

A hand holding a pen is positioned over a sheet of paper with a grid of small dots. The pen is pointing towards the dots, suggesting the act of connecting them. The background is a soft, out-of-focus grey.

# Connecting the Dots

Systems Thinking & the State of the World

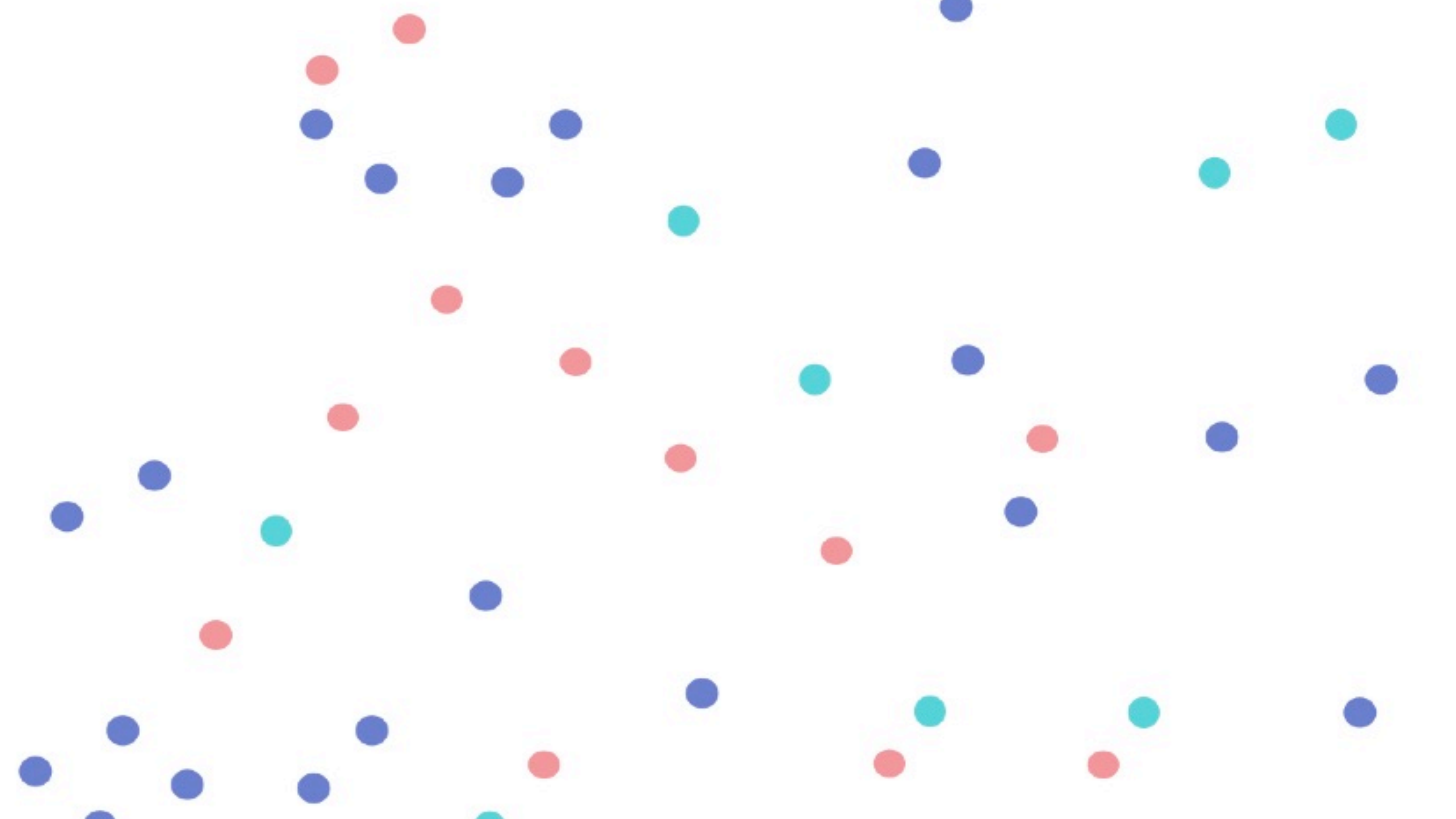
# Listen to Manzini

Take notes underway

Discussion on this following the video

<https://www.youtube.com/watch?v=bhm05JodBQ8>

Min ca 26,5-31



# Listen to Capra

Take notes underway

Discussion on this following the video

<https://www.youtube.com/watch?v=TFERd65UCh8>

# The cognitive foundation to move on

The great challenge of our time - build and nurture sustainable communities and societies, designed in such a way that our activities do not interfere with nature's inherent ability to sustain life.

- 1) Understand the principles of organization that nature's ecosystems have evolved to sustain the web of life; we need to become, as it were, ecologically literate.
- 2) Understand the basic principles of ecology – interdependence, the cyclical nature of ecological processes, flexibility, diversity, etc. – properties of all living systems.

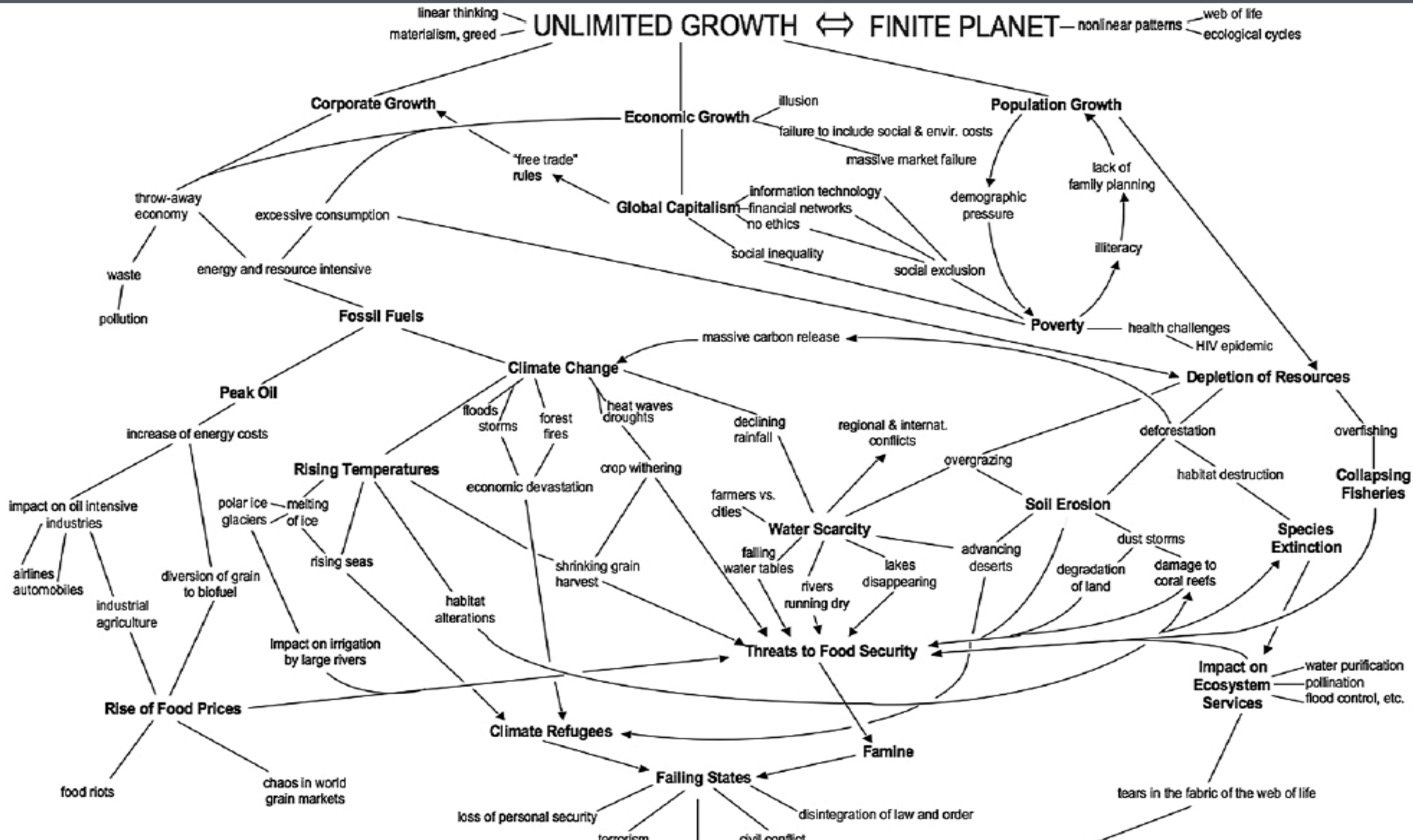
# Interconnectedness of problems

All problems facets of one crisis – that of perception

Solving problems of our time require a radical shift in our perceptions, our thinking, our values.

They are systemic problems and require systemic solutions and only viable solutions are those that are ecologically sustainable.

# A conceptual map to saving the world



# Qualitative and quantitative growth

Unlimited growth vs. multifaceted organic growth known from ecosystems where some parts of the system grow, others decline, releasing and recycling their components, which become resources for new growth.

*The End of Growth* (Heinberg, 2011) - the world is now colliding with three barriers to continuing economic expansion:

- 1) The depletion of important natural resources, importantly fossil fuels, the situation also known as “peak oil.”
- 2) The proliferation of harmful environmental impacts arising from the extraction and use of resources
- 3) The financial barrier



# Transition from quantitative to qualitative paradigm

The concept of qualitative economic growth will be a crucial tool in this task.

“Beyond GDP” European initiative you heard about from Klara

Globalization, global capitalism, and casino finance

# Transition from materialism to community

Change also at the individual level. Cultural conditioning on materialism would need to be overcome, likely by finding satisfaction in human relationships and community.

The values of conservation, cooperation, and community are promoted today by many grass-roots movements and organizations in the new global civil society. Among them, the feminist movement and the ecology movement advocate the most profound value shifts, the former through a redefinition of gender relationships, the latter through a redefinition of the relationship between humans and nature.

# The ecological impact

Case of South Korea and Taiwan, pg. 385

# Listen to Terry

And once more, Terry:

<https://www.youtube.com/watch?v=fDmBXxRqsW8>

# Systems Thinking

...is an approach that encourages us to take a more holistic or systemic view of *how different factors relate to one another* within a whole.

Encourages us to move away from a focus on individual events or simplistic cause and effect scenarios to focus on the bigger picture

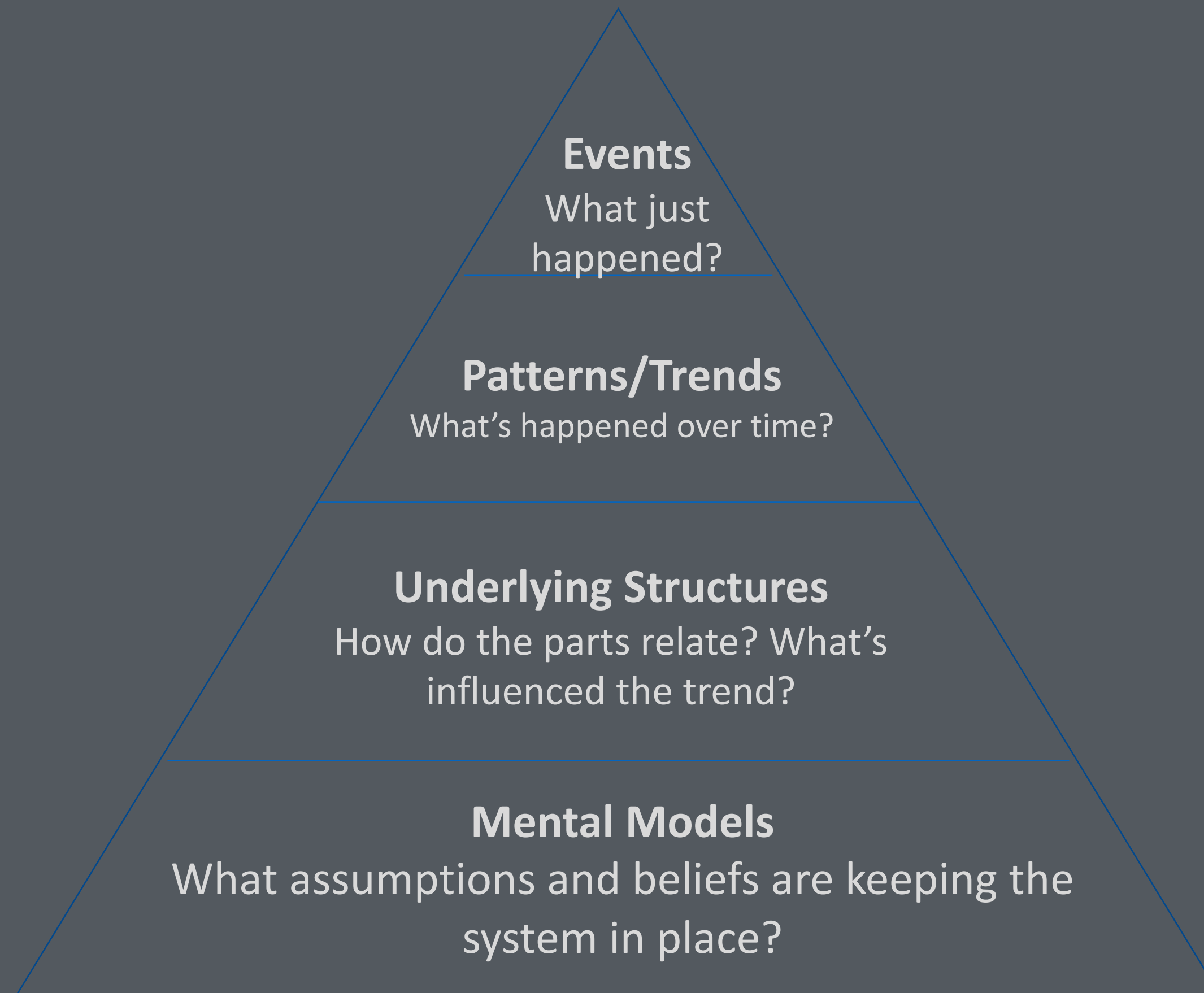
Allows us to see multiple components in relationship at once

Can indicate inputs we may have missed

May make it easier to understand delays – or escalations - in the system

Can suggest points of leverage for interventions

# The Systems Thinking Iceberg



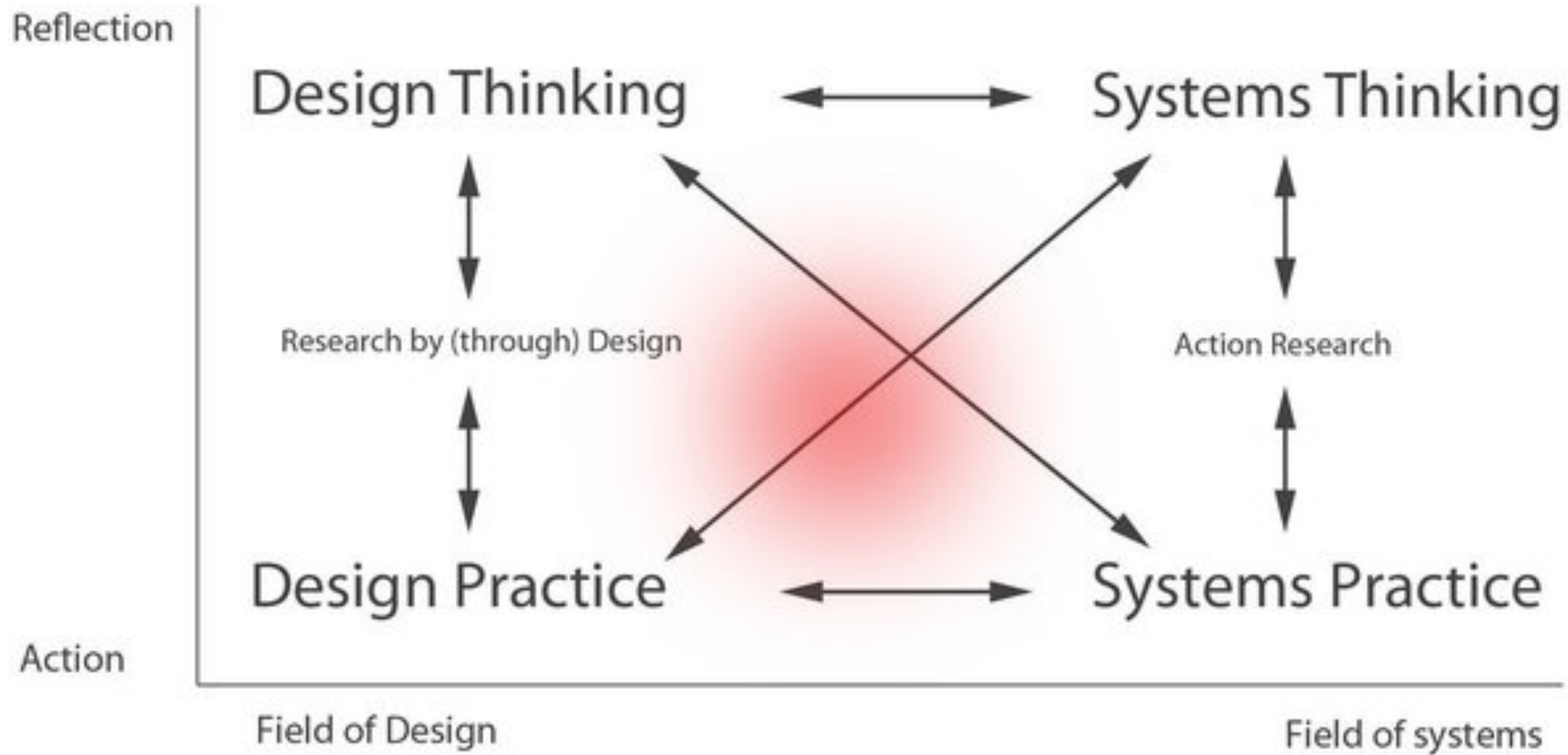
## Exercise

- Start at the top of the iceberg, by describing a current challenge that you're encountering
- Work down the iceberg asking each of the questions in turn to uncover the mental models/values supporting the status quo

See also:

<https://socialinsilico.wordpress.com/2017/11/27/reading-for-leading-14-exploring-the-iceberg/>

# Systems and Design



# How do we adopt a systems perspective?

## Three shifts

Big Picture

Personal  
Responsi  
bility

Systems  
Structure

Donella  
Meadows:  
“Thinking in  
Systems”  
Leverage points

## Culture change

...is often a “wicked” problem:

- Requires addressing the *whole* system
- Likely involves addressing *multiple underlying structural elements*
- Requires *more than one intervention* – strategies that target a single issue are unlikely to be effective alone
- Has multiple *interconnected elements*
- One size doesn't fit all – need to *understand the contexts in which we're working*





Climate change

# The global civil society

Values and membership in the human community



Watch for

What is the future?

