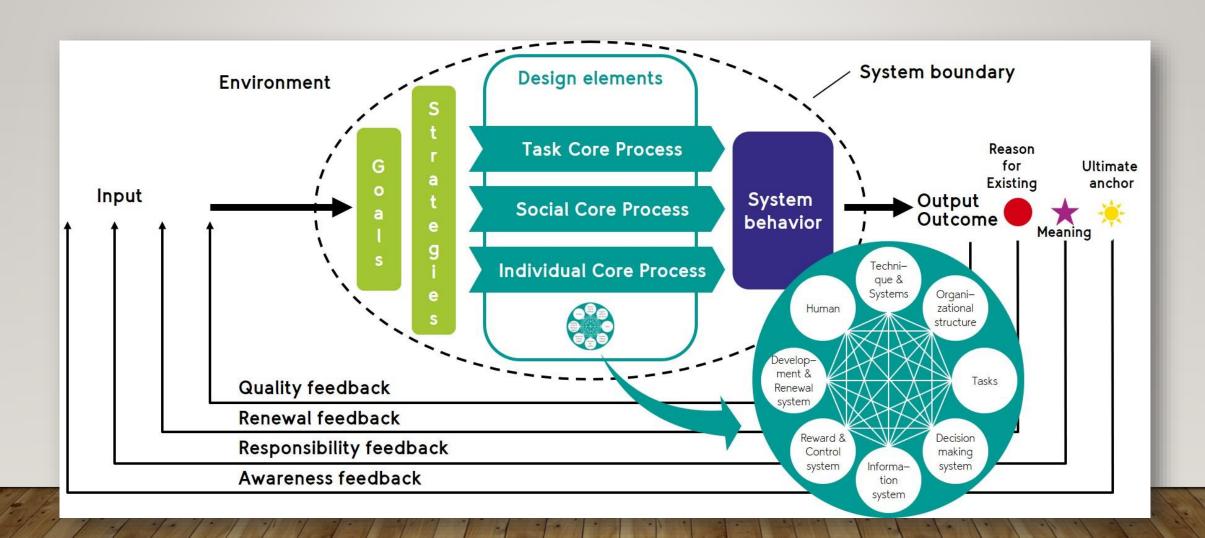
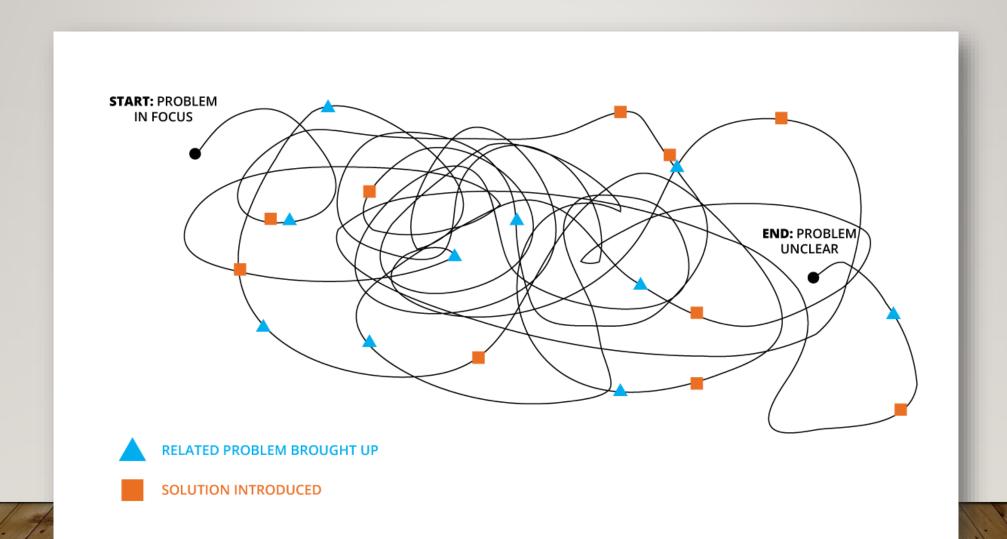


"FUTURE-PROOFING?"

Healthcare as a "System"



Tackling "Wicked Problems"



Futurists in a Pandemic

Financial Crisis

Global Pandemic

Extreme Weather Event

Rogue Al



Large Scale Multination War

Discover Aliens

ELE Asteroid Strike

Radical Climate Change

Futurists' Toolkit for Re-imagining Health Systems

Charting a Preferred Future for Healthcare in South Africa

Rafeeq Bosch

Research report presented in partial fulfilment of the requirements for the degree of Master of Philosophy – Futures Studies at the University of Stellenbosch

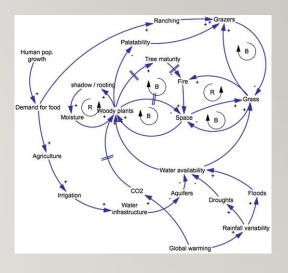
Supervisor: Prof A Roux

March 2011

Degree of confidentiality: A









The passing storm

The pandemic is managed due to effective responses from governments to contain the virus, but is not without lasting repercussions, which disproportionately affect SMBs and lower- and middle-income individuals and communities.

- Relatively constrained disease dynamic
- Effective health system and policy response



Lone wolves

Prolonged pandemic period, spurring governments to **adopt isolationist policies**, shorten supply chains, and increase surveillance.

- Severe, rolling pandemics
- Insufficient global coordination and weak policy response



Good company

Governments around the world struggle to handle the crisis alone, with large companies stepping up as a key part of the solution and an acceleration of trends toward "stakeholder capitalism."

- More prolonged pandemic
- Collaboration to control the pandemic led by large

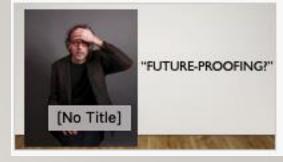


Sunrise in the east

China and other East Asian nations are more effective in managing the virus and take the reins as primary powers on the world stage.

- Severe pandemic
- Collaborative health response led by East Asian countries

- Plurality of the future
- Mutability of the future
- Aversion to "prediction" of the future
- Dystopian images of the future vs Utopian
- "Running away from" vs "Running towards"



- Curiosity about components and interactions
- Desire to model
- Then to explore alternative future states "scenarios"
- The optimization of the system may require active sub-optimization of the components



- Public health as a "system within a system"
- Analysis-based approaches to problem-solving vs synthesis-based/holistic approaches
- Tendency of the system to return to base state



- Pandemic as an instance of a large impact event
- Instructive benefit of gaming out society's response to such large impact events
- In retrospect the pandemic response reveals low level of foresight based response planning (more focus on recovery)
- Gaming exposes system vulnerabilities
- Gaming exposes over-optimizations or fragility that arises from excessive complexity



- Practical implication based on 2011 futures research
- Application of Futures techniques: Environmental Scanning, Systems Thinking, Causal Layered Analysis and Scenario Planning
- Prime the minds of system designers for true collaboration, even across competing positions in the system
- Precedent in the political history of South Africa



Q&A NOTES

- "How to kick off": integrated conversation with system actors, power or societal action (cf"disruption" in business)
- "Scenarios on Covid": Institute for Futures Research Dr Morne Mostert webinar circa April. Highlighted two driver dimensions, viz. covid virulence continuum and health system response continuum. Also CLA on Covid conducted in North America exposed some interesting core beliefs about pandemics in general. Opened the door to considering "non-traditional" and "non-technical" approaches to pandemic resilience i.e. designers should explore other medical traditions to inform a more context-compatible health system.