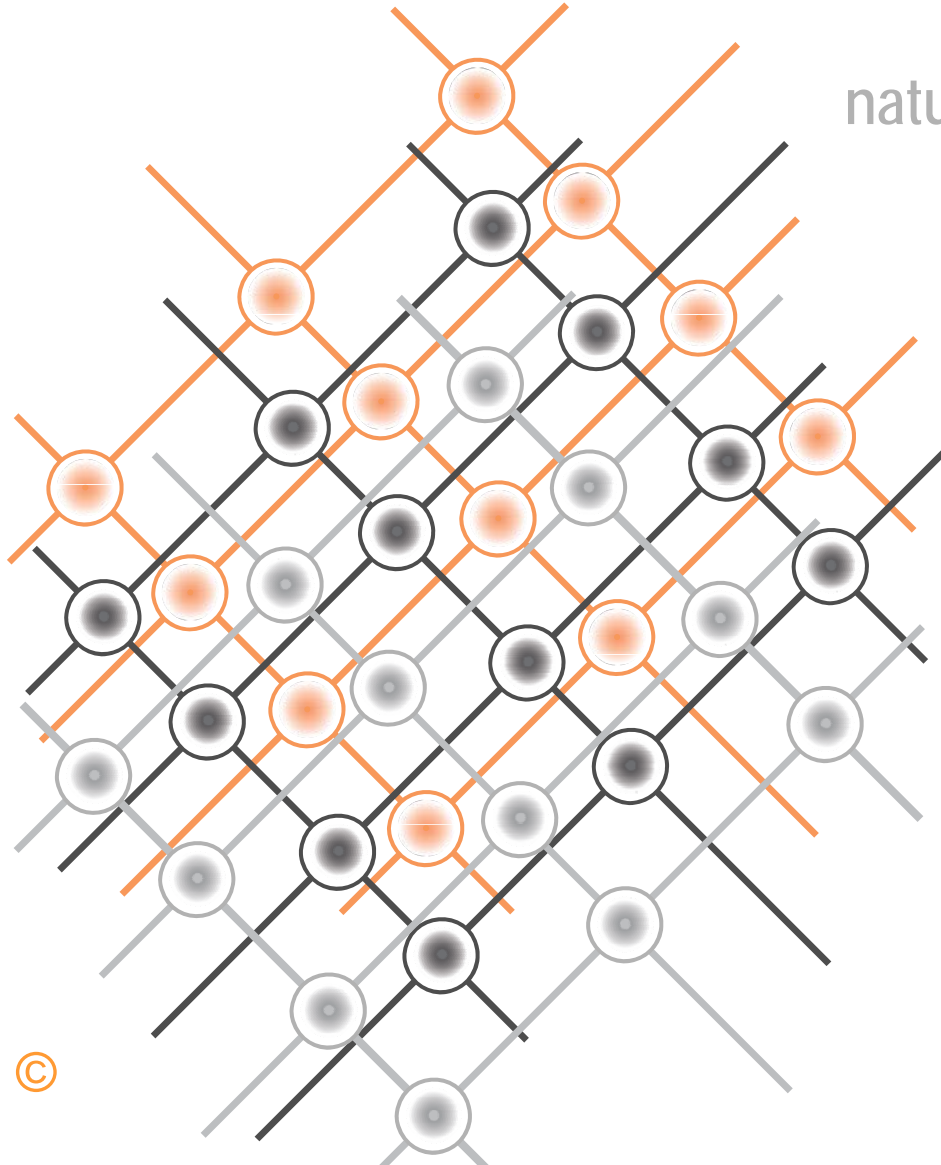
everything is connected to everything else

manage connectivity

each knot is the centre of the web

manage outward

key concept: sub-webs of the biomatrix



naturosphere

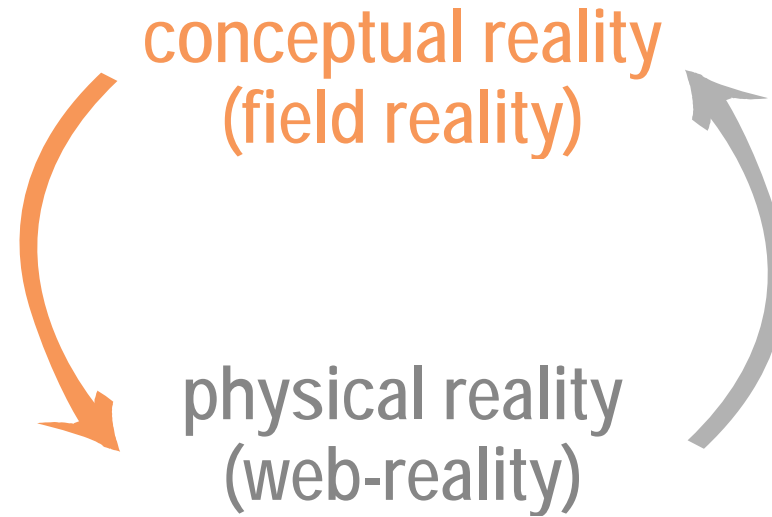
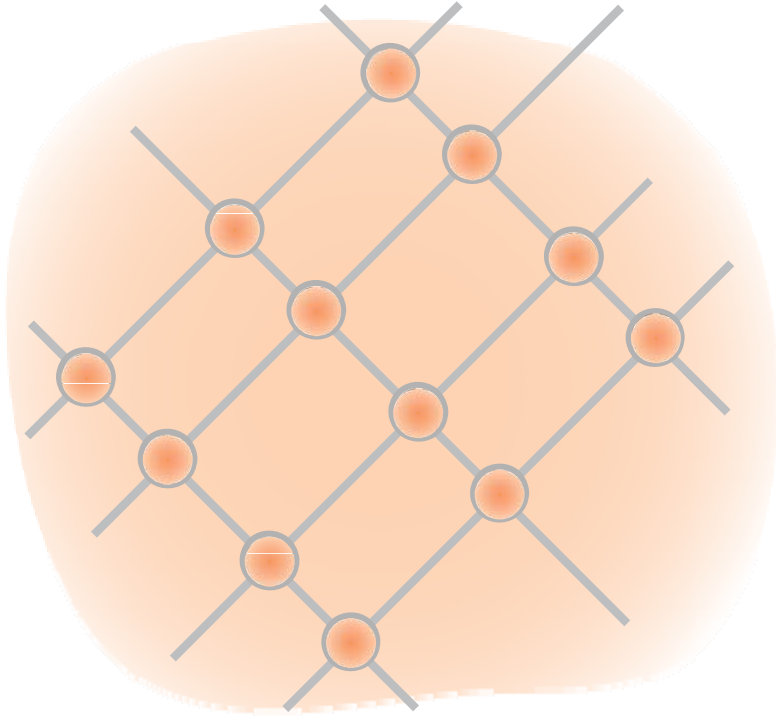
psycho-sociosphere

technosphere

change management principles

- spheres interact
multi-dimensional management
- difference in organisation
choice vs. fixed functioning
- nature has limits
sustainable management

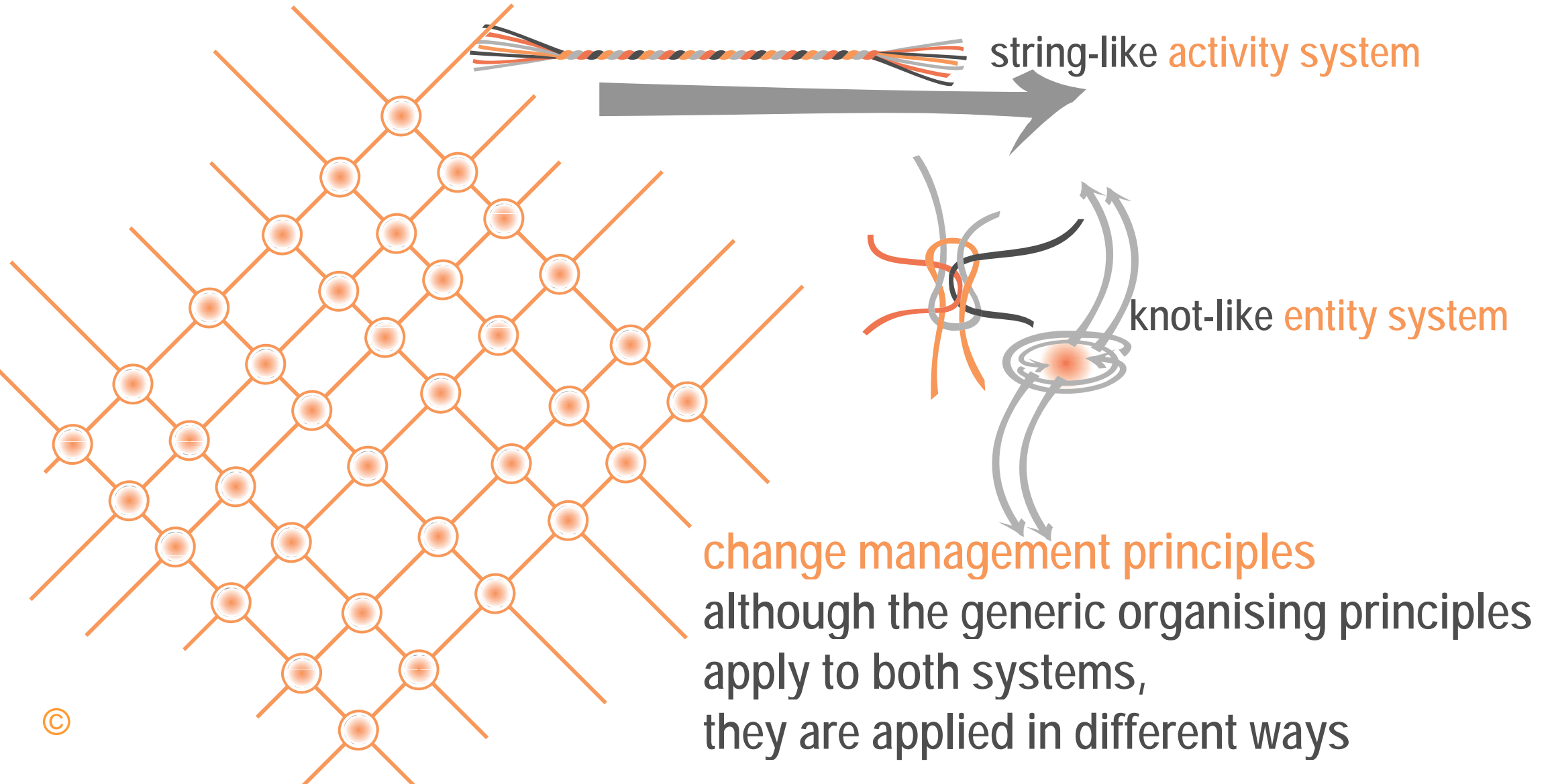
key concept: conceptual vs. physical reality



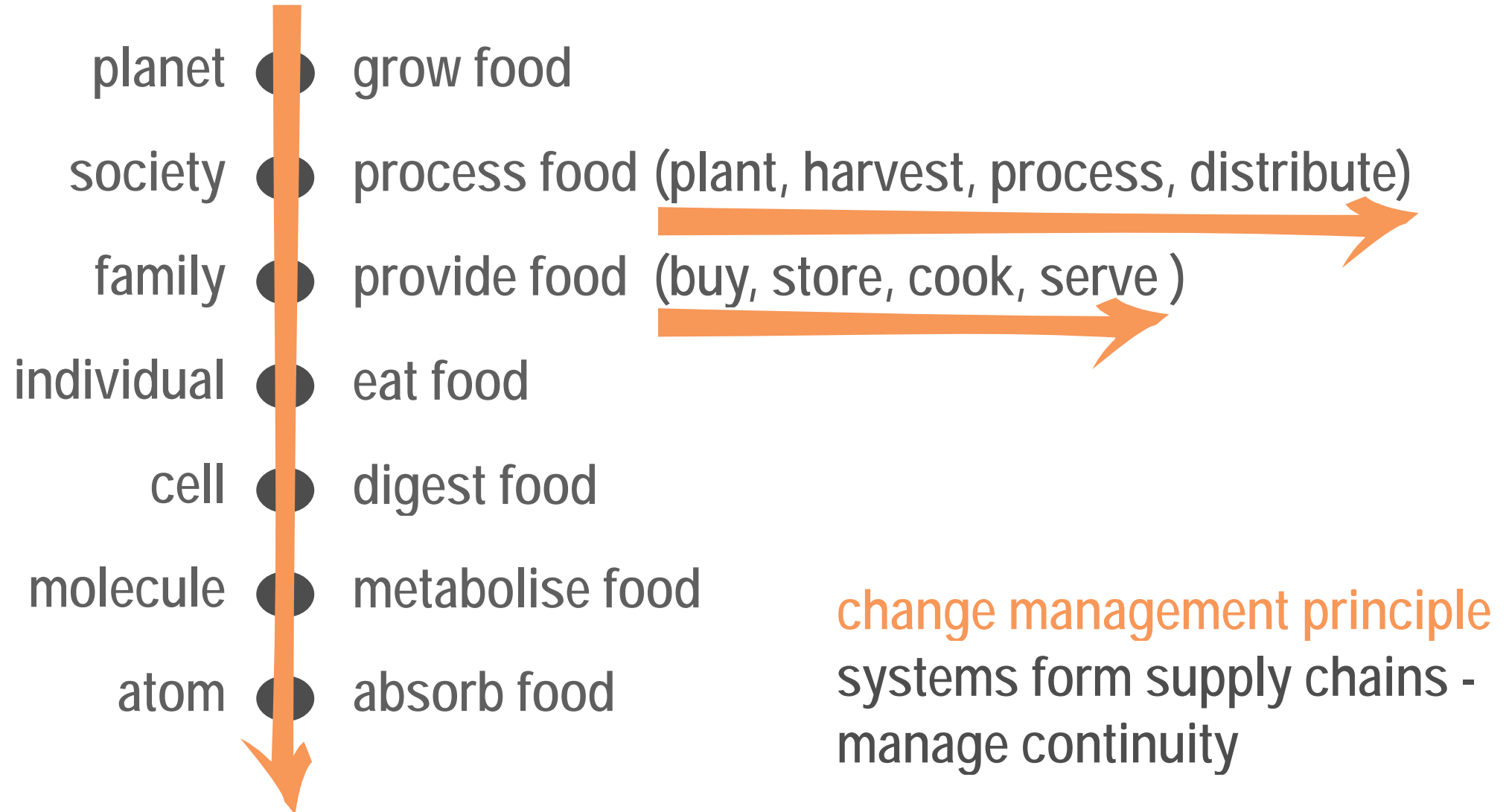
change management principles

- if we change the information field of a system, its physical reality will change
- the physical reality gives us feedback about our information field (e.g. the values we hold in the field)

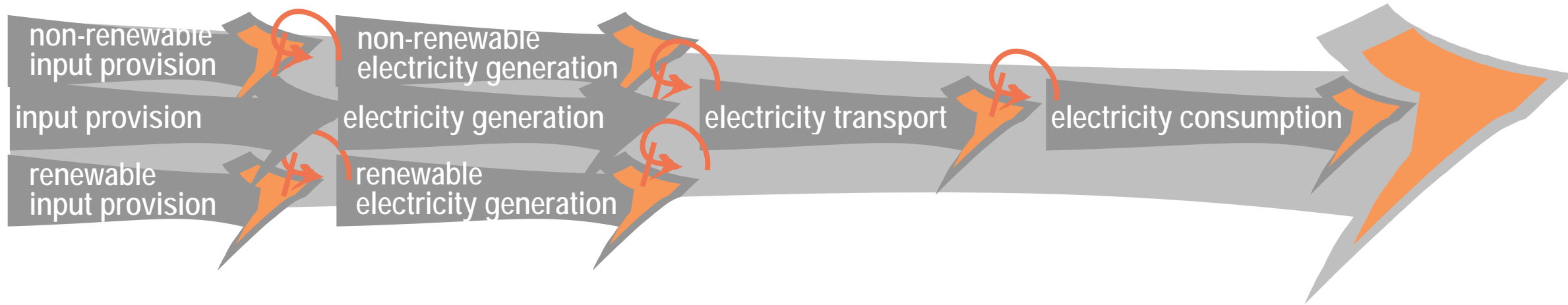
key concept: two types of systems



activity systems: vertical and horizontal supply chains



activity system: energy supply chain

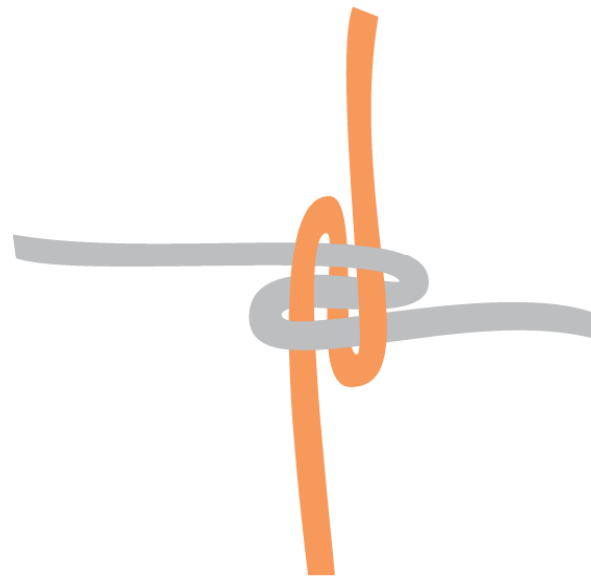


change management principles:

manage continuity of

- mei (matter-energy-information)
- purpose (ethos, aims, regulation)

entity system: interacting activity systems



Japanese knot



reef knot

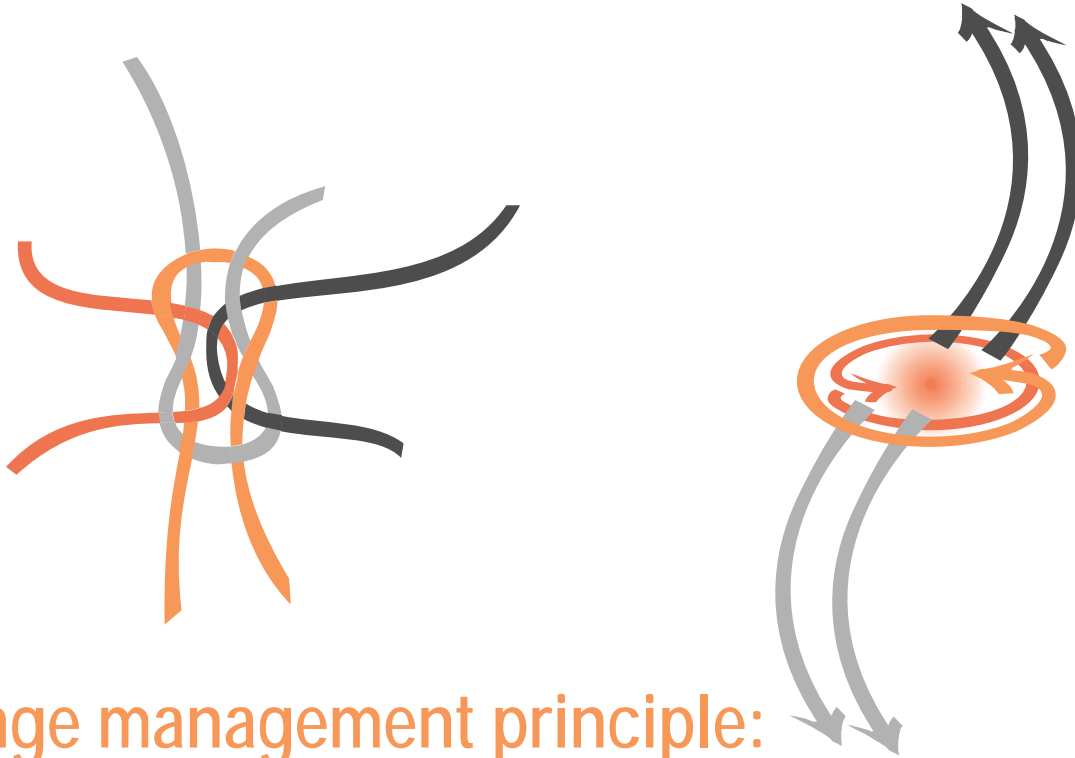


granny knot

change management principle:

- same strings, different knots with **emergent** properties
- optimal interaction of functions (determined by organisational structure)

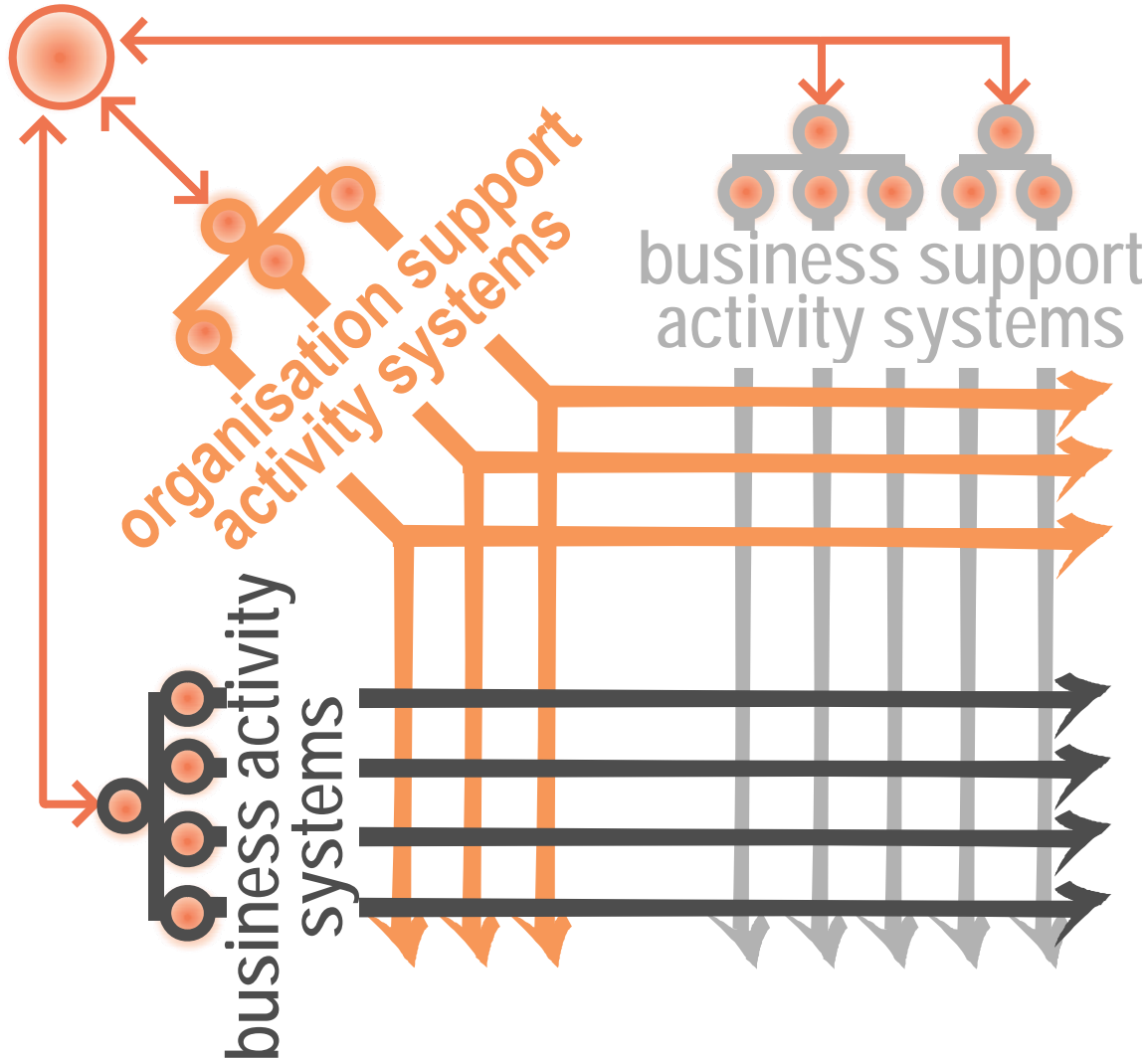
entity system: interacting activity systems



change management principle:

- entity systems consist of outward, inward and self-directed activity systems
- these interact in a matrix manner

three-dimensional organisational matrix



change management principles:

- manage efficient mei flow along each functional supply chain
- manage coherence of the information field (i.e. culture)
- create a systemic learning organisation

systemic change management methodology

