Transforming the Future:
Anticipation in the 21st Century
(Theory and design principles for using the future or what it means to be futures literate)

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Futures Literacy
(conscious anticipation)
Is a capability that rests on an understanding of:

1. Discipline of Anticipation (DoA):
   knowing why you want to use the future determines what kind of future to imagine.

2. Knowledge Creation Processes (KCP):
   describing different kinds of imaginary futures requires different kinds of KCP – the how-to of anticipation.

Anticipatory assumptions consist of the why, what and how of imagining the future.

- **Paris**: The Future of Cultural Heritage Research, November 19-20, 2012
- **Baku**: Scoping Global Anticipatory Capacities, June 1, 2013
- **Paris**: Knowlab Design Test Session “Scoping the Know-Lab: Tomorrow’s Knowledge, Creation Microscope”, June 20-21, 2013
- **Baku**: The Future of Science, 11-12 July, 2013
- **Sao Paolo**: Changing the Way Universities Use the Future?, July 15, 2013
- **Chicago**: The Future of Futurists, July 19, 2013
- **Oslo**: Innovation as Learning, Knowing as Learning, Knowing as Science: Imagining a Universal Innovation Society in 2040, October 21-22, 2013
- **Bogota**: Using the future to think about local labor markets, November 25-26, 2013
- **Rio de Janeiro**: Imagining the Future of Science in Society, November 28-29, 2013
- **Paris**: Imagining the Future of the Transition from “Youth” to “Adult”, January 13-14, 2014
- **Freetown**: Youth & Rites of Passage in Sierra Leone, January 20-21, 2014
- **Munich**: Imagining the Future of Sports in Society, February 5-6, 2014
- **Paris**: Inhabiting Planet Earth 2100: Beyond Cities?, March 27-28, 2014
- **Calceta, Bahia de Caraquez, Monta**: A Series of Future Literacy Knowledge Lab in Ecuador, April 26-May 1, 2014
- **Yangon**: Addressing the future of education in Myanmar?, May 2-3, 2014
- **Laog City**: Resilient Cities, Brighter Futures - A Forum for Sustainable City Futures, May 26-28, 2014
- **Ottawa**: The Future of Innovation Ecosystems in the Public Sector, June 4-5, 2014
- **Tanzania**: Future-Proofing an Entire Nation, September 2013
- **Brasilia**: Joint International Foresight Academy, November 16-21, 2014
- **Paris**: L’Afrique de Demain ?, May 21, 2015
- **Rabat**: Imagining Africa’s Future, June 25-26, 2015
- **Bangkok**: Rethinking Education: the Future of Informal Learning, September 1-3, 2015
- **Ulaanbaatar**: The Future of Mongolia, September 20-October 2, 2015
- **Paris**, 9th UNESCO Youth Forum, October 26 – 28, 2015
- **Tunis**: Social Transformations, 3 – 4 March, 2016
- **Havana**: Using the Future to Embrace Complexity, July 13, 2016
- **Antipolo City**: Developing the Capacity of Filipino Youth Leaders to Use the Future, November, 13-16, 2016
What is the future? How is it used?

“Good heavens! For more than forty years I have been speaking prose without knowing it.”
Monsieur Jourdain in Le Bourgeois Gentilhomme (1670) by Moliere

How to discover how people use the future when they do not realise that they are using the future?
Cyclotron
University of California Lawrence Radiation Laboratory.
Berkeley, August, 1939

Making the invisible visible
Futures Literacy Laboratories
Using the FLF to map FL

• Theory:
  – Anticipatory Systems – kinds of future
  – Collective Intelligence Knowledge Creation

• Practice:
  – Action-research
  – Action-learning

Research objective: making the invisible visible… ‘proof-of-concept’ level evidence for the pertinence of the FLF

Value proposition: FLF helps to design FLL that generate ‘ontological expansion’ by cultivating FL.

In the late 17th Century Anton van Leeuwenhoek discovered bacteria. The microscopes he invented revealed invisible worlds. But it took another two centuries to make sense of this discovery.
Collective intelligence knowledge creation processes: microscope of the 21st century

Narrative Capacity

Collective Intelligence

Capacity to Reframe

What are we trying to help people to do?
Distinguishing search & choice, continuity & discontinuity

Discontinuity

Valorizing the past
Experiments and sense making that seek to understand the links between old systems and novel systems - complexity between (retrofit strategy)

Discovery/Creation
Experiments and sense making that seek to invent new logics for new systems – not-doing & improvisation – surf complexity (exogenous novel change)

Reform
Experiments and sense making that seek solutions to problems within existing systems – mastering complexity within (endogenous change)

Adaptation
Experiments and sense making that seek to understand the links between novel systems and old systems - complexity between (transition strategy)

Continuity
The value-added of Futures Literacy:
Walking on both legs

Science of generality
• Statistics, patterns

Experimentalism
• Inspiring & harvesting novelty

Managerialism
• Preparation & planning

Science of specificity
• 21st C microscope – collective intelligence, action research

“Our very understanding of the world changes the conditions of a changing world; and so do our wishes, our preferences, our motivations, our hopes, our dreams, our phantasies, our hypotheses, our theories. Even our erroneous theories change the world, …. All of this amounts to the fact that determinism is simply mistaken (emphasis in the original): all of its traditional arguments have withered away and indeterminism and free will have become part of the physical and biological sciences.”
Karl Popper, Two New Views of Causality, 1990, p. 17
Human agency and complexity: resilience & values in the present

Thank you
Riel Miller