Uncertain Times
Changing Principles

Kiyoshi Kurokawa, MD
Pugwash Conference
@Nagasaki
The Real Weapon of Mass Destruction
Alone Together
Globalization

Inter-dependent
Hyper-connected
Fragmented and Fragile
‘Black Swan Events’

2001.09.11
2008.08.15
2010.12.18
2011.03.11
Fukushima Daiichi

Exploded 1

Exploded 2

Exploded 3

on Fire 4

Exploded 2

Exploded 3

Exploded 1
The accident exposed in a flash - quite literally - the worst traits of ‘old Japan’, with its elitist and secretive bureaucratic culture.

David Pilling,
Bending Adversity; Japan and the Art of Survival, Chapter 14
Independent Investigation Commission of Fukushima Nuclear Accident by the National Diet

<NAIIC.go.jp>
NAIIIC Core Message

‘Regulatory Capture’
‘Mind-set’ of ‘Japanese’
Groupthink
Transparency/Openness
Accountability
Obligation to Dissent
Lessons Learned from NAIIC

Apparent Causes:
- Insufficient Defense-in-Depth
- Lack of Systematic Knowledge Management/Transfer
- Lack of Safety Consciousness
- Regulatory and Academic Capture

Root Causes:
- Lack of Learning/Questioning Attitudes
- Poorly-Developed ‘Safety Culture’
- Complacency, ‘Mindset’
- Closed Mono-Cultured Community
  - ‘Groupthink’
Google me

www.Kiyoshikurokwa.com
Japan: Order by the structure

Most others; Order by the function

Less inequality
Convoy system

Upper limit
chances

Lower limit
risks

More inequality
Risk-taking and Competition
Rebuilding Trust  
〜 Transparency and Global Partnership 〜

1. Process of Governance of Nuclear Policy

- Independence
- Transparency

International  
Best Science Based

Public Engagement at Every Level

2. Partnership with the World
- International Standard of Regulation
- Partnership with World Regulatory Bodies
- Exchange, Training and Nurturing of World Professionals
Richard Samuels, 2013
US GAO, 2014
IAEA, 2014
US NAS, 2014
David Pilling, 2014