### RESCUE WP5 Future policies, regulations and management practices and communication



- Prof Markku Wilenius, Dean of Dubai Futures Academy, Professor Emerita Sirkka Heinonen, Project Researchers Joni Karjalainen, Matti Minkkinen, Hazel Salminen and Amos Taylor
- Conceptual Analysis of Crises related phenomena (definitions and interconnections)
- Special Issue of FUTURA (4/2021) on Crisis awareness and Futures resilience UNIVERSITY (Guest editors Sirkka Heinonen & Saija Tovonen)

### (in science and in general) = means to an end



# Methodology is the means taken or procedure followed in achieving an end

### GOAL OF METHOD

In futures studies methods are used to obtain results that are useful and relevant for decision-making



**CONTEXT MATTERS** It is not irrelevant what method is being used

METAPHOR soup eating with a spoon or fork?



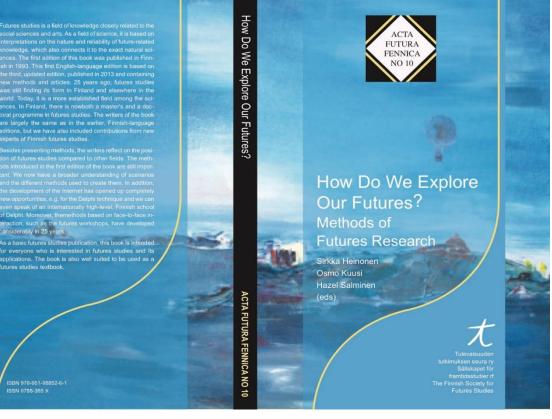
or





### **METHODOLOGIES IN TWO HANDBOOKS**

How Do We Explore Our Futures? Methods of Futures Research, Acta Futura Fennica 5, Finnish Society for Futures Studies (Heinonen et al 2017c)



Futures Research Methodology 3.0 by the Millennium Project (Glenn et al 2009)

### **Futures Research Methodology** The Millennium Project Version 3.0 Editors Jerome C. Glenn and Theodore J. Gordon With support from the Rockefeller Foundation 27. Using Vision in Futures 1. Introduction to Futures 14. Substitution Analysis Research Methodology 15. Statistical Modeling 28. Normative Forecasting 2. Environmental Scanning 16. Technology Sequence 29. S&T Road Mapping 3. Text Mining for Technology Analysis 30. Field Anomaly Relaxation Foresight 17. Morphological Analysis 31. Agent Modeling 4. The Delphi Method 18. Relevance Trees 32. Chaos and Non-Linear 5. Real-Time Delphi 19. Scenarios **Dynamics** 6. The Futures Wheel 20. A Toolbox for Scenario Planning 33. Multiple Perspective Concept 7. The Futures Polygon 21. Interactive Scenario 34. Heuristics Modeling 8. Trend Impact Analysi 22. Robust Decisionmakin 35. Causal Layered Analysis 9. Cross-Impact Analysis 23. Participatory Methods 36. Personal Futures 10. Wild Cards 24. Simulation and Game 37. State of the Future Index 11. Structural Analysis 25. Genius Forecasting, Intuition, 38. SOFI Software System 12. The Systems Perspective and Vision 39. Integration, Comparisons, 13. Decision Modeling 26. Prediction Markets and Frontiers of Futures **Research Methods** ISBN-978-0-9818941-1-9

+ FFA New Methods Book Project (in Finnish)

### **DIFFERENT TYPES OF METHODS**

**Different categorisations:** 

quantitative vs qualitative

mixed methods (=quant+qual)

(see Tapio et al 2011)

hybrid methods (any combinations)

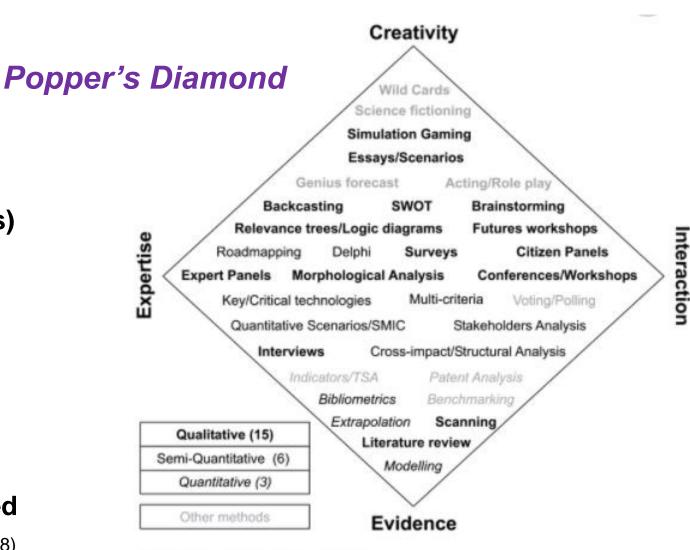
exploratory vs normative

long-term vs. short-term

participative vs. less participative

creative/intuitive vs evidence-based

..... (see e.g. Balcom Raleigh & Heinonen 2018)



Source: Adapted from Popper (2008)

### Questions for Discussion in the Advisory Board Meeting On Methodologies

1. What methods are best suited to anticipating (and/or analysing) risks & crises?

2. What methods are best suited to assessing impacts of risks & crises? (Are they the same or different?)

3. Are some methods particularly suited to anticipating certain types of future crises (e.g. environmental, technological...)

4. What weaknesses, limitations and development needs are there in currently used methods?



## **Thank You!**

### Sirkka Heinonen Finland Futures Research Centre (FFRC) University of Turku



https://www.utu.fi/en/university/turku-school-of-economics/finland-futures-research-centre/research/rescue

