

Futures Provocation

- what is systematic futures thinking and why you need it?

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Futures Studies and The Future of Sustainable Energy in Teaching

DEEM Training 3 September 2019

University of Yangon (YU)

Yangon, Myanmar



Lecturer's Background



Professor of Futures Studies since 2007 at Finland Futures Research Centre (FFRC), University of Turku

- PhD Helsinki University
- Previously Chief Research Scientist at VTT (Technical Research Centre of Finland)
 - technology foresight, future of cities,
sustainable knowledge society,
energy, social media, innovation
- Vice-President of the Finnish Society for Futures Studies
- Chair of Helsinki Node of the Millennium Project 2001 –
- Member of the Club of Rome 2005 -

Structure of Lecture

1. What is futures thinking and futures studies as a discipline
2. Main principles and approaches
3. Who owns the future? What is futures agency?

A vibrant rainbow arches across a clear blue sky, its colors transitioning from red on the left to violet on the right. Below the rainbow, a lush green field stretches across the foreground, with a line of trees and bushes in the middle ground. The trees are mostly green, with some yellow flowers visible. The overall scene is bright and cheerful, suggesting a clear day after a rain shower.

1. What is futures thinking and futures studies as a discipline?

KEY CONCEPT

What is Future?

That's the first question, then:

- *Does the future exist?*
- *Can we have knowledge about futures?*
- *How to study it?*

Origin of Futures Thinking Is Age-Old

Future is about Thinking (of the Future)



- Historically tied to the prevailing approach to the future in society during different ages.
- **Future consciousness is not possessed by only a few chosen ones but a characteristic typical of the entire human race.**
- This observation formed the foundation for the development of futures research as both academic and civic activity.

Different approaches to Futures in different ages and in different cultures

African concept of time/futures,
Chinese, Japanese, Brazilian,
German, French, **Myanmar...?**



Obiora Ike,
Nigeria

THE FUTURE UNFOLDS

- The Future unfolds every second
- The Future holds several possibilities
- Of these possibilities (only) some will be unfolded to the present realities
- ≈ Lat. *Explicare*
 Engl. *explain (the world)*



Ancient Tradition of Futures Thinking

- The Egyptians, Babylonians, Assyrians, Jews, Greek, Romans and Chinese shared the conviction that humans are capable of receiving transcendental knowledge about the future.
- The ancient tradition of foretelling the future included more than 100 various techniques (intuitive and inductive methods).

e.g. The Delphi oracle
consulted by statesmen



What is the Nature and Origin of Modern Futures Research?

Modern futures research means systematic action and approach for developing and using scientific methods and tools for probing future alternatives (NOT prediction or prophecy)

- **practiced ever since the 1940s-60s**
- **The scientific-oriented paradigm gradually established**
Ossip K. Flechtheim: Die Futurologie 1943
- **Futures studies launched in USA in 50s, France, Japan 60s**
....Finland in the late 70s.
- **Now an academic discipline, but ONLY in some countries**

CURRENT FUTURES STUDIES

Established paradigm with university-level courses, programmes, chairs, annual conferences, methodologies in Finland



FUTURES RESEARCH

Intl Master's Programme and
Doctoral Programme at FFRC

Future of Cities? Future of Energy?
Future of Myanmar? Future of South East Asia? 2030? 2050?

Futures Research

Foresight

Futures research = systematic, holistic, multidisciplinary and critical long-term analysis of futures topics and alternative developments

Foresight = structured participatory debate about the future of complex issues

International Master's Programme in Futures Studies at School of Economics, University of Turku

**School of
Economics' Motto:
A Great Place to
Think Ahead!**



Turun yliopisto
University of Turku

e.g. scenarios for existing companies!

BUILD YOUR
**FUTURE CAREER
WITH US**

**+ Doctoral
Programme**

GENERAL PURPOSE OF FUTURES STUDIES According to Wendell Bell



**“To maintain or improve the freedom and welfare of humankind and of all living beings, plants and the earth’s biosphere
-> making the world a better place”**

PENTTI MALASKA

A Visionary
and Forerunner

Edited by Laura Pouru • Markku Wilenius • Karin Holstius • Sirkka Heinonen



The Finnish Society for Futures Studies

- **Life and work of Professor Pentti Malaska.**
- **A key pioneering role in establishing the academic discipline of futures studies not only in Finland, but also internationally.**
- **Insight into the futures research ideas, theories and methods developed by Malaska**

Pouru, Laura, Markku Wilenius, Karin Holstius & Sirkka Heinonen (eds.) (2018)

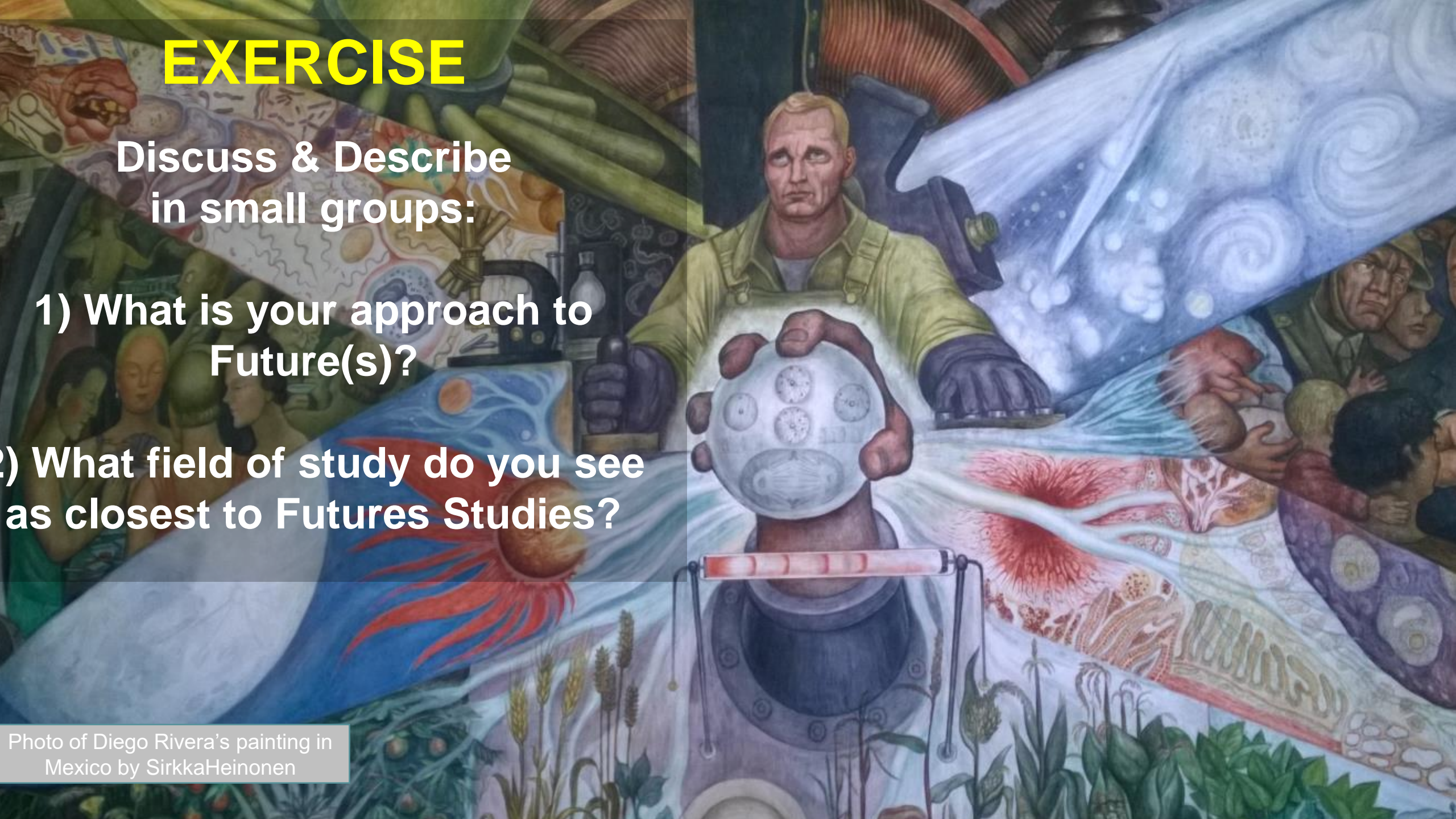
Futures Series 9, The Finnish Society for Futures Studies. 243 pp.

EXERCISE

Discuss & Describe
in small groups:

- 1) What is your approach to Future(s)?
- 2) What field of study do you see as closest to Futures Studies?

Photo of Diego Rivera's painting in
Mexico by SirkkaHeinonen

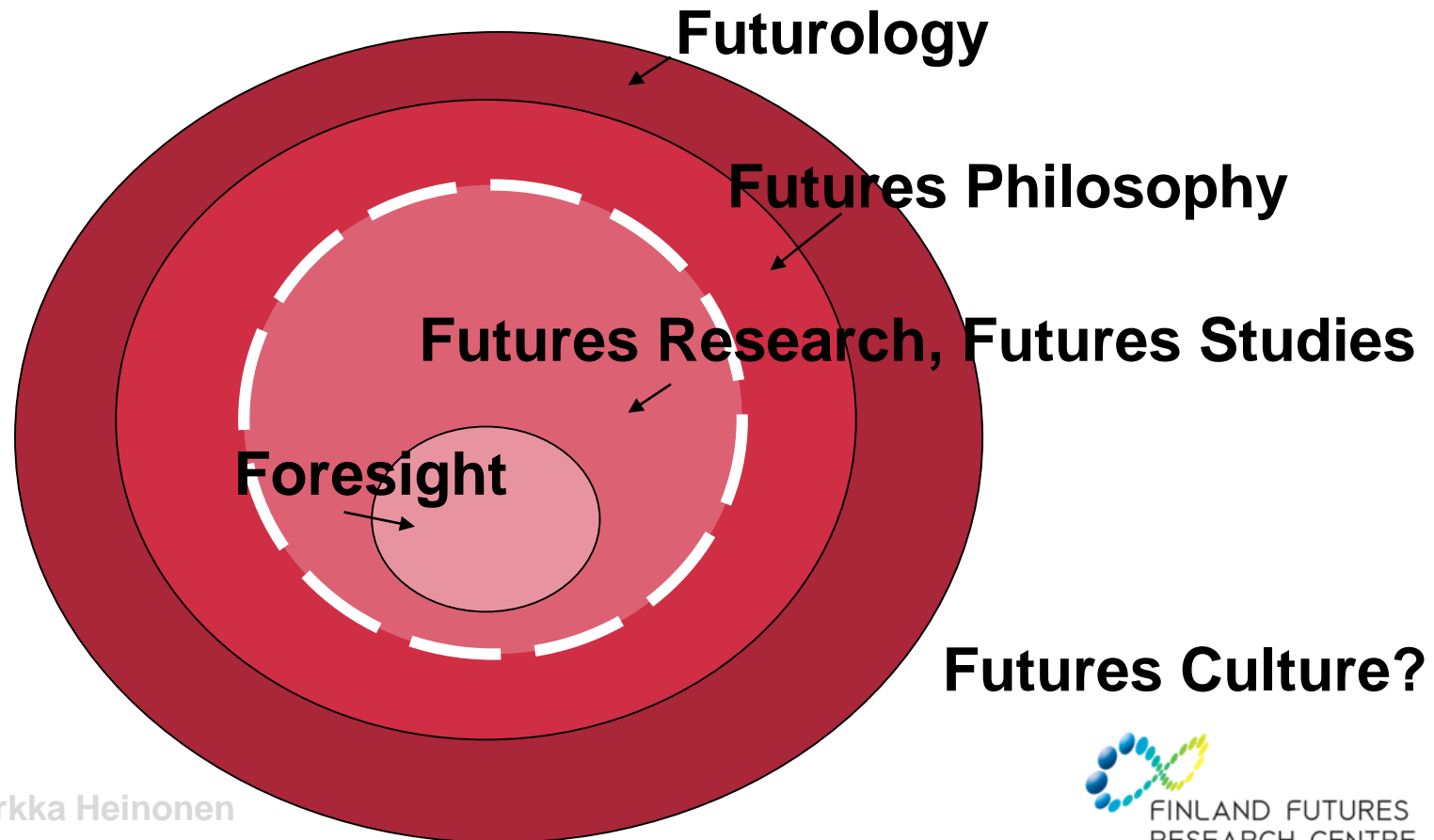


A vibrant rainbow arches across a clear blue sky, its colors transitioning from red on the left to violet on the right. Below the rainbow, a lush green field stretches across the foreground, with a line of trees and bushes in the middle ground. The trees are mostly green, with some yellowing foliage visible. The overall scene is bright and cheerful, suggesting a clear day after a rain shower.

2. Main Principles and Approaches

Futures Research Paradigm

Futures research means systematic, multidisciplinary, holistic, long-term, critical exploration of future development alternatives.



FORESIGHT

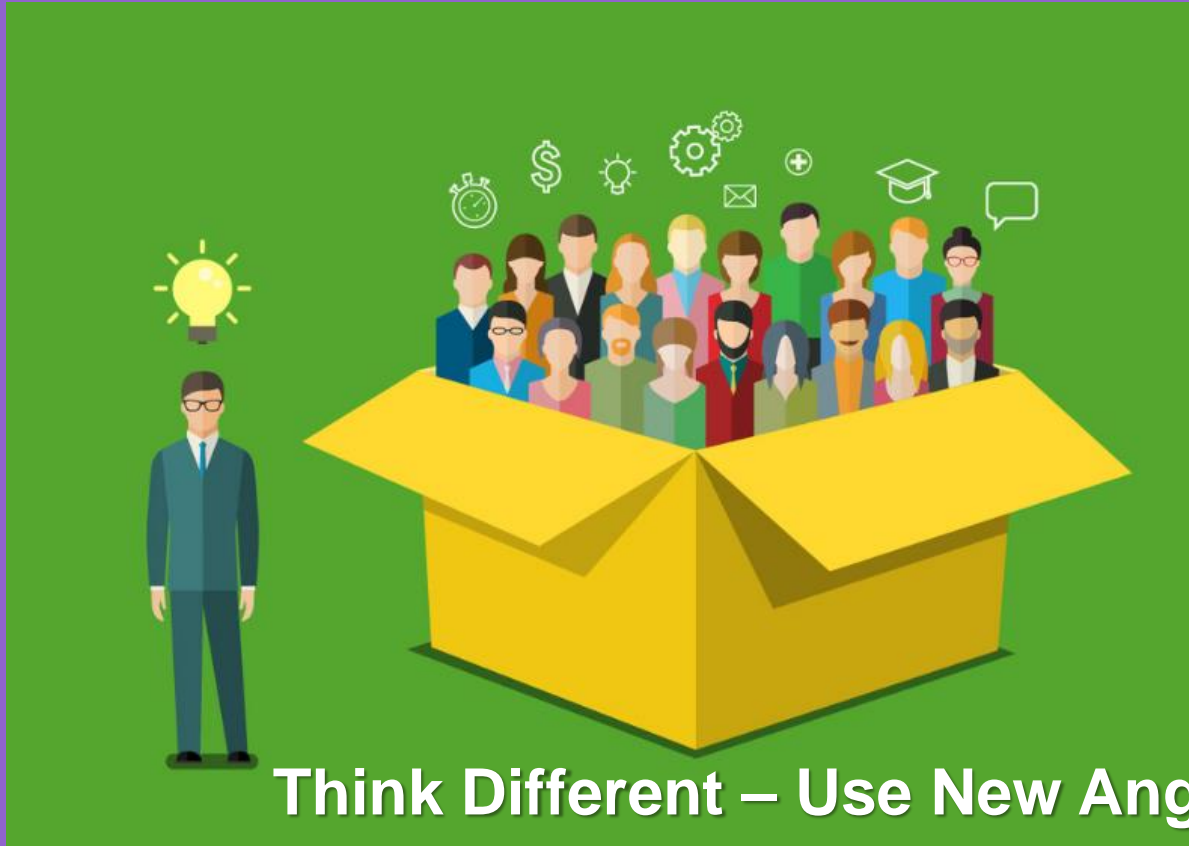
- Foresight is a pragmatic, problem-oriented futures studies approach as **structured debate about future-related topics.**
- Short & medium term horizon



Criteria for Applications of FUTURES STUDIES & FORESIGHT

- Within the larger framework of futures research
- Timeframe flexible (from shorter-term exercises to long-term foresight)
- Involving many stakeholders
- Participatory
- Multidisciplinary
- Open & questioning -> critical & alternative
- Often including roadmap working
- Action-orientated
- Part of innovation process and policy
- Learning process

Out-of-the Box Thinking



Think Different – Use New Angle! – Come out of the Box!

Dator's law “Any useful statement about the future should at first seem ridiculous”

Three Key Principles



- 1. Future cannot be predicted**
- 2. Future is not predetermined**
- 3. Future can be affected**

(Roy Amara 1981)



Three kinds of futures

- **Possible futures**

(What is theoretically possible to happen. Is something impossible? What?)

- **Probable futures**

(On what grounds? A continuation of the present conditions in the future? Is it probable?)

- **Preferred futures**

(In what kind of a world would you like to live in?)

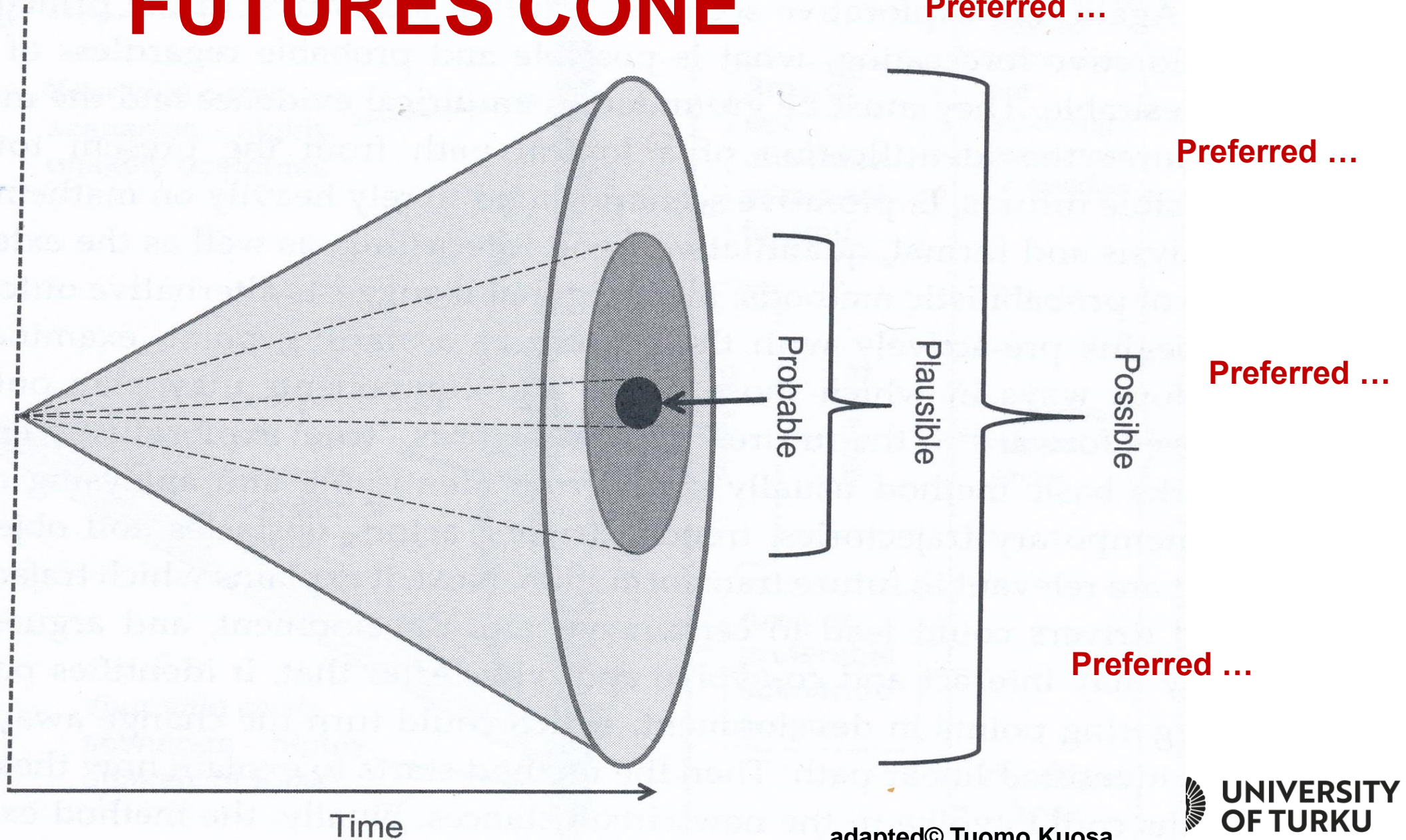
YOUR LIFE IN...

**WHAT IS YOUR PREFERRED SCENARIO
FOR FUTURE OF SUSTAINABLE
COMMUNITIES?**

- Talking homes
- Delivery robots
- Contact lens displays
- Airship holidays
- Driverless taxis
- ...AND MORE!

Now

FUTURES CONE



adapted© Tuomo Kuosa

Several approaches

Exploratory vs Normative

Exploratory: *What could we do in space?*

Normative: *Let's send a man onto the Moon and get him back!*

Other Categories of Approach

1. Descriptive
2. Scenario
3. Evolutionary (Mannermaa 1991)

1. Predictive/empirical
2. cultural/descriptive
3. Critical/poststructuralist (Inayatullah 1990)

1. Probabilistic (forecasting),
2. Possibilistic (scenarios),
3. Constructivist (design-based foresight) (Tuomi 2019)

3. Who Owns the Future? Futures Agency



Three mannequins are displayed in a modern, minimalist interior. The mannequin on the left is yellow and blue, the one in the middle is red, and the one on the right is silver. They are all in a similar pose, with hands near their chests. The background features a grey wall and a window on the right.

ACTORS

FUTURE IS NOW – FUTURE IS HERE – FUTURE IS OURS

**The future is always on
- therefore one should not use the time or
resources defending yesterday (Peter Drucker)**

What has already happened, will create the future

**Future cannot be predicted, but it can be
influenced – it is far too important to leave in the
hands of others or to fate**

Long Tradition of Futures Studies in Finland

- **Finnish Society for Futures Studies 1980**
- **Finland Futures Research Centre, University of Turku 1992**
- **Committee for the Future in Parliament 1993**
- **Prime Minister's Office, Foresight Team**
- **Helsinki Node of the Millennium Project 2001**
- **Finnish Association of the Club of Rome**

NATIONAL FORESIGHT PROCESS IN FINLAND



PARLIAMENT OF FINLAND

COMMITTEE FOR THE FUTURE



EXAMPLES OF RECENT FORESIGHT by the Committee for the Future



- **Radical technologies**

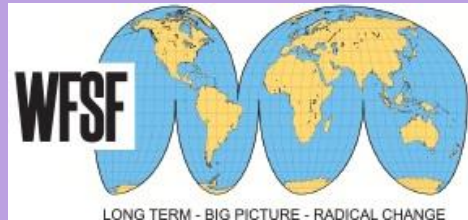
Societal transformation 2018–2037: 100 anticipated radical technologies, 20 regimes, case Finland (2019)

- **Education export**
- **Wellbeing 2030**
- **Generative (creative) spaces**

GLOBAL ASSOCIATIONS AND THINK-TANKS



- World Future Society (WFS) 1968



- World Futures Studies Federation (WFSF) 1973



- Club of Rome 1968 (CoR) - Limits to Growth 1972



- Millennium Project (MP) 1996
<http://www.millennium-project.org/>
Helsinki Node 2000 & Myanmar Node?



To Own the Futures you have to Create the Futures

- creation
- co-creation/participation
- empowerment
- emancipation

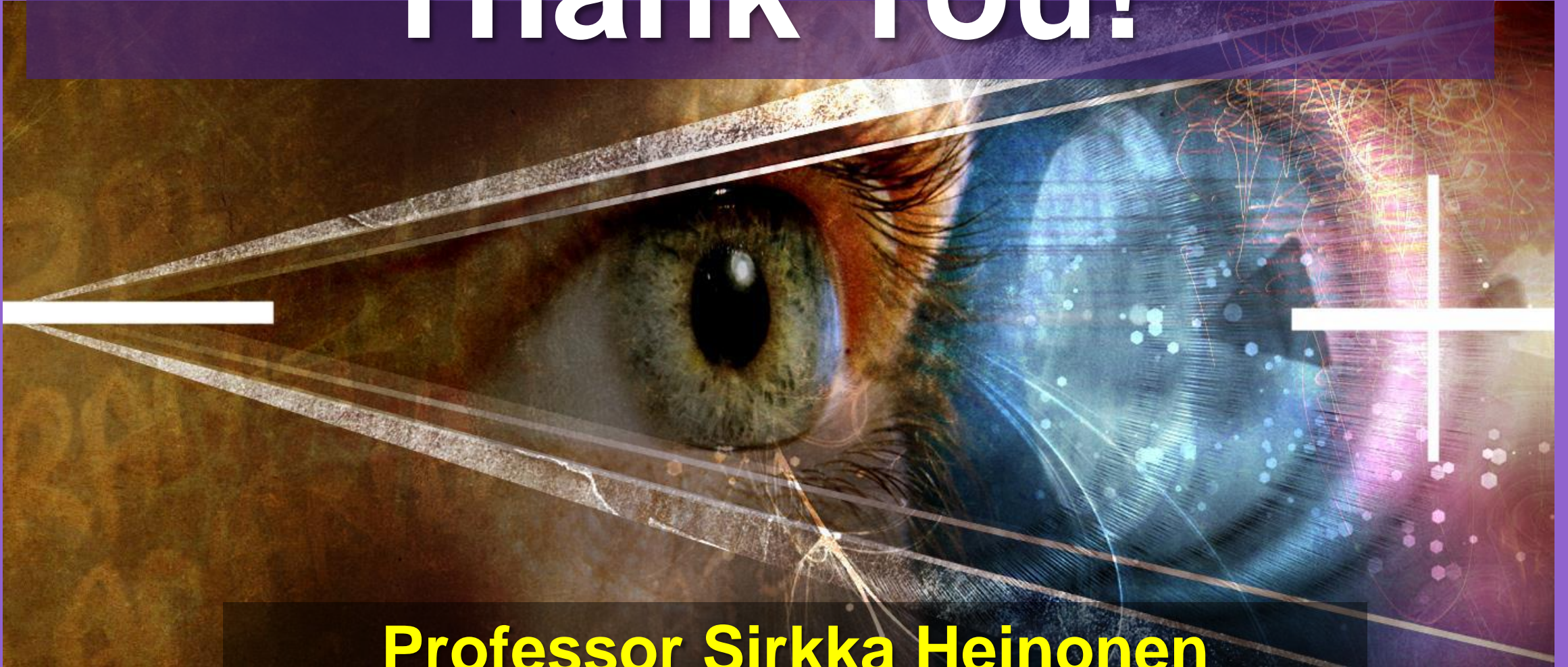
Robert Jungk
Johan Galtung

Actors → Pioneers



©SirkkaHeinonen

Thank You!



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How Do We Explore Our Futures?

Acta Futura Fennica 10

The Finnish Society for Futures Studies

Futures Studies =
Body

Methods =
Skeleton

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How To Explore Our Futures?

Information about the methods book

- **Editorial Board:** Prof. Sirkka Heinonen, Adj. Prof. Osmo Kuusi & MSc Hazel Salminen
- **Publisher:** The Finnish Society for Futures Studies (www.futuressociety.fi) **Series:** Acta Futura Fennica 10

HERE

INQUIRIES & ORDERS

- **Printed book: EUR 45 + postage** (discounted price EUR 40 for members of the FSFS)
E-book: EUR 25 (member price EUR 20)
- **For orders, visit our online shop:** <https://holvi.com/shop/Tutuseura/section/julkaisut-publications> **OR** contact directly Hazel Salminen at the Finnish Society for Futures Studies, Finland, at this email: toimisto@futurasociety.fi