on FORESIGHT, with EXAMPLES

WELU 28 March 2017

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OUTLINE

by DH

- What Foresight is, and does
- Why Foresight is needed
- How Foresight can be useful
- Examples of three types: CPG, BA, CACOR
 by PM
- What Next? for the CACOR Climate Change Ex by EVERYONE
- Discussion

Please feel free to comment/question at any time



WHAT IS FORESIGHT?

is

- PROCESS
- an intellectual framework
- a discipline
- a capacity
- a skill

is not

- Prediction (only)

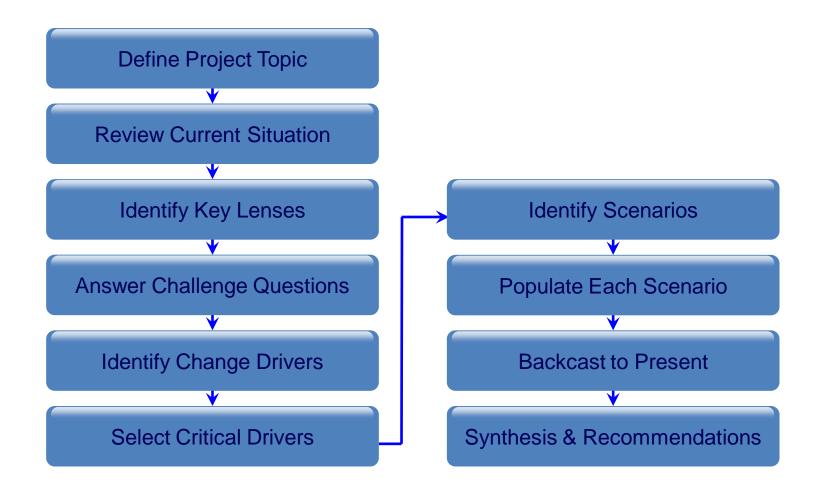
or

Forecasting (only)



A Foresight Process

...that an be scaled up or down in scope or detail





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FORESIGHT

INFORMS the identification of options going forward and timelines for attention: <u>It focuses vision</u>

PROMOTES better decisions *now* by relating current circumstances (circumstances/issues/needs) with plausible demands and opportunities to come: <u>It shapes strategy</u>

STIMULATES more open communication/collaboration among key strategic, operational and tactical players: It should precede strategic planning



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TOOLS OF FORESIGHT

- Environmental scanning
- Scenario design, construction, testing and interaction
- Delphi methods
- Cross-impact analysis
- Trend analysis
- Simulation
- Decision Modeling
- Visioning
- Futures workshops ("provocations")
- Casual layered Analysis (CLA)
- Back-view mirror analysis
- Futures biographies
- Monitoring
- Backcasting
- Relevance trees
- Morphological analysis
- Futures Wheel

- Patterning
- Mix-match-sift
- Roadmapping
- Gaming
- Genetic (and other) algorithms
- Agent modeling
- Structural analysis
- Field Anomaly Relaxation
- Technology Sequence Analysis
- Statistical Modeling
- Strategic Analysis and Diagnosis
- Text Mining
- Genius Forecasting
- Normative Forecasting
- Multiple Perspective Concept
- Systems Perspectives
- Mactor
- Multipol

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'SEEING'



Social

Technological

Economic

Environmental

Political

Legal

Ethical

Security



WHY FORESIGHT?

Personal experience; life-lessons learned Hindsight is not 20/20; a 'world 2.0' of 'historians

that defies TTTTWTANBTT

There are no experts on the Future;

- Predictions and Forecasts are not reliable

Context is King

- Context is Compressing
- Context demands a new Framework



Forecasts and Predictions

- Heavier than air flying machines are impossible Lord Kelvin, President Royal Society 1882
- The horse is here to stay, the automobile is a novelty Bank Manager to Henry Ford 1908
- There is no likelihood man can ever tap the power of the atom Robert Milliken,
 Nobel Prize in Physics 1923
- Who the hell wants to hear actors talk? Henry Warner, Film Producer 1927
- There is a world market for about five computers Thomas Watson IBM 1943
- We don't like their sound, and guitar music is on the way out President Decca Records, rejecting the Beatles 1962
- New labor saving devices will free us from the burdens of the workplace and give us more time to ponder philosophy, goof off, explore the arts, and hang around with friends and family. – 1000s of North Americans in the 1970s/80s/90s.



CONTEXT

Context is 'king'.

- It is what is.
- It determines what can be done, and not done, **now**.
- It is the CURRENT start point for what can be done, and not done, next and thereafter.

The Costs of

'WILLFUL BLINDNESS' or 'TUNNEL VISION' i.e., ignoring context is rising, quickly...



Context COMPRESSION

The 'future' (good and bad) is arriving faster and faster as the 'present',



The present includes more and more 'new' history from the 'past',



Our 'competence' is falling farther behind what is necessary now and will be sufficient next and thereafter



KNOWLEDGE

CONSEQUENCE of CONTEXT COMPRESSION

S.W.O.T to

T.O.W.S



No FORESIGHT?

or equivalent?

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'The' Vision,
and/or 'The' Strategy,
and/or Strategic Planning
are based on and derived from – at best, high-quality - forecasts or predictions that are extrapolations from the present.
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In other than the very short term, and even then infrequently, Vision, Strategy and Strategic Planning will be weak, at best, because the future is <u>never</u> only what we want or expect or are prepared for in time.



USEFUL FORESIGHT

'SEEING' BETTER

STRATEGY
CRITERIA AND CONTENT

DECISION-MAKING

OPTION IDENTIFICATION AND ANALYSES



'SEE' better "ALLWARDS"

Life is ALL about

Biases, Assumptions and Interests

and

how yours (unique) and those of others (unique)

mesh, mash-up, or conflict

in the real world

at a given time and place



On STRATEGY CRITERIA AND CONTENT FORESIGHT

- Is an <u>efficient</u> and <u>agile</u> approach to policy planning in an era of national and international challenges and when facing resource constraints;
- Supports interdepartmental networks in deploying <u>interoperable capabilities</u> appropriate for the task and the time;
- Mitigates the effects of under-exploited government abilities due, in part, to the inevitable challenges caused by <u>turf battles</u> and the electoral clock;
- Improves abilities to <u>deal with changes to the trends and drivers</u> of national interests and needs in times of globalization and as advances in technology outpace regulation and laws:
- Strengthens <u>shared understanding</u> of the implications of trends and drivers on multi-disciplinary, multi-dimensional and cross-cutting issues.



On OPTION-Development & DECISION-Making

FORESIGHT

- Reveals prospective new issues, challenges, threats, stakeholders, and shifts in alignments of influential players;
- Signals needs for new skills, knowledge and capabilities, and indicates which have become less useful or obsolete;
- Highlights new, weak signals that may become influential trends or drivers in the future, thereby reducing the frequency and severity of disruptive surprises;
- Exposes existing regulatory weaknesses, and indicates fields where failure to improve could have bad consequences;
- Strengthens priority-setting and adjustment in critical and complex sectors; i.e., R&D, investment, skill development, alliance management;
- Clarifies the limits of current policies, and emphasizes policy gaps that need urgent attention;
- Enhances broad-perspective intelligence/knowledge on emerging Threats and Opportunities, and on own and others' Weaknesses and Strengths.



Example 1

A *Normative International* Foresight Project on

Nuclear Disarmament (2015)

"WORLD WITHOUT NUCLEAR WEAPONS 2040"



WWNW 2040 ONE SCENARIO – SIX STORIES

#1 WWNW - Just Business*

The Global Nuclear Management Initiative (GNMI) handles nuclear goods and services, employment and information security.

#2 WWNW- Altruism redux*

Global realities amplified incentives for states to call for the elimination of and to get rid of their own nuclear weapons.

#3 WWNW - Controlled*

The Nuclear Control Force (NCF) of the global Security Industry Consortium (SIC) ensures there are no nuclear weapons.

#4 WWNW-Lite*

The WWNW is a fabric of NWFZs that blanket the planet.

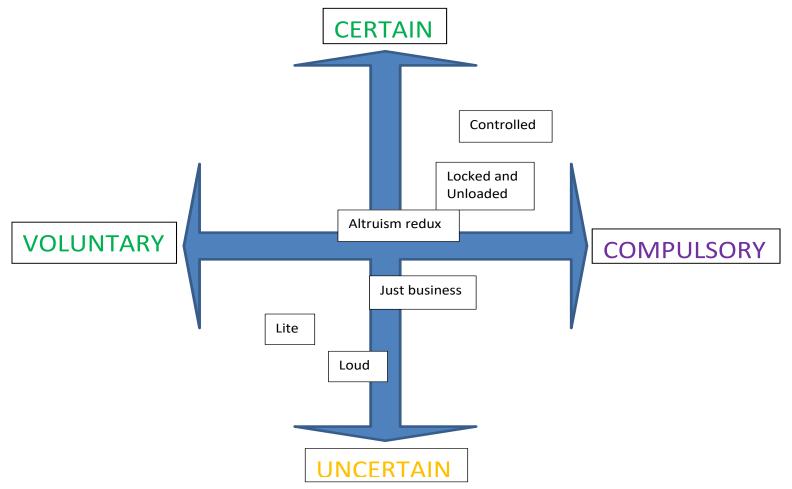
#5 - WWNW- Loud

Humanity is as one in opposition to nuclear weapons.

#6 WWNW- Locked and Unloaded

The World has no state-owned NW in readiness mode or stockpile-assembled, and, all NW parts and contents are strictly and effectively under certain lock and key.







Example 2

A British Foresight Project on a Past 'Failure' (2009)

Why was the 2008 Credit Crisis not Fore'seen'?

"Foresight deserves to be recognized for its potential ability to shine light on the *full* context of the selected theme, whether an issue, event, action or personality. This *full* context is an evolving and dynamic assembly of the interconnected factors from the past, in the present, which the future may offer or impose, and, not infrequently the most important, the influence of those contributing to the Foresight exercise in terms of the nature of their commitment to the process.



PRIVATE AND CONFIDENTIAL STRICTLY EMBARGOED UNTIL SUNDAY 26 JULY 2009 AT 00:01 HRS

Her Majesty The Queen Buckingham Palace London SW1A 1AA

10 Carlton House Terrace London SW1Y 5AH Telephone: +44 (0)20 7969

5200

Fax: +44 (0)20 7969 5300

22 July 2009



MADAM,

When Your Majesty visited the London School of Economics last November, you quite rightly **asked: why had nobody noticed that the credit crunch was on its way?** The British Academy convened a forum on 17 June 2009 to debate your question, with contributions from a range of **33** experts from business, the City, its regulators, academia, and government. This letter summarises the views of the participants and the factors that they cited in our discussion, and we hope that it offers an answer to your question.

Many people did foresee the crisis. However, the exact form that it would take and the timing of its onset and ferocity were foreseen by nobody. What matters in such circumstances is not just to predict the nature of the problem but also its timing. And there is also finding the will to act and being sure that authorities have as part of their powers the right instruments to bring to bear on the problem.

...... Given the forecasting failure at the heart of your enquiry, the British Academy is giving some thought to how your Crown servants in the Treasury, the Cabinet Office and the Department for Business, Innovation & Skills, as well as the Bank of England and the Financial Services Authority might develop a new, shared horizon-scanning capability so that you never need to ask your question again. The Academy will be hosting another seminar to examine the 'never again' question more widely.



Example 3

An 'empirical' Foresight Exercise (2016) on

CLIMATE CHANGE 2050

Goal

More informed, more useful and more widelyshared awareness of the context for and the nature of Climate Change today and going forward.



CLIMATE CHANGE

..is

- a force-multiplier of wicked problems
- a multi-dimensional 'W' M D *



 *D Destruction, Destabilization, Degradation, Disruption, Decay, Displacement

"We are the last generation that can do something about climate change." UN Secretary General Ban Ki-moon.

On Monday, 26 Jan 2015 the Calgary Zoo cancelled <u>its popular penguin walk</u> because it was too warm for the birds.

((http://calgaryherald.com/news/local-news/calgary-hit-with-nearly-years-worth-of-rain-in-july-environment-canada))



STEPS

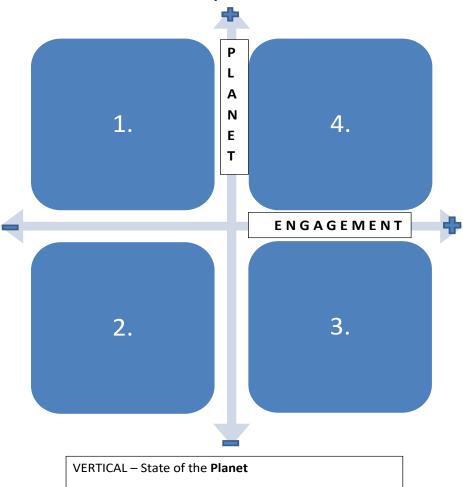
PLANNINGScanningScenario Development

Backcasting
Synthesis
What Next, CACOR?



PLANNING

SCENARIOS QUADRANT 2050



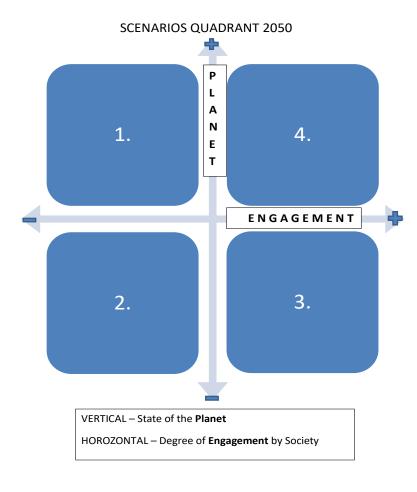
HOROZONTAL – Degree of **Engagement** by Society



SCENARIO DEVELOPMENT

Don't Worry, Be Happy... We've got your back!

The globe is in a mess, but most people really don't care, or are not in a position to care



Beyond Expectations: the Possible Dreams

Muddling Up



Backcasting, today



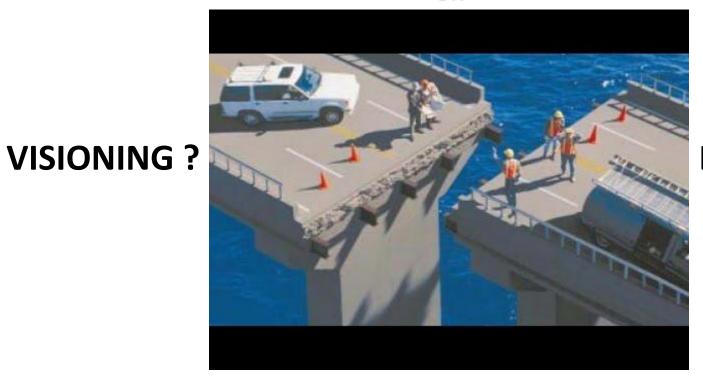


Now....

OVER to Peter Meincke

QUESTION

OR



BACKCASTING?



'PROGRESS'

The most realistic 'solution' is **progress**.

Constantly changing complexity,
in company with ML, the LUC and 'mu',
means a SOLUTION to any wicked problem is unlikely.
(no "End" of History, of War, of Poverty, of Inequality, or of Climate Change)

...even if we could get over our habit of trying to solve problems in ways and with means that existed when the problem arose (and, not infrequently, contributed to the problem's creation.)



Foresight Definitions

European Commission

FORESIGHT is a participative approach to creating *shared long-term visions to inform short-term decision-making* process: http://www.foresightnetwork.eu/index.php?option =com_content&task=view&id=13&Itemid=52

Richard Slaughter - New South Wales

"Strategic Foresight is the ability to create and maintain a high-quality, coherent and functional forward view, and to use the insights arising in useful organizational ways. For example to detect adverse conditions, guide policy, shape strategy and explore new markets products and services. It represents a fusion of futures methods with those of strategic management



Foresight Definitions

<u>World Futures Studies Federation (WFSF) – University of Houston – Clear Lake</u>

Foresight is an academic discipline that connects aspects of conventional PM, strategic planning and decision-making skill sets with what can not be found elsewhere.

Foresight Canada (FC)

(Strategic) Foresight is the integrated capacity to see, think through and do what needs to be done NOW in the light of history-altering implications of the weak signals of change, while there is still time to act pro-actively and creatively and before hidden opportunities are lost and unseen threats have become crises.



Facing the Future

"The only relevant discussions about the future are those where we succeed in shifting the question from whether something will happen to what would ((could)) we do if it did happen."



Arie de Geus, Principal in Royal Dutch Shell Group Planning Architect of Energy Futures Scenarios



FORESIGHT is in USE

- Energy & Environment Scenarios Royal Dutch Shell, Horizons Canada, Industry Canada, NRCan, British Petroleum, International Energy Agency, World Business Council on Sustainable Development
- Exploration of current and next generation Issues; i.e. technology: Finland, Germany, France, Ireland, Japan, South Korea, Australia, Singapore, Brazil, United Kingdom, EU, Azerbaijan, Austria*
- Complex Multi-Sectoral Policy Issues e.g. infectious diseases, coastal zones, convergent technologies, climate change (IPCC), nationalism, inequality, aboriginal well-being, citizen resilience, societal change (WAAS)*
- Security Threats and Futures US Naval Postgraduate School, US
 Department Homeland Security, US National Intelligence Council*,
 US National Reconnaissance Office, DRDC Public Safety Can Centre
 for Security Science, CFIA, PCO; ProteusCanada, Conference Board
 of Canada

