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Make it real!

ORGANIZE FOR COMPLEXITY

How to make work work again.
How to break the barrier of command-and-control –
and create the peak-performance, networked organization

BetaCodex Network Associates

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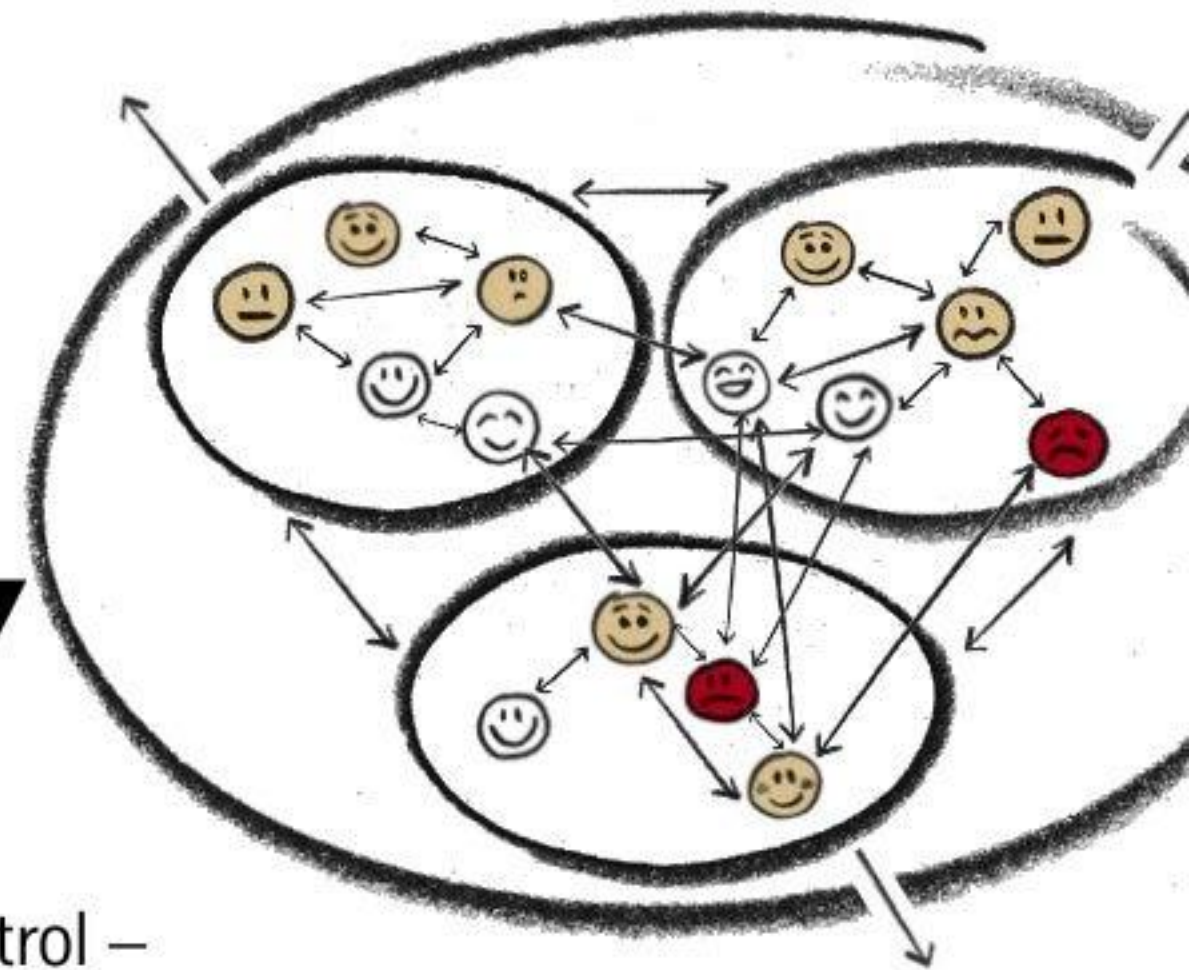
special edition

This paper addresses fundamental questions of interest to business owners, managers, professionals and change agents

Don't we all ask ourselves questions like:

- How can organizations deal with growing complexity?
- How to adjust a growing organization, without falling into the bureaucracy trap?
- How to become more capable of adapting to new circumstances?
- How to overcome existing barriers to performance, innovation and growth?
- How to become an organization more fit to human beings, and achieve higher engagement?
- How to produce profound change, without hitting the barrier?

In this paper, we argue that in order to address these issues, we must create organizations that are truly robust for complexity, as well as fit for human beings. We also discuss how that can be done. You will learn about concepts that allow to design entire organizations for complexity, regardless of size, age, industry, country or culture.

Part 1.
# Complexity: it matters to organizations. Big time.
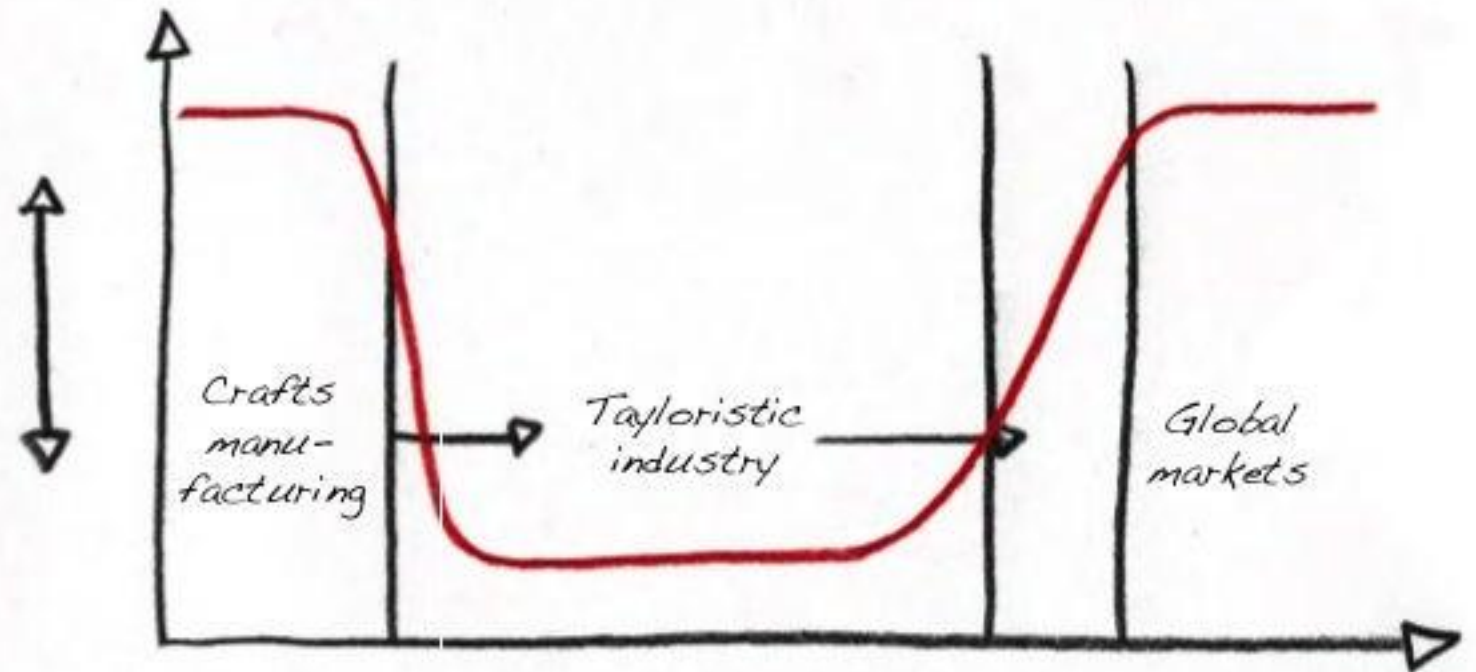
Frederick Taylor's grand idea and how management was invented: The division between thinkers and doers

In 1911, Frederick Taylor published his landmark book The Principles of Scientific Management. He proposed management as a "revolution" that would eliminate the productivity constraints of the industrial-age organization. Taylorism achieved just that. What Taylor pioneered was the idea of dividing an organization between thinking people (managers) and executing people (workers) – thus legitimating the management profession as that of "thinking principals of the non-thinking human resources". Taylor also introduced functional division to shop-floor work.

Taylor's concepts were soon decried as inhumane and non-scientific, his consulting methods as ineffective. But hierarchical/functional division became widely adopted after his death, in 1915, his principles were applied to non-industrial, non-shop-floor work. Management, as we know it, is not much different from what Taylor proposed a century ago. In dynamic and complex markets, however, command-and-control turns toxic for both organizational performance and human/social advancement.
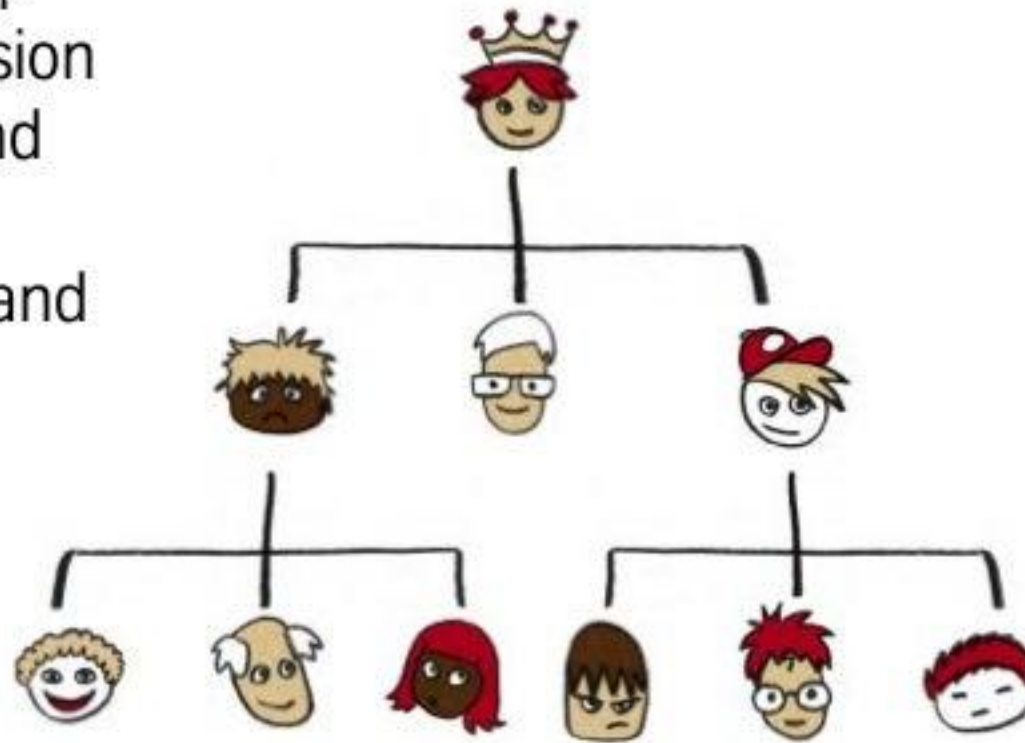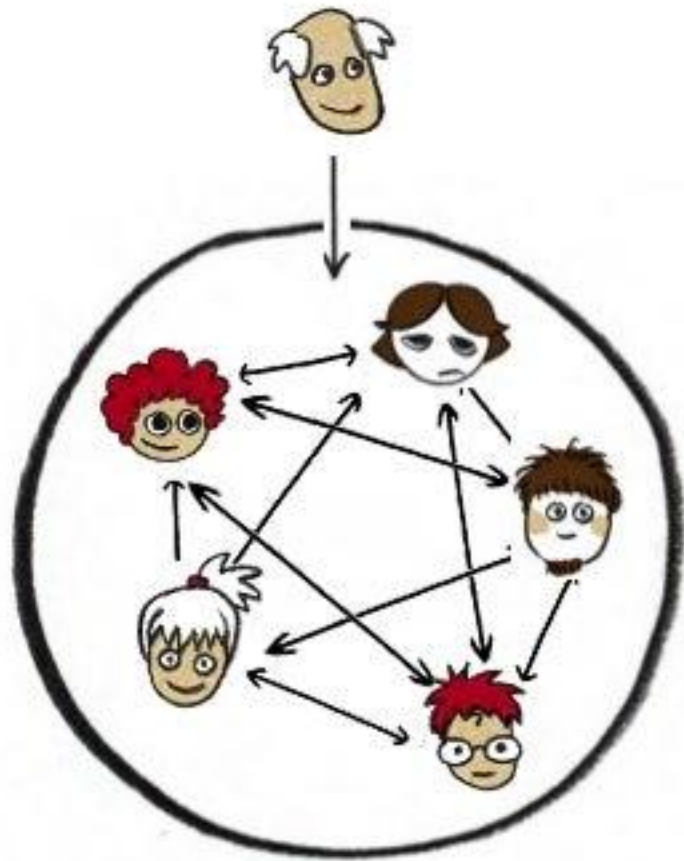We call tayloristic management Alpha.
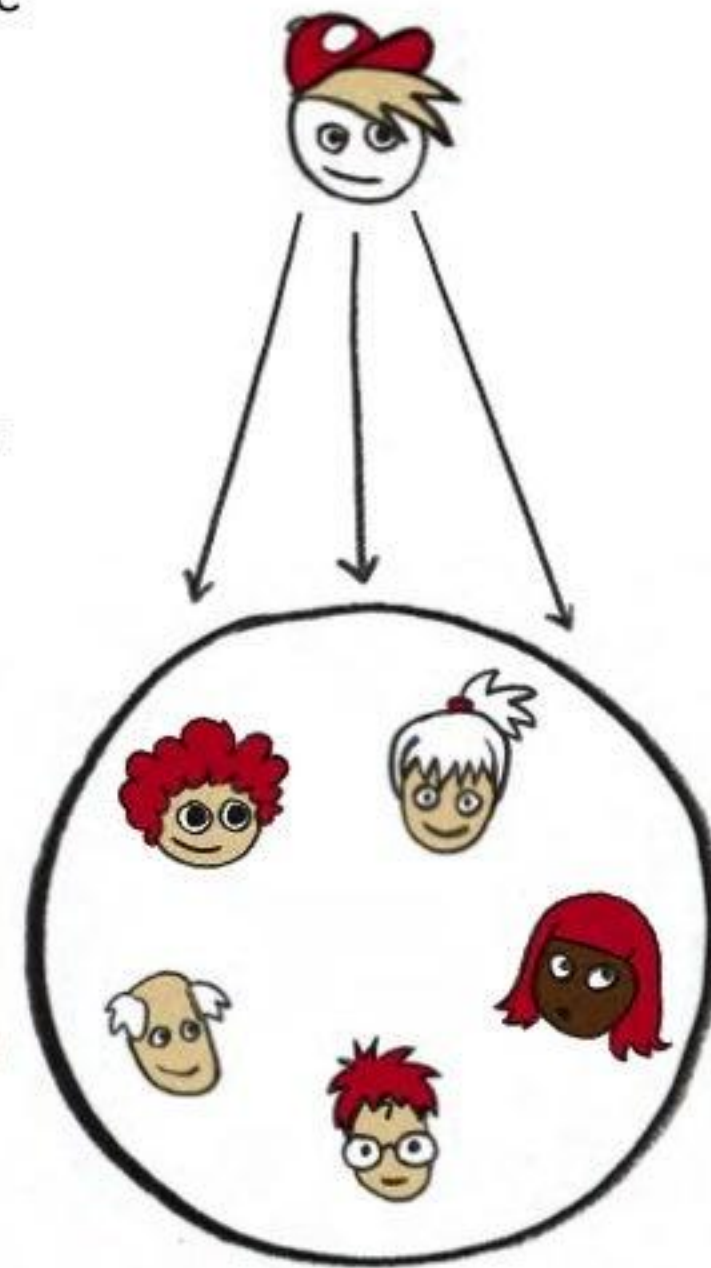
"Thinkers"/
Managers
strategize, steer,
control, decide

"Doers"/
Workers
execute, obey,
follow

The price of simplicity: Tayloristic division causes "managed" organizations to experience three systemic "gaps"

1 The Social Gap

Hierarchical division and top-down control cause an erosion of social/group pressure and dialog, and a bias towards management by numbers and leadership by fear

3 The Time Gap

Personal division between thinking thinkers and non-thinking doers causes need for managed/imposed roles, complicated IT, strategy, forecasting, and planning

2 The Functional Gap

Functional division produces a need of managed/imposed coordination through process control, interfaces, planning, rules, standards, hierarchic power etc.
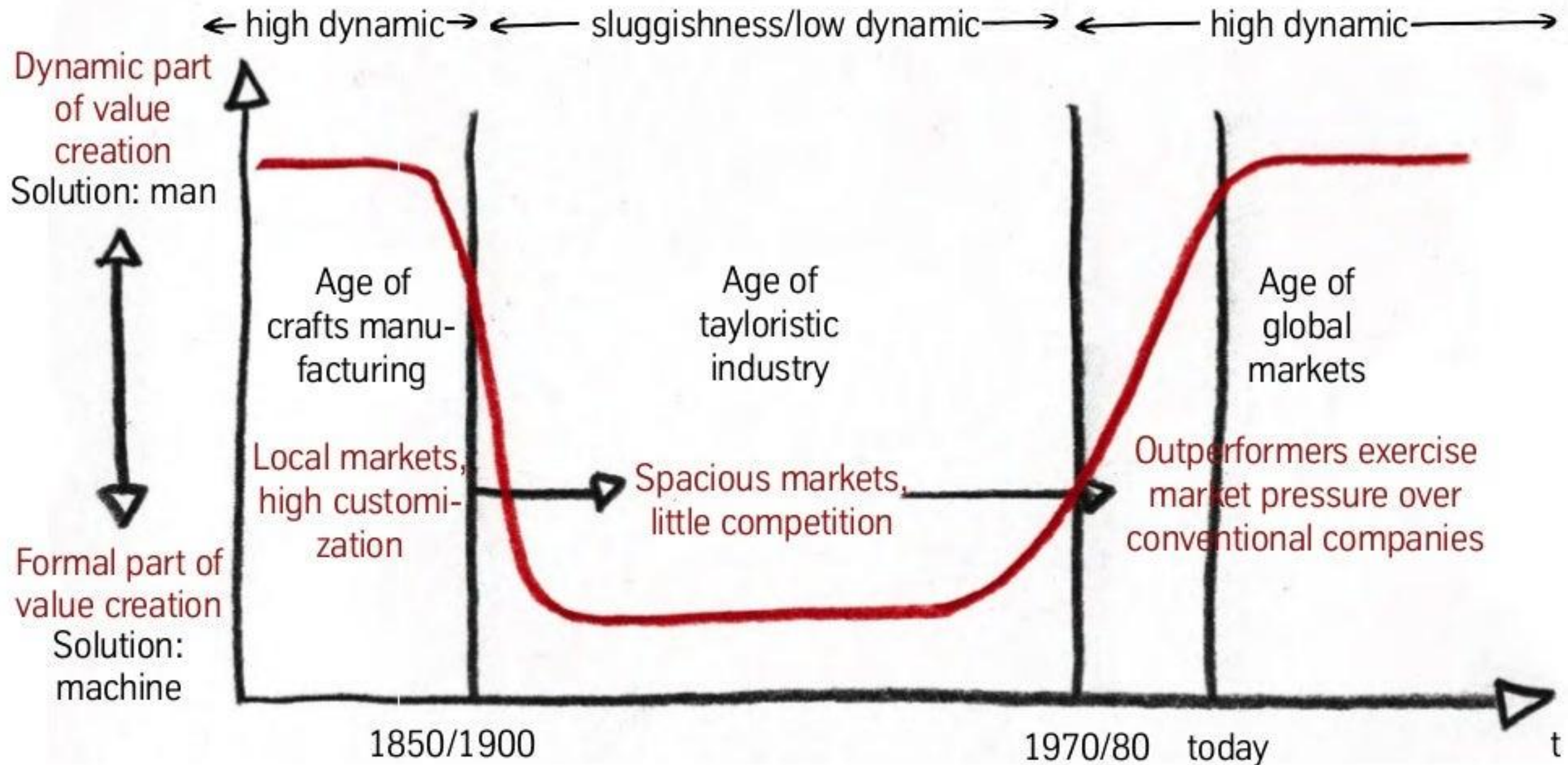
9am: Doing

3pm: Thinking

None of this feels good. None of this is value-creating. The three gaps all lead to waste.

The historical course of market dynamics and the recent rise of highly dynamic and complex markets

We call the graph shown here the "Taylor Bathtub".

The dominance of high dynamics and complexity is neither good nor bad. It's a historical fact.

The difference between the complicated and the complex

- Complicated systems operate in standardized ways. Here, imprecision is diminished, non-objectivity and uncertainty are reduced as far as possible. Can be described through non-ambiguous cause-and-effect chains Are externally controllable.

- Any high-precision machine is complicated: Everything is done to avoid imprecision/to increase precision. A watch, for example, is calibrated to diminish mistakes, uncertainty and illusion. It is configured to supply objective data, certainty and a minimum of illusion.

- Complex systems have presence or participation of living creatures. They are living systems - that's why they may change at any moment. Such systems are only externally observable – not controllable.

- A complex systems´ behavior is non-predictable. Here, it's natural that there is a level of error, uncertainty and illusion that is much higher than in complicated systems.
A complex system may possess elements that can operate in standardized ways, but their interaction would be constantly changing, in discontinuous ways

Consequences of complexity:
The importance of mastery for problem-solving

The only "thing" capable of effectively dealing with complexity is human beings. What matters in complexity, thus, as far as problem-solving is concerned, is neither tools, nor standardization, nor rules, nor structures, nor processes – all those things that used to serve us well in the industrial age and its dull markets.

In complexity, the question isn't how to solve a problem, but who can do it. What matters now, thus, is skilful people, or people with mastery. People with ideas.

Problem-solving in a life-less system is about instruction. Problem–solving in a living system is about communication.

Complexity can neither be managed, nor reduced. It can be confronted with human mastery.

The improvement paradox: In complexity, working on separate parts doesn't improve the whole. It actually damages the whole
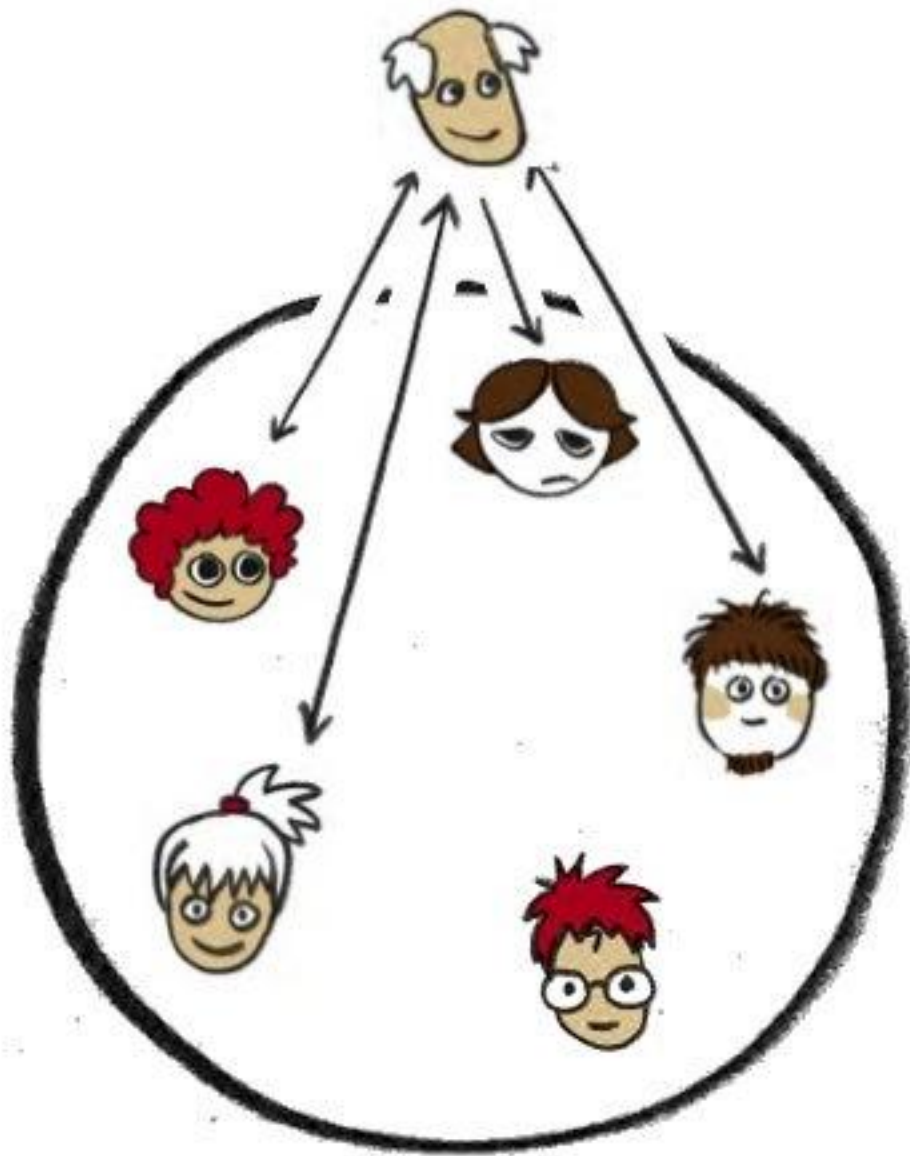
Working on individual parts of the system does not improve the functioning of the whole: Because in a system, it is not so much the parts that matter, but their fit.
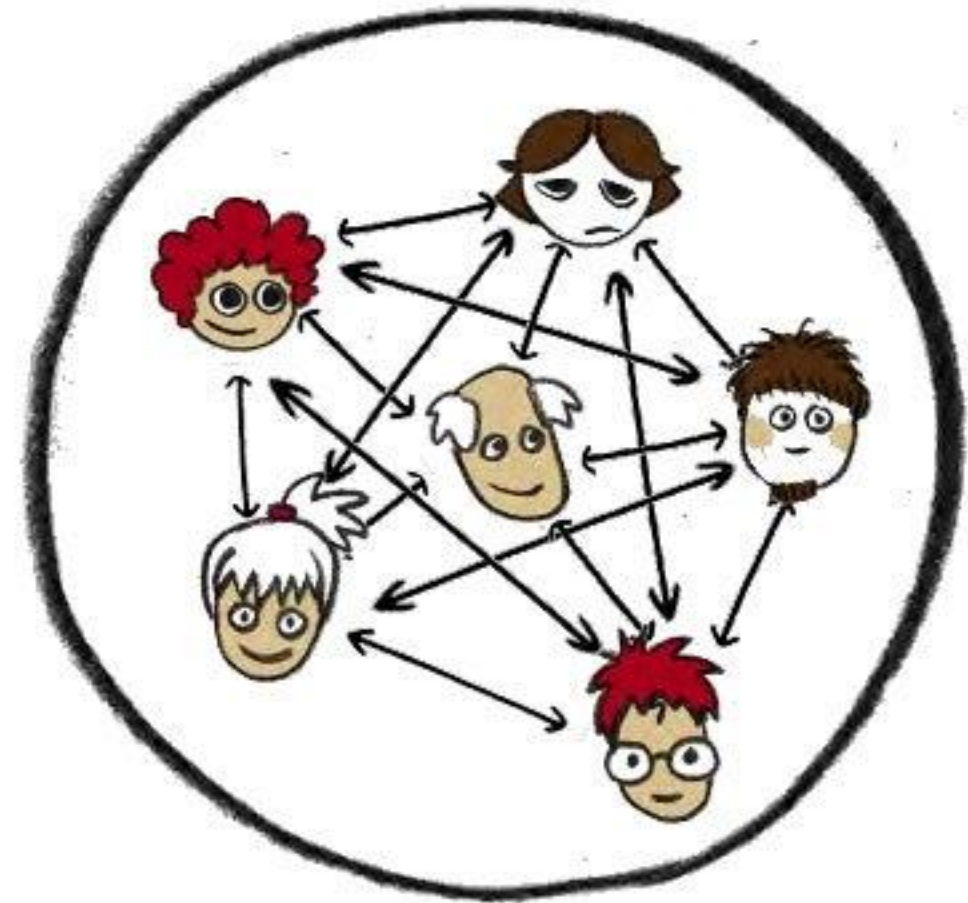
What really improves a system as a whole is working not on the parts itself, but on the interactions between the parts. You might call this attitude "leadership".

Systems are not improved by tinkering with the parts, but by working on their interactions.

Part 2.
People and work

Human nature at work - McGregor's critical distinction.
Ask yourself: which theory describes me, and people around me?

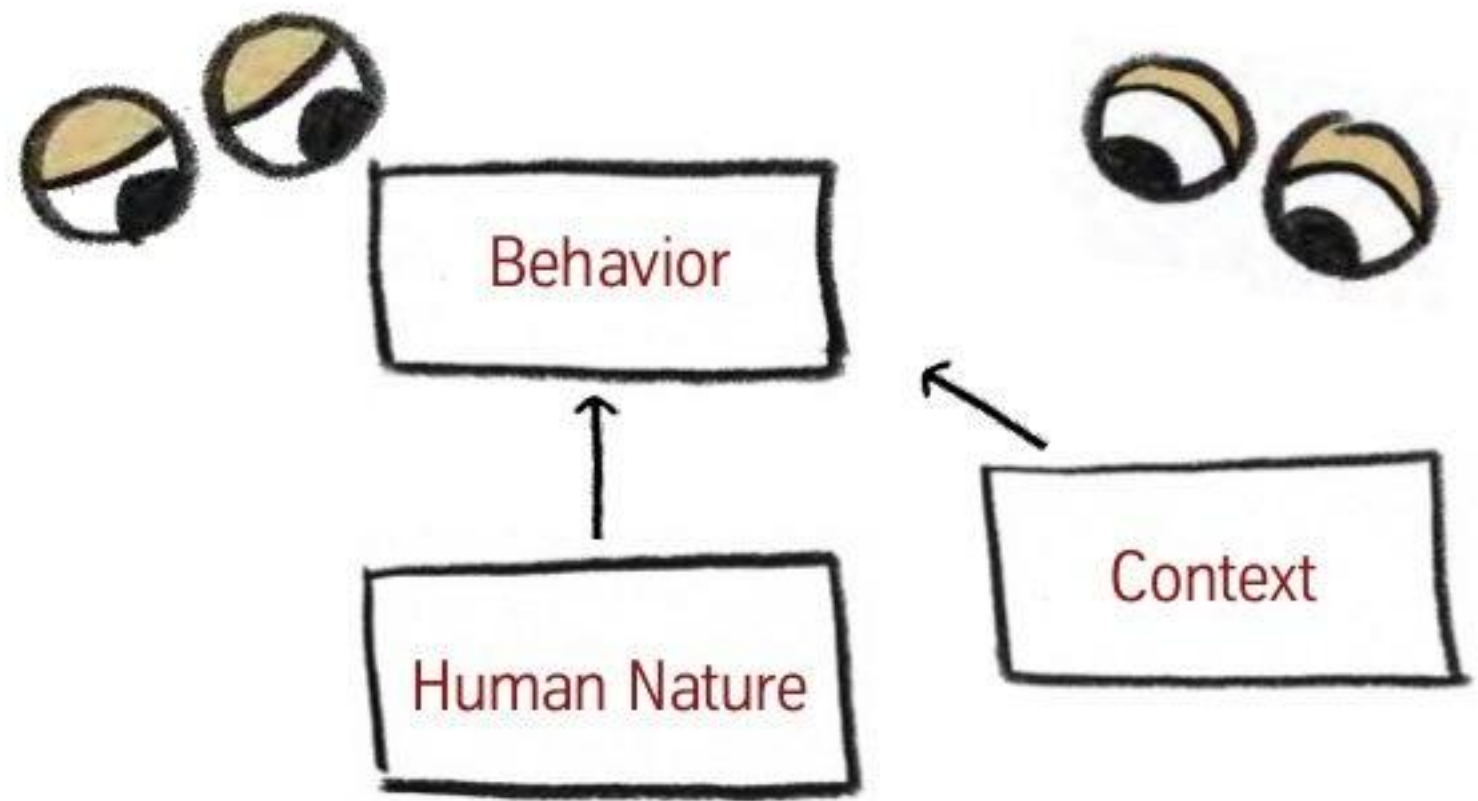| Theory X	Theory Y
Attitude	
People dislike work, find it boring, and will avoid it if they can	**People need to work** and want to take an interest in it. Under right conditions, they can enjoy it
Direction	
People must be forced or bribed to make the right effort	**People will direct themselves** towards a target that they accept
Responsibility	
People would rather be directed than accept responsibility, (which they avoid)	**People will seek and accept responsibility**, under the right conditions
Motivation	
People are motivated mainly by money and fears about their job security	**Under the right conditions, people are motivated** by the desire to realize their own potential
Creativity	
Most people have little creativity - except when it comes to getting round rules	**Creativity and ingenuity are widely distributed** and grossly underused

Source: Douglas McGregor, 'The Human Side of Enterprise', 1960

Human nature at work: McGregor's critical distinction

Asked which theory about human nature – X or Y – describes us, everyone immediately knows: "I am a Theory Y sort of person!" When asked about other people, however, the answer is usually not as clear cut. Haven't we all experienced Theory X people many times in our lives? At work? In our organizations?

Douglas McGregor, in his seminal work from 1960, distinguished between two images of human nature, of which only one is "true", in that it holds up to science and available theory. The other one, Theory X, is nothing more than a prejudice that we have about other people. There are two reason why this theory, besides being a superstition, is commonplace. Firstly, it reflects common thinking from our pre-democratic, pre-enlightenment past. Secondly, while observing other people's behavior, we tend to make conclusions about their human nature – frequently ignoring behavior-shaping context.

This matters. Because assumptions we have in our minds about other people shape our behavior, and the way we tend to design and run organizations: if you believe in the existence of Theory X humans, then command-and-control systems design will follow. In order to build complexity-robust organizations, a shared view of human nature is needed.

The nature of motivation and why leaders cannot motivate

People are driven by motives. It is safe to say that everyone carries all kinds of motives, to a certain degree. Everyone thus is a "carrier of motives", or "intrinsically motivated". The specific levels or the dominance of different motives, however, vary greatly among individuals.

What this means for organizations, or employers, is: they cannot motivate. Because motivation *is*. The main thing that organizations can do to stimulate performance is facilitating options for connection between individuals and the organization, through purpose and work. We call the phenomenon, when an individual connects itself voluntarily to work and an organization, connectedness.

Unfortunately, belief in the myth of motivational power of leadership is still widespread. Truth is: because of motivation's intrinsic nature, leaders, through their behavior, can only de-motivate.

Appreciating behavioral distinctiveness: People and preferences

An individual's behavior is also strongly influenced by preferences. The concept of "preferences" was introduced by Carl G. Jung in his pioneering work "Psychological Types".

Introversion — Extraversion

Thinking — Feeling
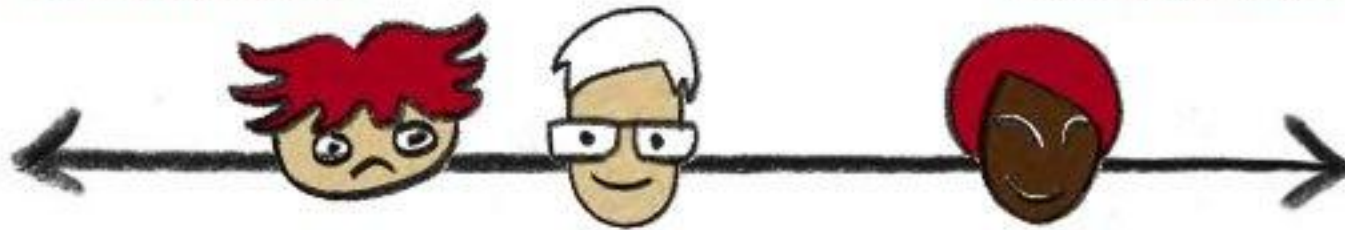
Sensing — Intuition

Attitude. Jung differentiated types firstly according to their general attitude: Attitude describes people's way of reacting more to outer or inner experiences.
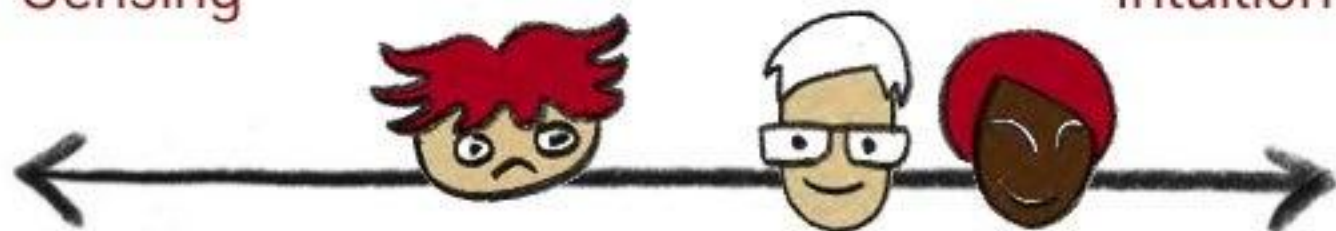
Decision-making "functions". 'Heady' individuals, who prefer to make decisions by thinking things through, rationally using the 'thinking function'. 'Heart' people prefer to evaluate and make decisions subjectively using the 'feeling' function.

Perceiving "functions". We view the world using a combination of 'sensing' to record the sensory details, and 'intuition' to see patterns, make connections and interpret meaning.

Making use of distinctiveness in preference to deal with complexity

There is great variety of behavior within the three categories of preferences, depending on which position on each of the three bi-polar scales the person's behavior is plotted. The majority of people will not be extreme, demonstrating a close balance – as such they can be more difficult to read.

Every person has the ability to use either side of the bi-polar scales, although we will all have preferences for one side more than the other – most of the time.

When people with different preferences work together, they can compliment each other.
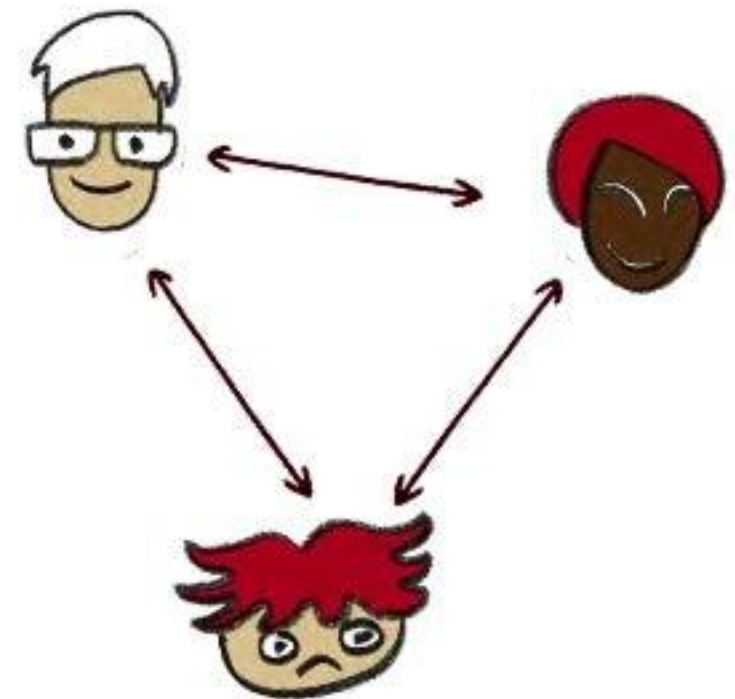
In complexity, distinctiveness in motivations and preferences can be an asset – or a liability

Individual competence vs. collective competence

"We learned that individual expertise did not distinguish people as high performers. What distinguished high performers were larger and more diversified personal networks."

"Engineers are roughly five times more likely to turn to a person for information as to an impersonal source such as a database."

Cross, Rob et.al.
The Hidden Power of Social Networks.
*Boston: Harvard Business School*
Press, 2004
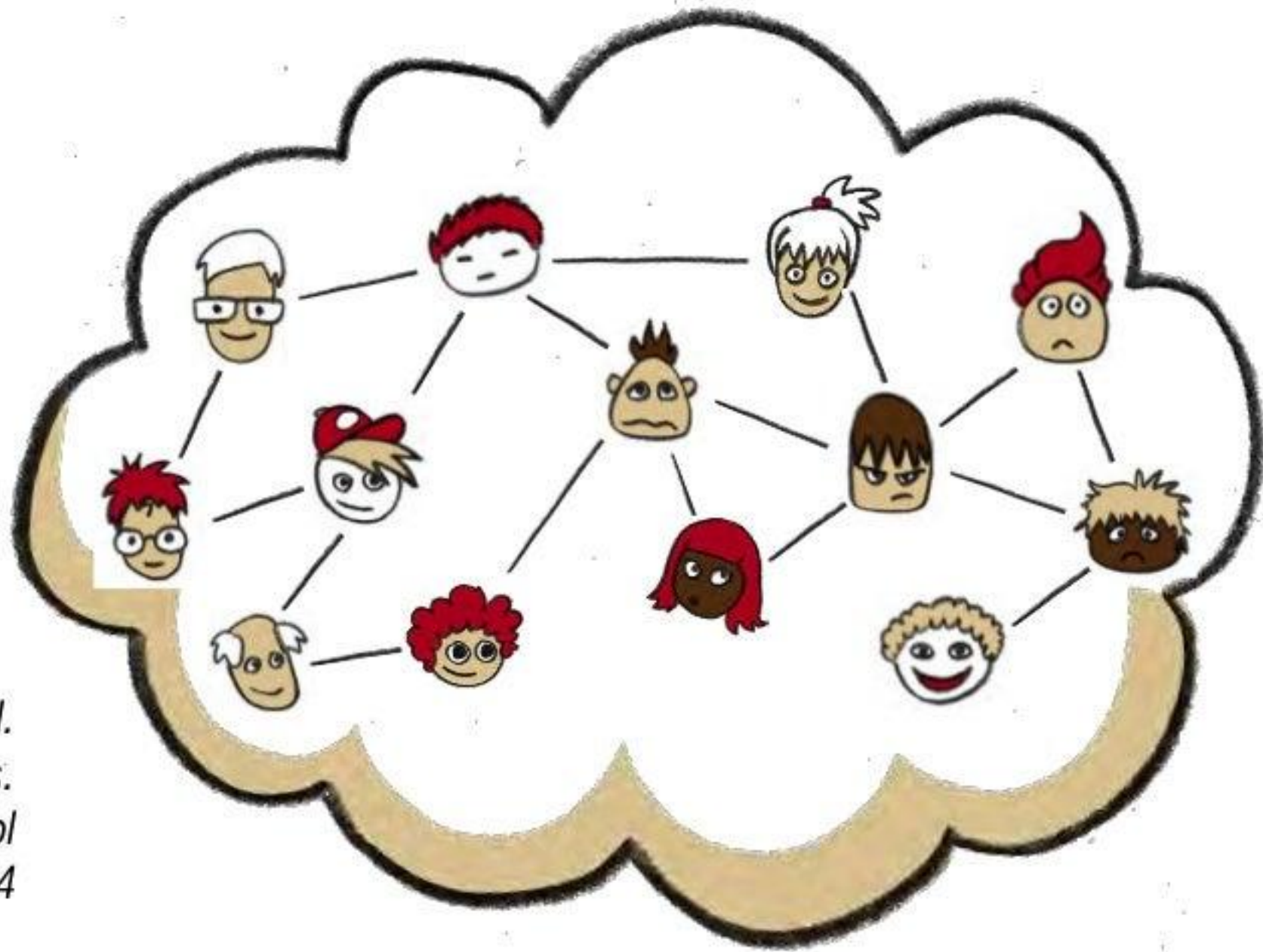
Most organizations are obsessed with individual performance. But individual performance is actually a myth

Individual performance is not just overrated. It simply doesn't exist, in organizations.

Why? Because value, or results, never arise from individual action, but from interaction between various individuals, or within teams. A sales person only does part of the sale – the other parts are being done by people who may call themselves back office staff, production and procurement staff, accountants and HR professionals.

Because interdependency is in organizations, trying to define individual targets, or to measure individual performance, leads to deception. Appraisals of individual performance can only have a de-spiriting and de-motivating effect on people and damage team spirit.
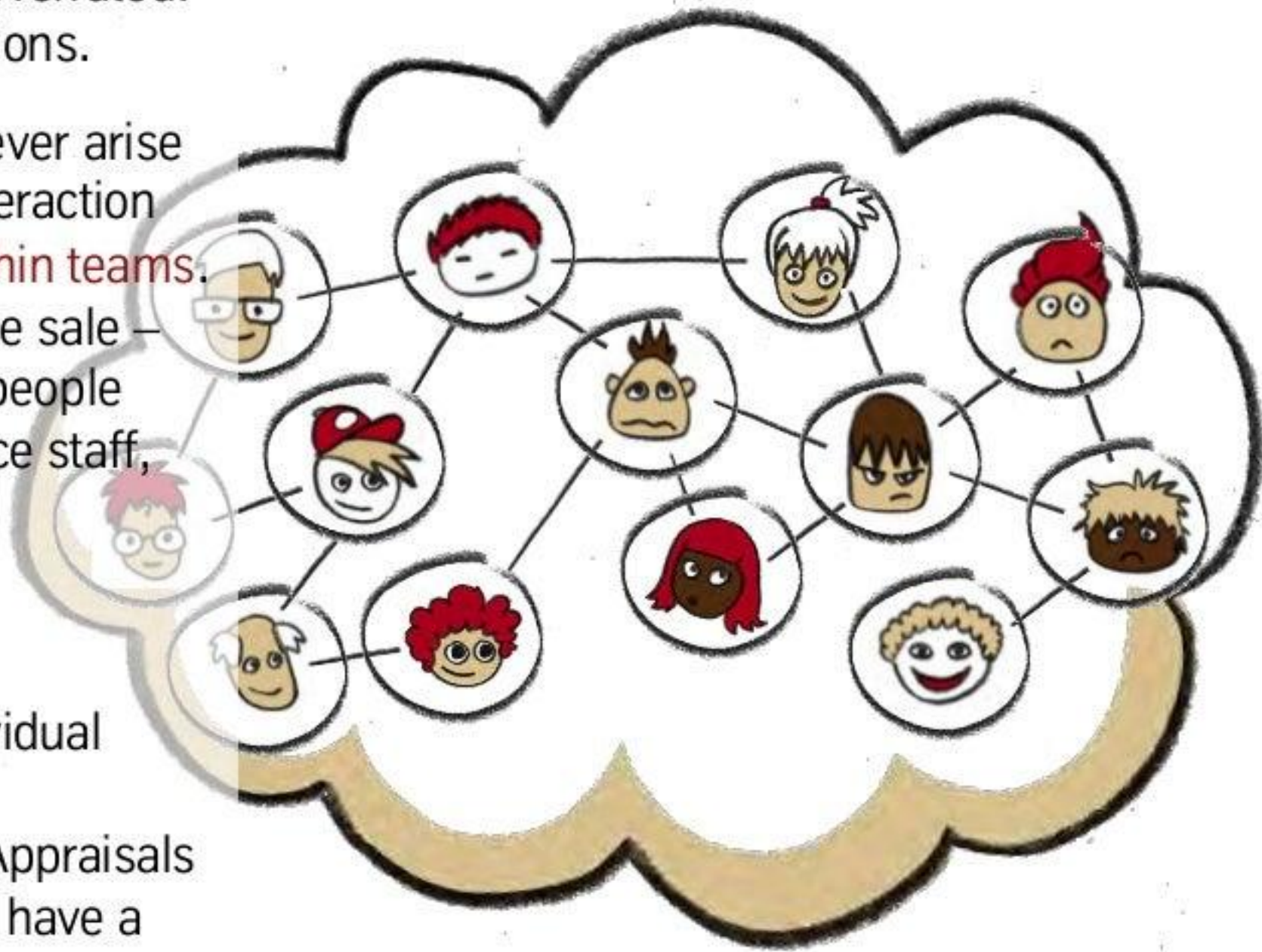
People communicate & connect in wildly different manners. About the "archetypes" of communicators

Hubs	draw information and broadcast it
Gatekeepers	carefully manage information flow:
Pulsetakers	great observers of people

Karen Stephenson, *Quantum Theory of Trust*.
Harlow: Pearson Education Ltd, 2005

Connectors	exchange information with many people
Mavens	invest more time in people
Salesmen	masters of interpersonal communication

Malcolm Gladwell, *The Tipping Point*.
Boston: Back Bay Books, 2002

It is not important which of these concepts is "true" or "better":
There is potential in making use of social patterns and these varied ways of acting.
Make use of them, or ignore them at your peril!

What makes people complex: putting it all together

Behavior (visible)
Competencies
Preferences
Motives
Nature
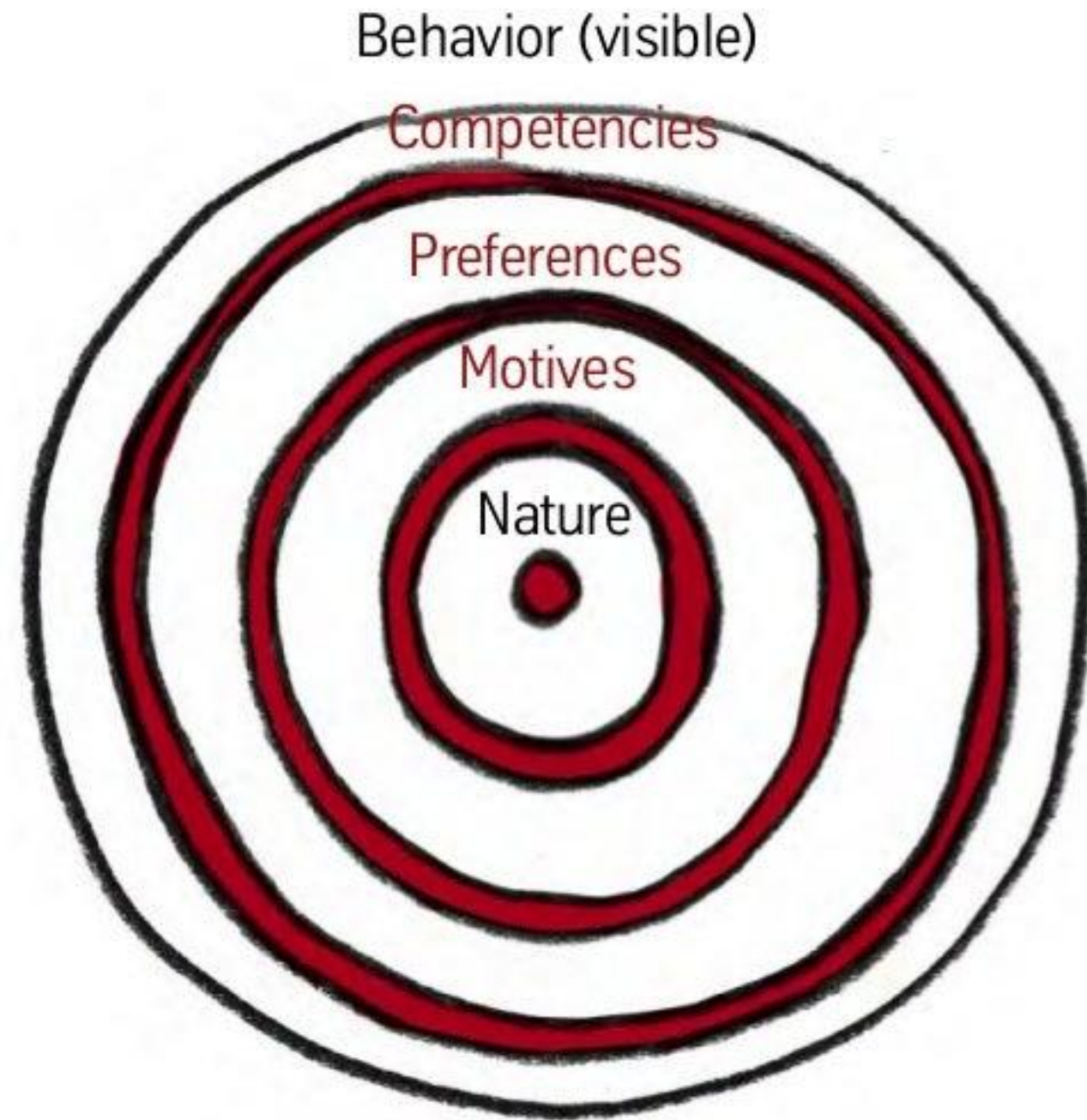
An individual's behavior is shaped by motives, preferences and competencies. Motives as personal characteristics are quite stable over time – they describe how important certain goals are for the individual. Preferences, by contrast, can partly evolve during the course of a lifetime - depending on environment, challenges and personal goals. Motives and preferences, combined, influence our interest to acquire certain competencies: There are abilities that are present or that can be learned. Competencies, thus, are directly related to learning.

As we saw, only behavior is easily and readily observable. It is still quite easy to describe an individual's competencies. With a little more effort yet, preferences can be mapped and described. Proper identification of someone's motives require even more effort and delicacy. Human nature cannot be observed at all: it is a matter of conviction, or part of the social theories that we hold. Problem is: observing behavior seduces us to (mis)judge others´ competencies, motives, or even their nature. An organization fit for complexity requires more reflection!

Part 3.
Self-organizing teams and the networked organization:
From the old design principles to new, and better ones