

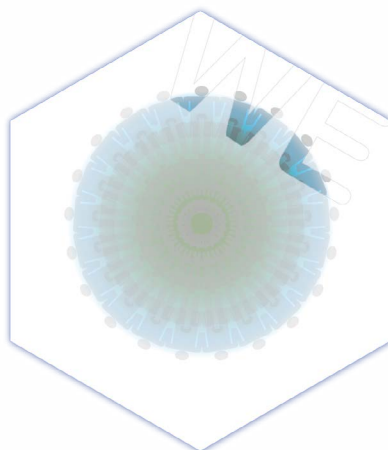
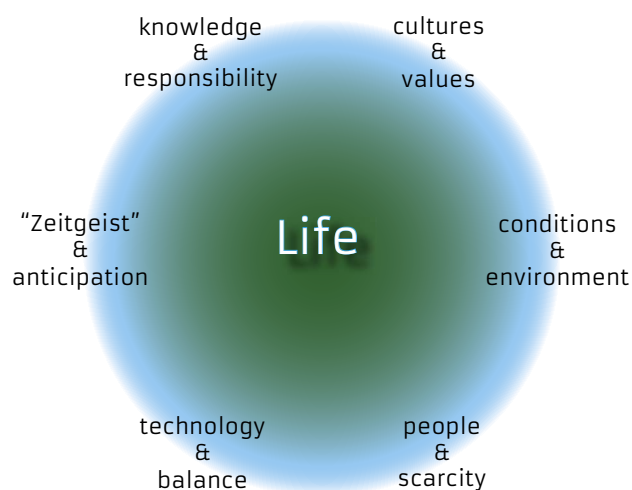
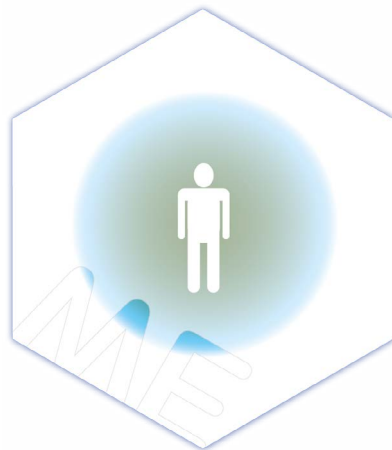


About System Thinking

Me-We & Civilization Design



A collaboration
with
Blockchain for Lean





About System Thinking

Collaboration on System Thinking with
Blockchain for Lean



The Me-We life vision has developed from 2020 into multiple interactive and practical tools combined with Design Thinking and System Thinking methodology. Since 2021, Me-We World has been working with [Blockchain for Lean](https://blockchainvoorlean.nl/) on a program about System Thinking in combination with game simulation for teachers and organizations.

In this document, we provide some information about Systems Thinking and a peak at our workshops, training programs & game projects.

Although the Me-We organization distinguishes three categories, including Community Builders, Entrepreneurs, and Educators the Me-We Program is widely applicable and intended for anyone who wants to think, live and work in a forward-looking, innovative, sustainable and socially responsible manner.



About System Thinking

Introduction

Repositioning Humanity



One of the things we want to address at Me-We-World is how we rule our civilisation in a responsible, inclusive and circular way. For this, we must think in systems. We also should be aware that it is impossible to be or think outside of systems! To make it even more challenging, we should understand that we are all responsible for these systems and their consequences! During the pandemic, there were crises on different levels where we had to rely on our systems. At this point, we realised how interdependent we are and why it is crucial to question our actions and the mental models behind them.

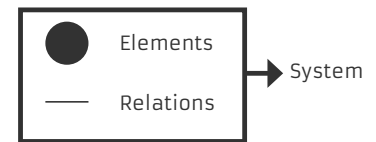
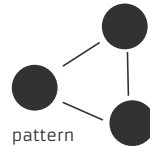


About System Thinking

What is a system & why do we need System Thinking?

A System:

- is made of elements
- has a pattern
- has a purpose



Let's start from the beginning by defining what a system is. A system is represented by elements that are related to each other in a pattern to achieve a certain purpose. The outcome of all the interconnected elements is the function of the system. Systems also exist within systems. For example, we have a system for time measurement or a metric system. Can you imagine what it would mean for communication, collaboration or coordination if we didn't have these 2 systems? Now you could also think of an economic system, a circular system, a social system and a governance system. The main reason why these systems don't work well together is that they are not designed in a way that takes all their different elements into consideration.

For example, when it comes to a governance system, it needs to take into account the economic system, the social system, the environmental system, and so on.

As was mentioned in the introduction we should think in systems so what is System thinking?

The core of systems thinking is using systems thinking to look at the whole, rather than looking at parts in isolation.

It is based on the idea that any system is composed of interconnected parts, and that understanding the relationships between those parts is key to understanding the system as a whole. Systems thinking helps to identify how different parts of a system interact and how they affect each other, as well as the ways in which they can be managed and improved.

Systems thinking is often used in many different industries, such as business, finance, engineering and education. It can be used to look at the way an organization is structured, the processes it uses, and the relationships it has with other organizations. It can also be used to assess the effectiveness of a business model or to understand the challenges and opportunities within a particular sector. Systems thinking can also be used to analyze the effects of policy decisions. Since the 1950s all kinds of theories, methods and techniques were developed through the systems thinking approach.

"Very often, this is the way we humans try to solve problems — by fixing the parts without accounting for how they work together and hoping that it improves the whole."

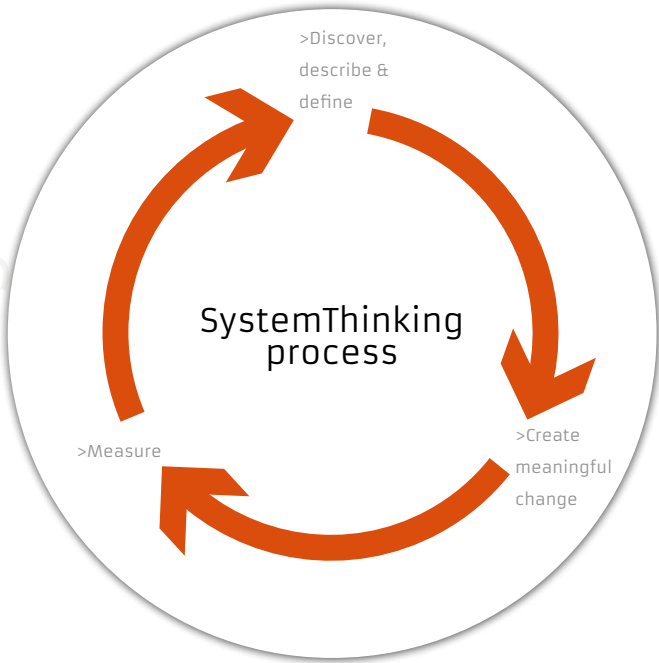
Dr. Leyla Acaroglu



About System Thinking

The Process

Repositioning Humanity



- > [understanding]
- > the whole
- > cause-and-effect relationships
- > [evaluating]
- > engage different perspectives
- > leverage points
- > affect known and unknown elements
- > [solving]
- > think circularly; not linearly
- > complex problems in a holistic manner

"At its best, the practice of systems thinking helps us to stop operating from crisis to crisis, and to think in a less fragmented, more integrated way."

**Living in a World of Systems, excerpts from Donella Meadows*

"The significant problems we face cannot be solved at the same level of thinking we were at when we created them."

**Albert Einstein*

"Very often, this is the way we humans try to solve problems — by fixing the parts without accounting for how they work together and hoping that it improves the whole."

Dr. Leyla Acaroglu

No one can define or measure justice, democracy, security, freedom, truth, or love. No one can define or measure any value. But if no one speaks up for them, if systems aren't designed to produce them, if we don't speak about them and point toward their presence or absence, they will cease to exist.

**Donella H. Meadows, THINKING IN SYSTEMS: A Primer*

"Living successfully in a world of systems requires more of us than our ability to calculate. It requires our full humanity—our rationality, our ability to sort out truth from falsehood, our intuition, our compassion, our vision, and our morality"

**Living in a World of Systems, excerpts from Donella Meadows*

→ To Link with 15 rules by Donella Meadows

↓
[To Link 12 leverage points by Donella Meadows](#)



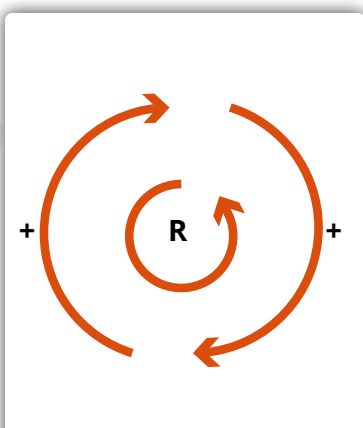


About System Thinking

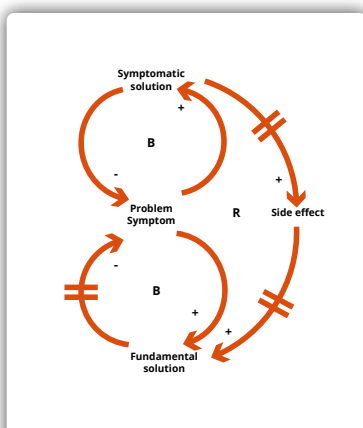
Archetypes

In our Systems Thinking program we focus on these 4 archetypes

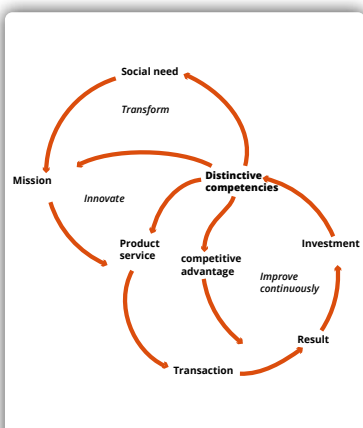
Another aspect of the world of System thinking and System dynamics is the archetypes. These can help to recognize behavioural patterns. One could think of behaviour patterns within social systems such as communities, states, countries, economies, companies, etc. The archetypes can be used as a diagnostic tool to determine the current system status or to gain insight into future trends and developments in systems. Archetypes make us aware of causal connections and can be typical examples or recurring motifs. There are two basic archetypes the Balancing loop and the Reinforcing loop. All other 14 archetypes are established from these. Furthermore, there are two categories. The Fixing a Problem category and the Influencing Change category. Below an overview of all archetypes (16 in total)



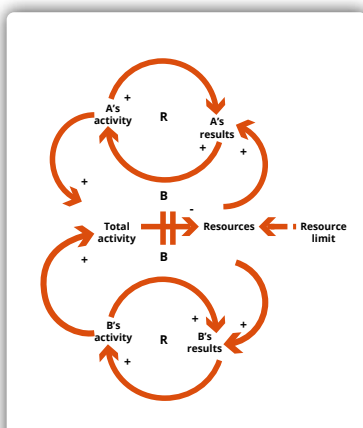
A reinforcing loop is one in which an action produces a result which influences another of the same action thus resulting in growth or decline.



Shifting the Burden is a problem symptom is modified without addressing the underlying problem.



Every organization chooses in which field it wants to contribute, but if it does not adapt to the changing environment, it will not last long.



The tragedy of the commons is an economic problem in which every individual has an incentive to consume a resource, but at the expense of every other individual with no way to exclude anyone from consuming.

Fixing a Problem

- Balancing Loop
- Balancing Structure with Delay
- Indecision
- Drifting Goals
- Escalation
- Fixes That Fail
- Shifting the Burden
- Addiction

Influencing Change

- Reinforcing Loop
- Limits to Growth
- Accidental Adversaries
- Success to the Successful
- Tragedy of the Commons
- Attractiveness Principle
- Growth and Underinvestment
- Growth and Underinvestment with Drifting Standard



About System Thinking

Workshops & games

Challenge

Process

"Trust"

Value

Scarcity

System

question cards

ADDITIONAL

DESIGN THINKING CANVAS

EMPATHIZE

TOILETPAPER BULLRUN

Storytelling

During the corona crisis, people started hoarding toilet paper. Why did people start stockpiling? What causes this fear of missing out (FOMO)? What are the consequences? How can we avoid such "hype"?

S SOCIAL
T TECHNICAL
E ECONOMIC
E ENVIRONMENT
P POLITICS

Remember, the Design Thinking Canvas is a collaborative tool, so make sure everyone has a chance to contribute their ideas and perspectives. Good luck!

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Inspired by the Design Thinking methodology: A mapping workshop (above) and an Island game explained through the Iceberg model (below)

ICEBERG MODEL - ISLAND GAME

12 Leverage points by Donella Meadows

- 12 Parameters
- 11 Stabalizing stocks
- 10 Digital/ physical infrastructure
- 09 Delays, time & coordination
- 08 Information control
- 07 Address systemic inequality
- 06 Information flows
- 05 Rules
- 04 Governance
- 03 Goals
- 02 Paradigm
- 01 Not knowing (transcend paradigms)

Events - "Emergence"
What is happening?

Patterns of behaviour
the trends or what has been happening over time?

Systems structure
How are the elements related? What are the structural forces at play contributing these patterns?

Mental models
What values assumptions & beliefs shape the system?

Gameboard **Event cards**

Market place

Players/ Roles (outer level)

Ledger **Construction card** **Certificates**

Game Levels **Players/ Roles (inner level)**

The Winner, The Idealist, The Psyc0

12 Leverage points by Donella Meadows

- Shallow leverage points: 10-12 Parameters, 07-09 Feedbacks
- Deep leverage points: 04-06 Design, 01-03 Intent

02 Paradigm shift: A dead tree has more value than a living one > A tree has a voice in the system

