Faculty of Design, sLAB (Strategic Innovation Lab)

2013

Co-creating foresight culture in government

Van Alstyne, Greg

Co-Creating Foresight Culture in Government

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WorldFutures 2013
Chicago, IL, 21 July 2013

Lessons from Three Cases

How might we foster foresight culture in government?

Can co-creation, science fictioning and other innovative, design-centered foresight techniques find fertile ground within those shiny, marble halls?

Three projects:

1. Economic Futures for Ontario 2032 (not public)
2. SSHRC — Imagining Canada's Future (public)
3. What is Foresight? video
   Policy Horizons Canada (forthcoming/public)

What is meant by *co-creation* and *co-design*?

"Companies must learn to **co-create** value with their customers"
—**Prahalad & Ramaswamy (2002), The Co-Creation Connection**

"From designing *for* people to **designing *with* us**"
—**Thackara (2005), *In the Bubble***

"**Co-design** refers to the creativity of designers and people not trained in design, working together in the design development process"
—**Sanders & Stappers (2008), Co-creation and the New Landscapes of Design**

CoDesign: International Journal of CoCreation in Design & the Arts (Taylor & Francis)
Co.Design: business + innovation + design www.fastcodesign.com/ (Fast Company)

About me

Co-founder / Director of Research, sLab, OCAD U
Teacher, MDes in Strategic Foresight & Innovation
Designer, teacher, researcher, futurist
MS, Integrated Digital Media
Research in complex systems, 'design for emergence'
Generalist (not an expert in gov't, economics, etc)

OCAD U
Master of Design in Strategic Foresight and Innovation
(est. 2009)

We are enterprising agents who tackle complexity, see patterns, and lead in dynamic contexts
We develop human capacity to explore, challenge, find meaning, create sustainable, vibrant futures and design, responsibly.

Co-creating Foresight Culture in Government | WorldFutures 2013, Chicago

Greg Van Alstyne | OCAD University

Strategic Innovation Lab (sLab)
(est. 2008)

sLab at OCAD University is a growing community for applied foresight and innovation research.

Rooted in a heritage of **design thinking**, sLab's approach places human needs, desires, behaviour and culture at the heart of
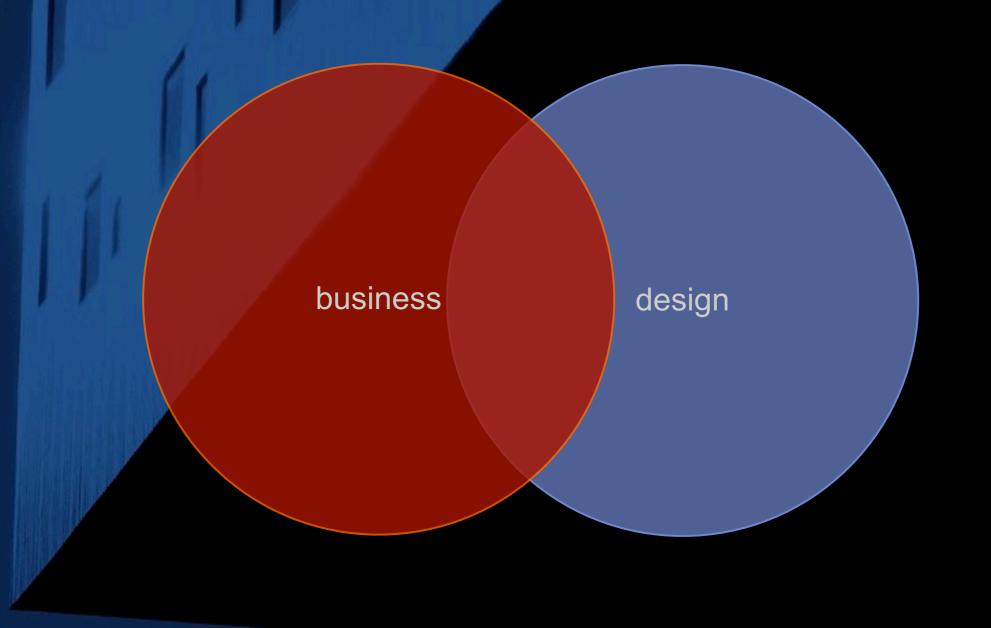
▸ problem **finding**   foresight
▸ problem **framing**   strategy
▸ problem **solving**   design

we are here

OCAD University, Toronto, Canada
Co-creating Foresight Culture in Government | WorldFutures 2013, Chicago

Greg Van Alstyne | **sLab** | OCAD University

OCAD U foresight and innovation model

business   design

OCAD U foresight and innovation model

futures

business

design

OCAD U foresight and innovation model

systems thinking
visual thinking

futures

business

design

Greg Van Alstyne | **sLab** | OCAD University
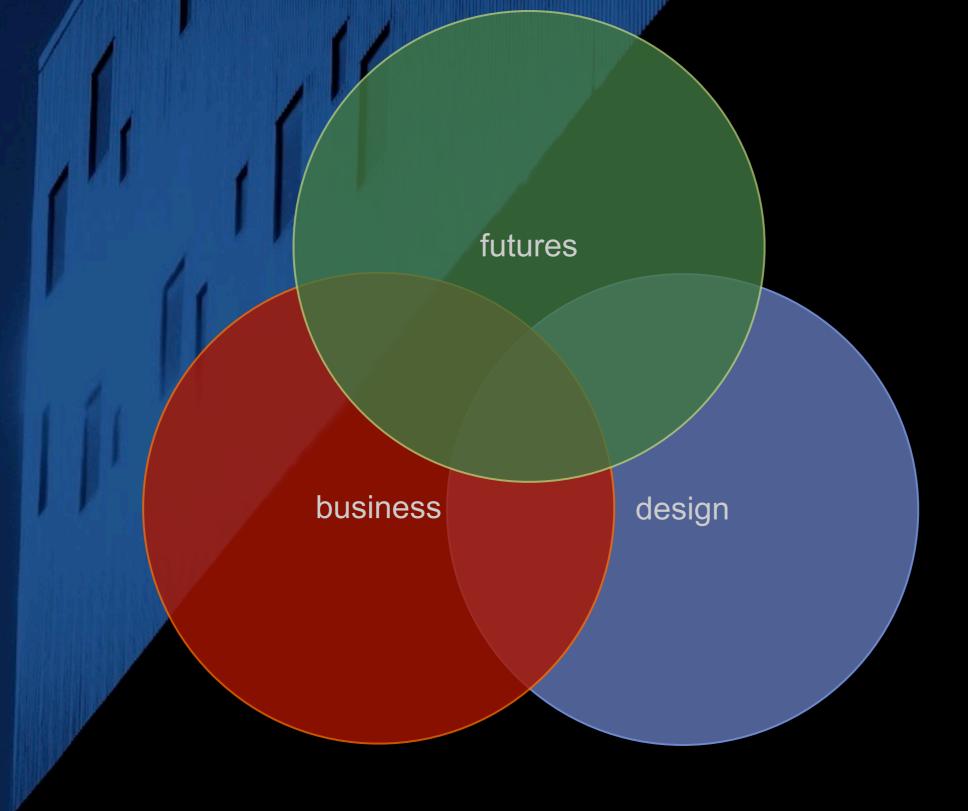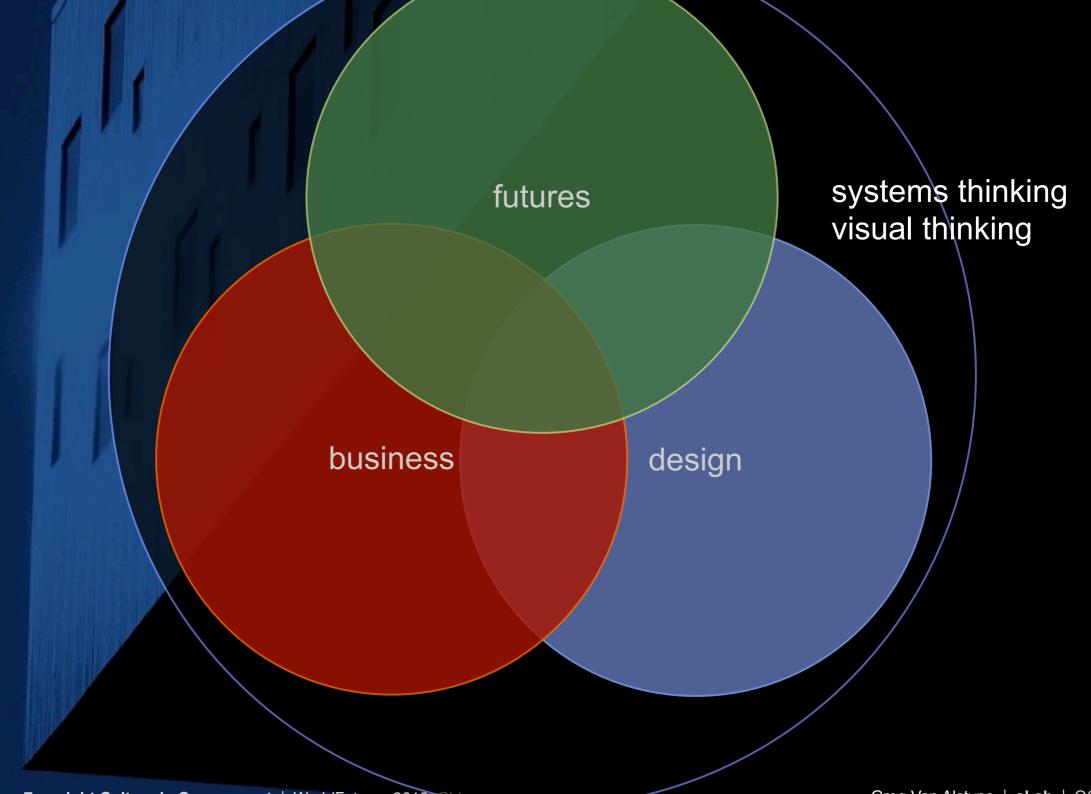
Selected sLab Projects

Economic Futures for Ontario 2032
Ontarian-Centred Foresight Project
for the Government of Ontario

SSHRC: Imagining Canada's Future, Expert Panel for Southern Ontario
Top ten future challenges for the
Social Sciences & Humanities

What is Foresight?
Educational video for
Policy Horizons Canada

Visualizing Emergence
Understanding innovation
through data visualization

2020 Media Futures
Strategic Foresight for Ontario's
Cultural Media Industries

United Way Centraid Canada (UWCC) Strategic Plan
Guiding Canada's largest
philanthropic organization

OCAD U Strategic Foresight
Scenarios and implications for
OCAD U Strategic Plan 2012–2017

Access for All
Inclusive Design online training
for Ontario's Public Employees

http://www.flickr.com/photos/santos/27538777/

Why foresight… in policy making?

"Research foresight is…the *only plausible response* to resolving conflicts over priority-setting…. Foresight provides…a systematic mechanism for coping with that complexity and interdependence as it affects long-term decisions on research, in particular facilitating policy-making where integration of activities across several fields is vital"

—Martin & Irvine (1989, 3) [emphasis mine]

photo: flickr.com/photos/emio_me/

International Precedents

International technology and Innovation foresight programs, 1990–2008	
UK	United Kingdom Foresight Program
France	FutuRIS; AGORA 2020; INRA2020
Germany	T21; Delphi series; Futur program
Finland	Finnsight; SITRA Foresight
Norway	VERDIKT
European Union	FOREN; COST; eFORESEE; NEM
USA	Metaverse Roadmap; 21st Century Challenges GAO
Japan	Delphi series, 1969–present
Brazil	Brazil 3 Moments; Prospectar; TFP Brazil
China	TF Toward 2020; TF of Priority Industries
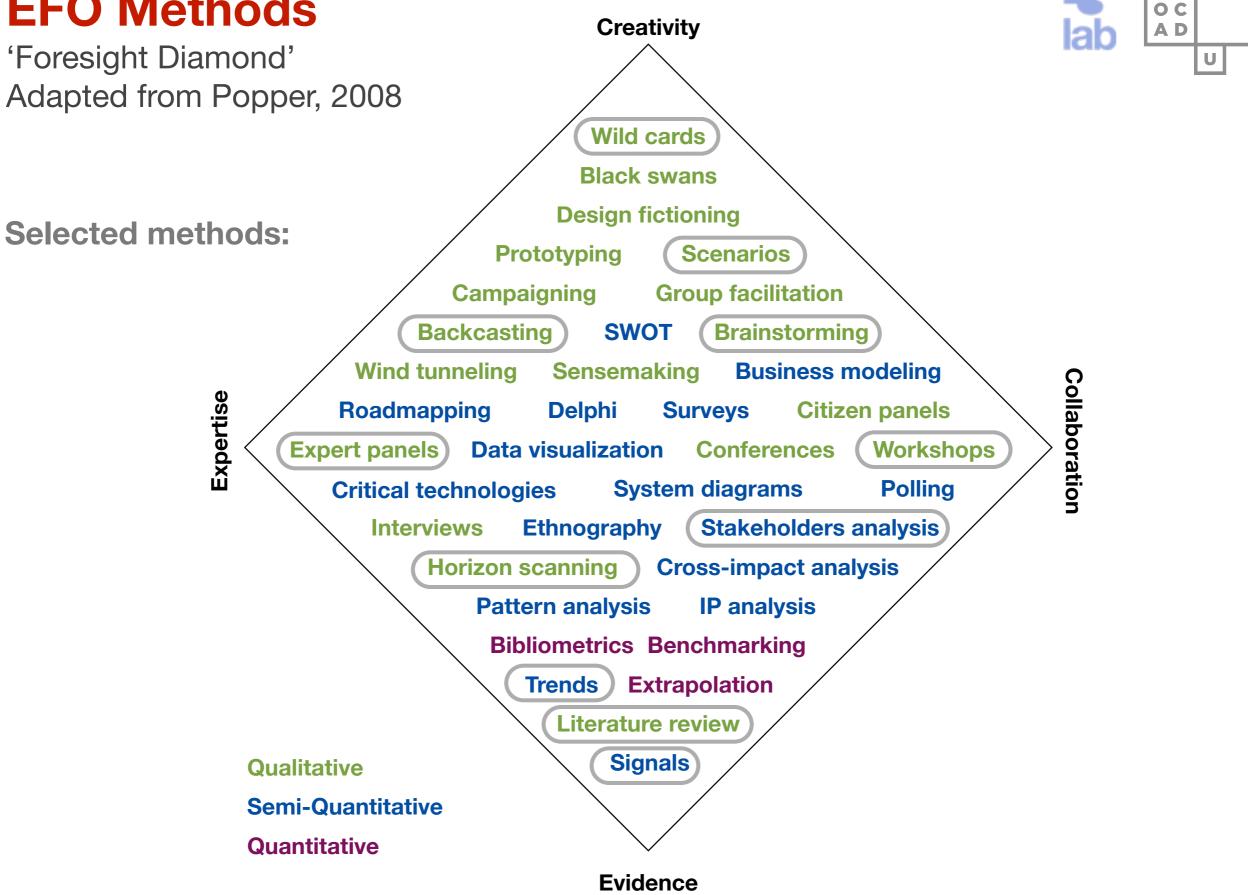
Adapted from: Miles et al. (2008) "The Many Faces of Foresight" in *The Handbook of Technology Foresight*, ed. L. Georghiou et al.

Possible Futures—Not Predictions

The Economic Futures for Ontario 2032 project (EFO) developed a set of plausible future stories—foresight scenarios—to reveal insights for decision-makers.

Insights and capacity gained from this process can be used to inform the development of longer-term strategies and policies today, and aid government's preparedness in conditions of rapid change. It is important to note that these scenarios describe *possible futures* driven by key *uncertainties*. They are not predictions of the future but they are highly useful in preparing for it.

EFO Methods

'Foresight Diamond'
Adapted from Popper, 2008

Selected methods:

Creativity

Wild cards

Black swans

Design fictioning

Prototyping · Scenarios

Campaigning · Group facilitation

Backcasting · SWOT · Brainstorming

Wind tunneling · Sensemaking · Business modeling

Roadmapping · Delphi · Surveys · Citizen panels

Expert panels · Data visualization · Conferences · Workshops

Critical technologies · System diagrams · Polling

Interviews · Ethnography · Stakeholders analysis

Horizon scanning · Cross-impact analysis

Pattern analysis · IP analysis

Bibliometrics · Benchmarking

Trends · Extrapolation

Literature review

Signals

Expertise

Collaboration

Evidence

Qualitative
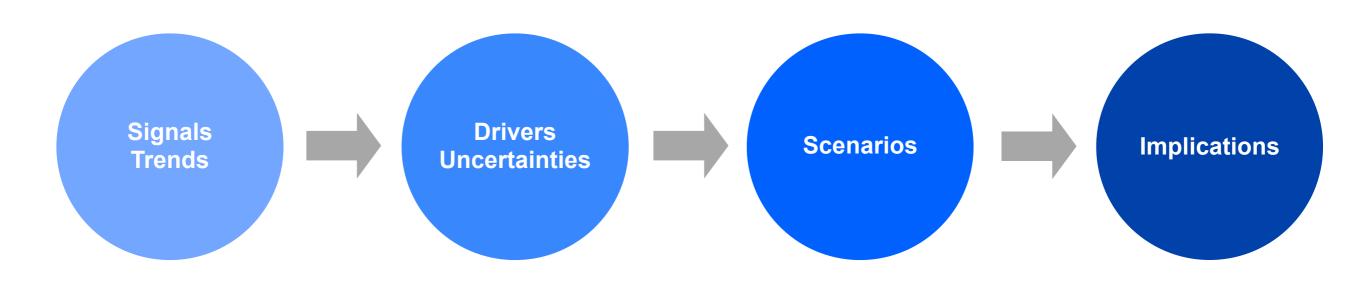
Semi-Quantitative

Quantitative

EFO Foresight Process

750 Signals: tangible evidence of change

30 Trends: patterns in signals

28 Drivers: structure behind the trends

3 Uncertainties: most critical and unpredictable drivers

4 Scenarios: possible futures driven by key uncertainties

Implications: how to think about and use the scenarios

Trends / STEEPV Scan

Society
Workforce Mash-up
Superhuman
Not-so-Private Lives
Webucation
Global Citizens

Technology
Energy Shift
Digitization of Everything
Combination Acceleration
Pervasive Surveillance
Material Innovation

Ecology
Toxic Meltdown
Cities Intensified
Everyday Extremes
Future of Farming
Precious Water

Economy
Marketable Renewables
Information Economies
BRICS + the Next 11 Markets
Fiscal Federalism
No Growth Economy

Politics
Power Redistribution
Politicization of Resources
Technology-assisted Government
Aboriginal Self-determination
Governance Beyond Government

Values
Everyone Together
Separate and Apart
Opting Out
Gamification
Distributional Inequality

Trends

Technology-Society-Economy

Superhuman

Trends

Political-Economy-Ecology

Precious Water

Economic Futures for Ontario Project – 10.31.2011

Trends

Ecology-Economy
Everyday Extremes

Politics-Economy
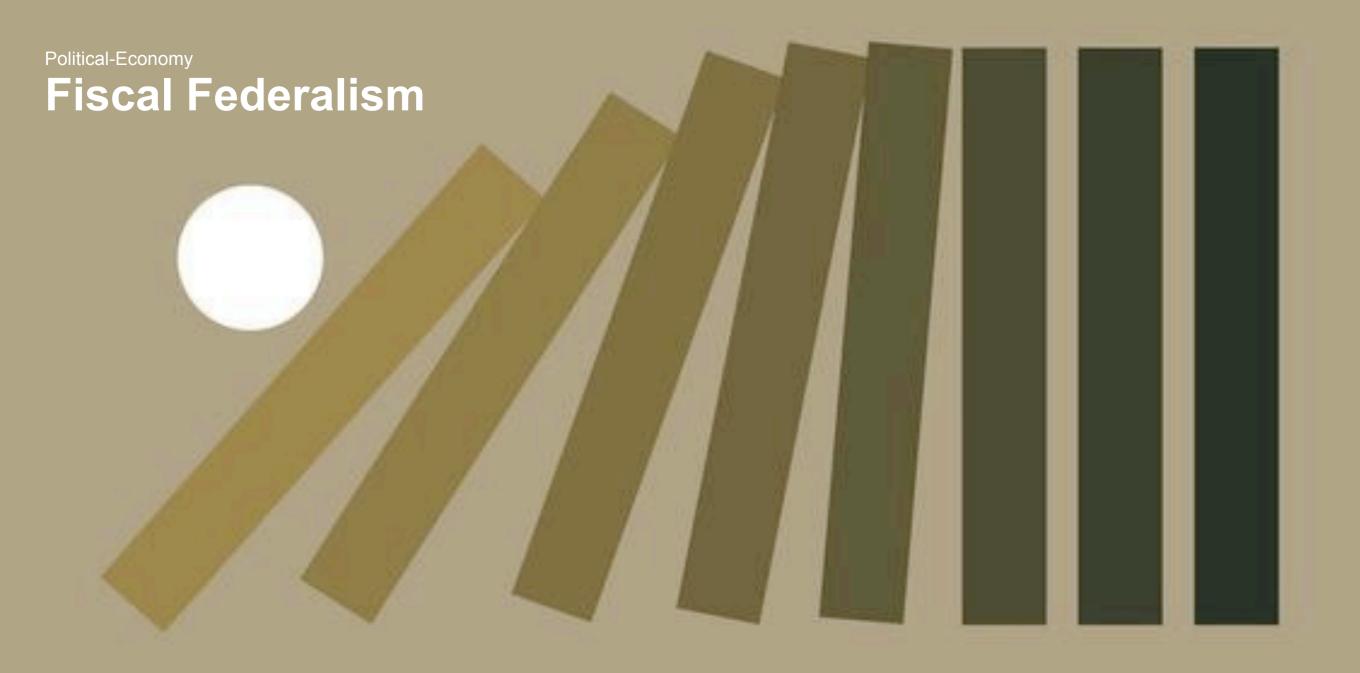
BRICS + The Next 11 Markets

http://www.coxandkings.co.uk/rae_tourdetails.aspx?regioncode=RESHA

Trends

Political-Economy
Fiscal Federalism
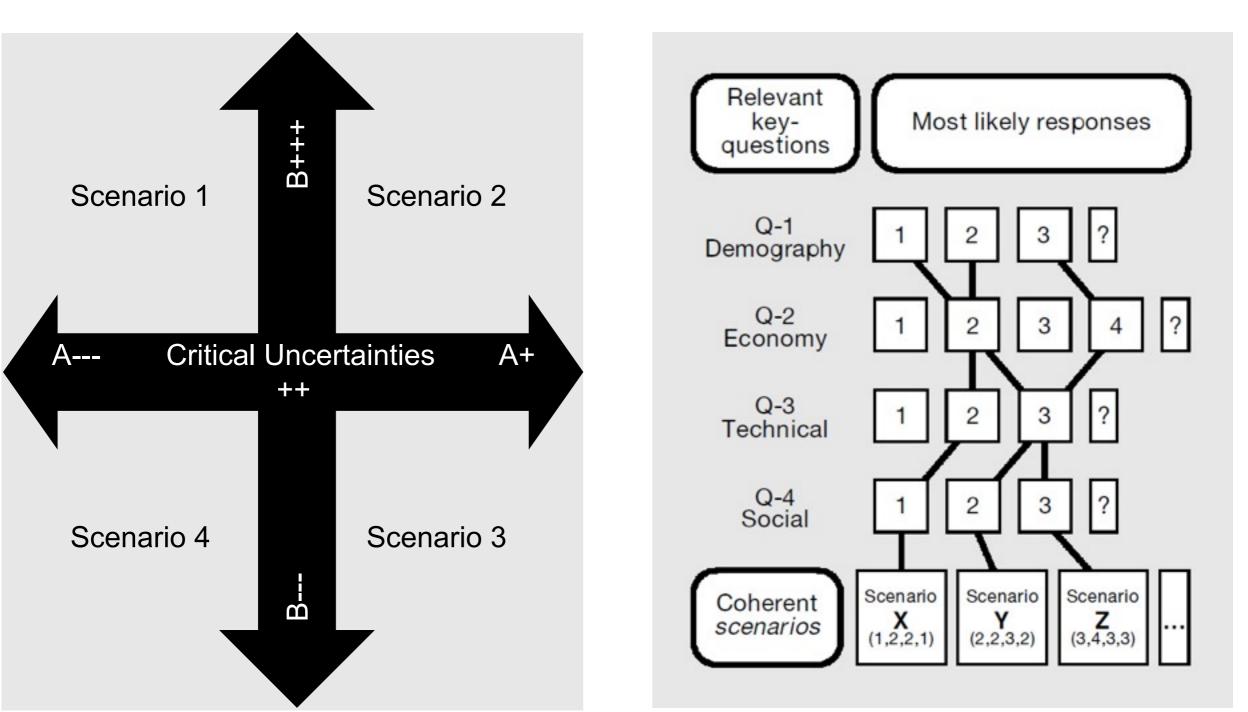
http://www.mymodernmet.com/profiles/blogs/genis-carreras-complex-philosophical-theories

Economic Futures for Ontario Project – 10.31.2011

How to Generate Scenarios?
2x2 Matrix vs Godet's Morphological Analysis

Godet M. The Art of Scenarios and Strategic Planning: Tools and Pitfalls. *Technological Forecasting and Social Change*. 2000 Sep;65(1):3-22.

What Differentiates Scenarios?

We selected a 2x2x2 matrix to generate scenarios

This method uses *critical uncertainties*—
drivers of change that are judged to possess:

- ‣ **Relevance** to the research question
- ‣ **Impact** through the time horizon (20 years)
- ‣ **Independence** from each other
- ‣ **Uncertainty**

Uncertainty: estimated degree of unpredictability or instability in anticipating direction or nature of effects

Three Critical Uncertainties

Climate change

Will predictability, pace, and human management of climate change be:

Progressive
Changing at a manageable pace

Volatile
Rapid, unpredictable, challenging change

Emerging and interconnected economies

Will jurisdictional trade relations and economic power balance be:

Friendly
Characterized by collaborative competition
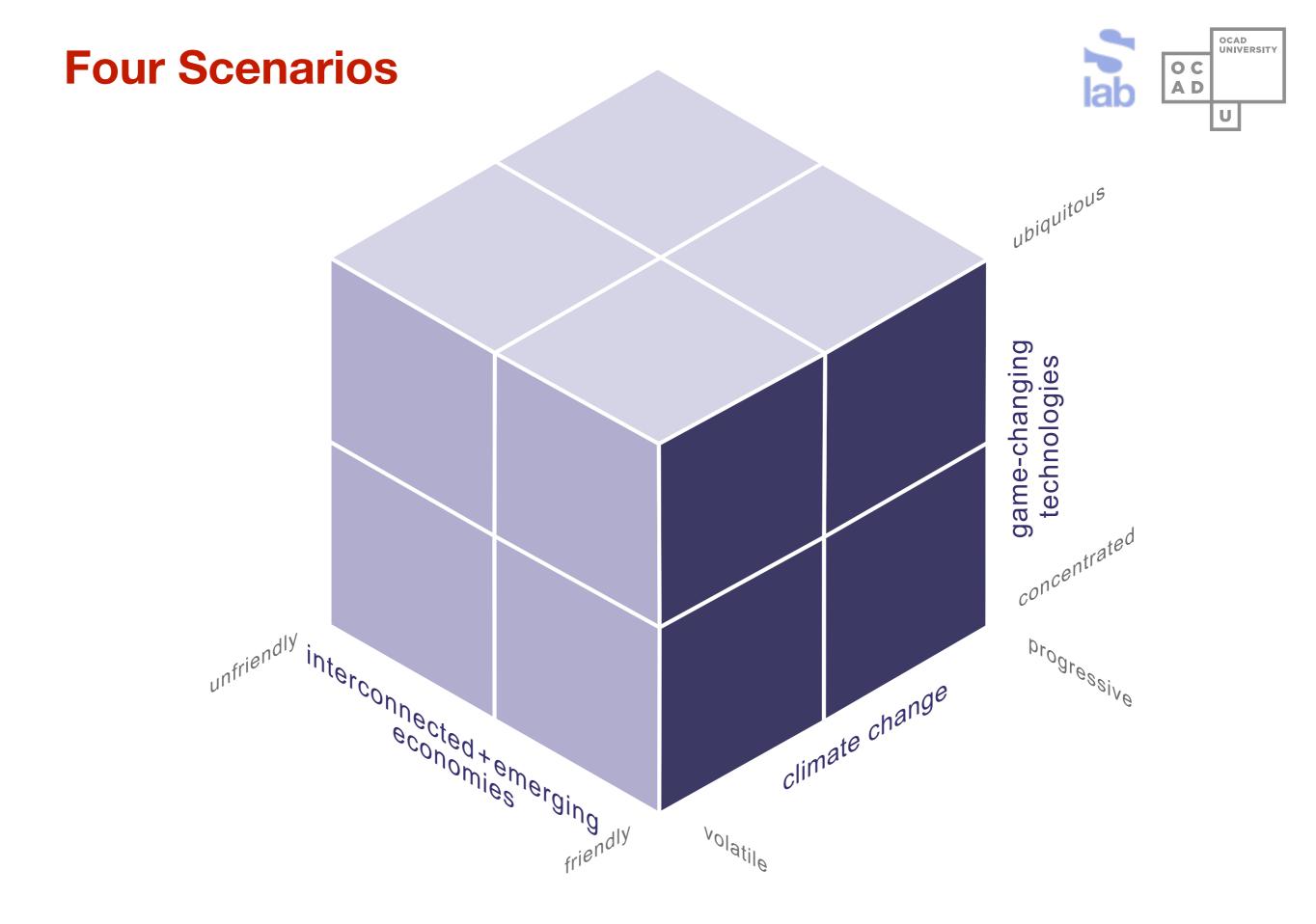
Unfriendly
Characterized by selective/exclusive trade relations
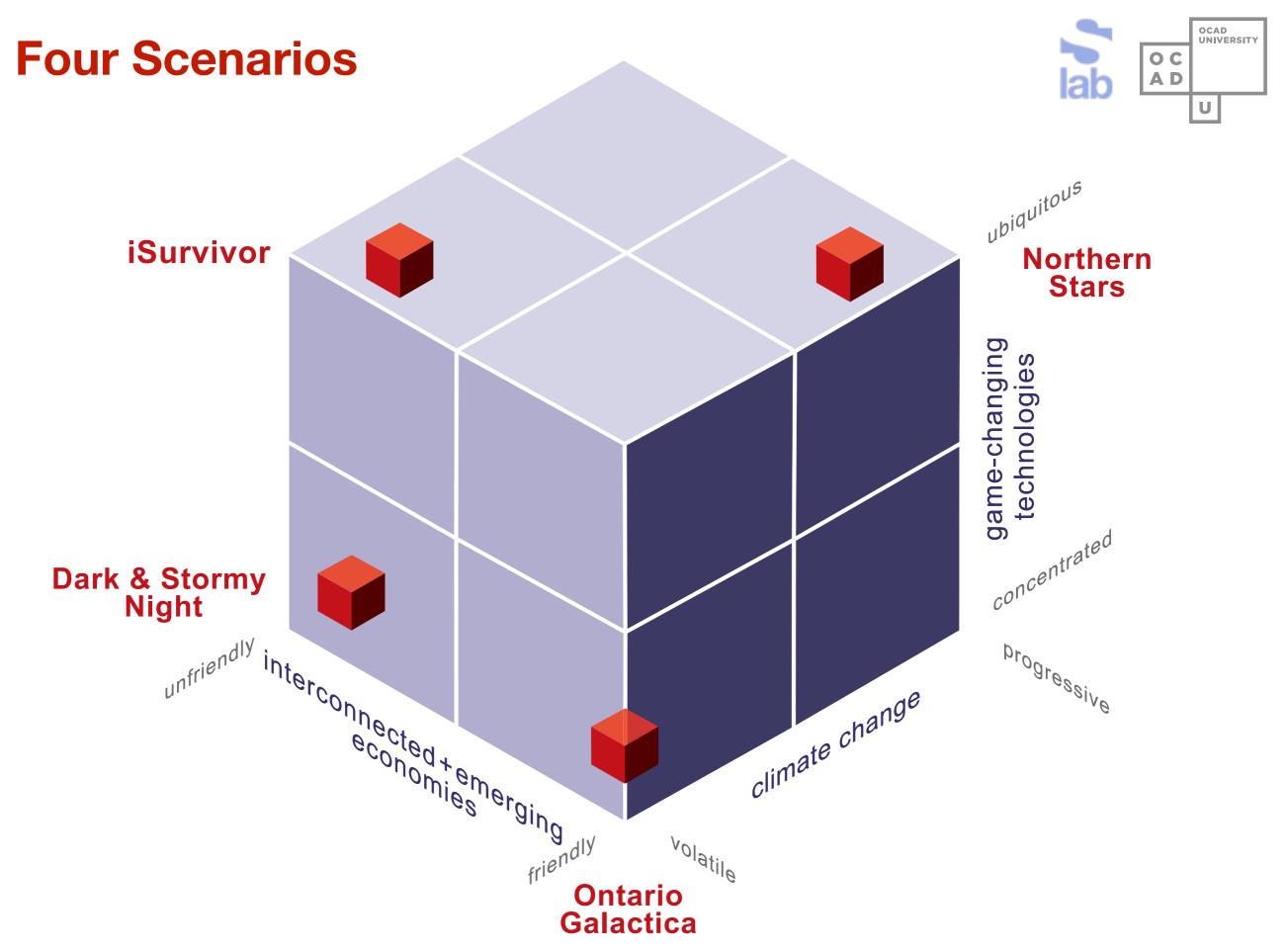
Game-changing technologies

Will diffusion, control and accessibility of key technologies be:

Ubiquitous
More widespread, accessible, or open

Concentrated
More constrained, controlled, or closed

Four Scenarios

Four Scenarios

iSurvivor

Northern Stars

ubiquitous

game-changing technologies

concentrated

Dark & Stormy Night

unfriendly

interconnected+emerging economies

progressive

climate change

friendly

volatile

Ontario Galactica
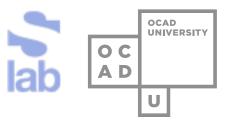
Scenarios Attributes

Interconnected Economies	Unfriendly	Unfriendly	Friendly	Friendly
Climate Change	Volatile	Volatile	Volatile	Progressive
Game-changing Technologies	Ubiquitous	Concentrated	Concentrated	Ubiquitous
Scenario Title	**iSurvivor**	**Dark and Stormy Night**	**Ontario Galactica**	**Northern Stars**

Developing Scenarios

To develop detailed foresight trends, drivers and scenarios for provocative yet plausible features, rich with 'turning points' and unexpected implications for policy, we convened:
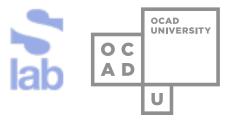
▸ Internal Working Group (IWG) trends workshop
▸ IWG drivers workshop
▸ IWG scenarios workshop (2 days)
▸ Senior Leaders workshop
▸ Leaders of Tomorrow workshop
▸ Implications workshop

Scenarios workshops

"Texturing" the Scenarios

Participants were asked to consider:

▸ What features can you imagine as part of this world?
▸ Other characters? activities? events?
▸ What surprising events might emerge?
▸ How might we hypercharge the ideas?

It's 2032! Imagine yourself living in this world

▸ What about this world makes you uncomfortable?
▸ What are you hopeful about?
▸ What would you do? What is work? What is fun?
  What is community?

Scenarios Illustrations

Centering on specific ideas, characters and events in each scenario, hyper-real illustrations were developed by OCADU Illustration graduate Ryan Lake, directed by sLab's Van Alstyne

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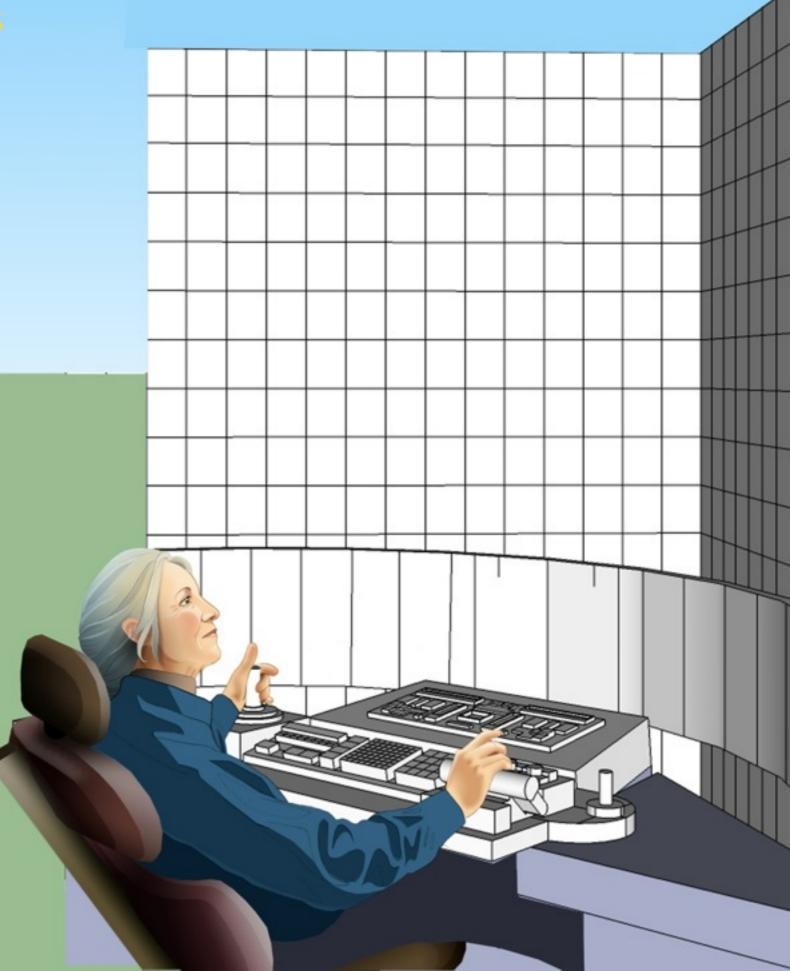
Scenarios Illustrations

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Scenario Teams

To cultivate foresight sensibility in government, teams were broad and diverse. One included people from:

sLab, OCAD University
Cabinet Office
Ministry of Agriculture, Food and Rural Affairs
Ministry of Aboriginal Affairs
Ministry of Correctional Services
Ministry of Economic Development and Innovation
Ministry of Health and Long-term Care
Ministry of Infrastructure
Ministry of Labour

iSurvivor

Climate Change	Volatile
Interconnected Economies	Unfriendly
Game-changing Technologies	Ubiquitous

Illustration: (cc) Ryan Lake

Dark & Stormy Night

Climate Change	Volatile
Interconnected Economies	Unfriendly
Game-changing Technologies	Concentrated

Illustration: (cc) Ryan Lake

Ontario Galactica

Climate Change	Volatile
Interconnected Economies	Friendly
Game-changing Technologies	Concentrated

Northern Stars

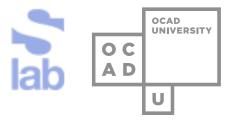|	
Climate Change	Progressive
Interconnected Economies	Friendly
Game-changing Technologies	Ubiquitous

Illustration: (cc) Ryan Lake
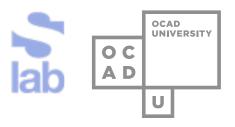
Why does co-creation work?
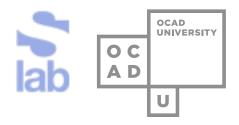
When participants bring something unique into being, they do so with attention, passion, care and creativity— less administration and management, more 'parenting'.

(cc) http://commons.wikimedia.org/wiki/File:Baby_on_Back.jpg
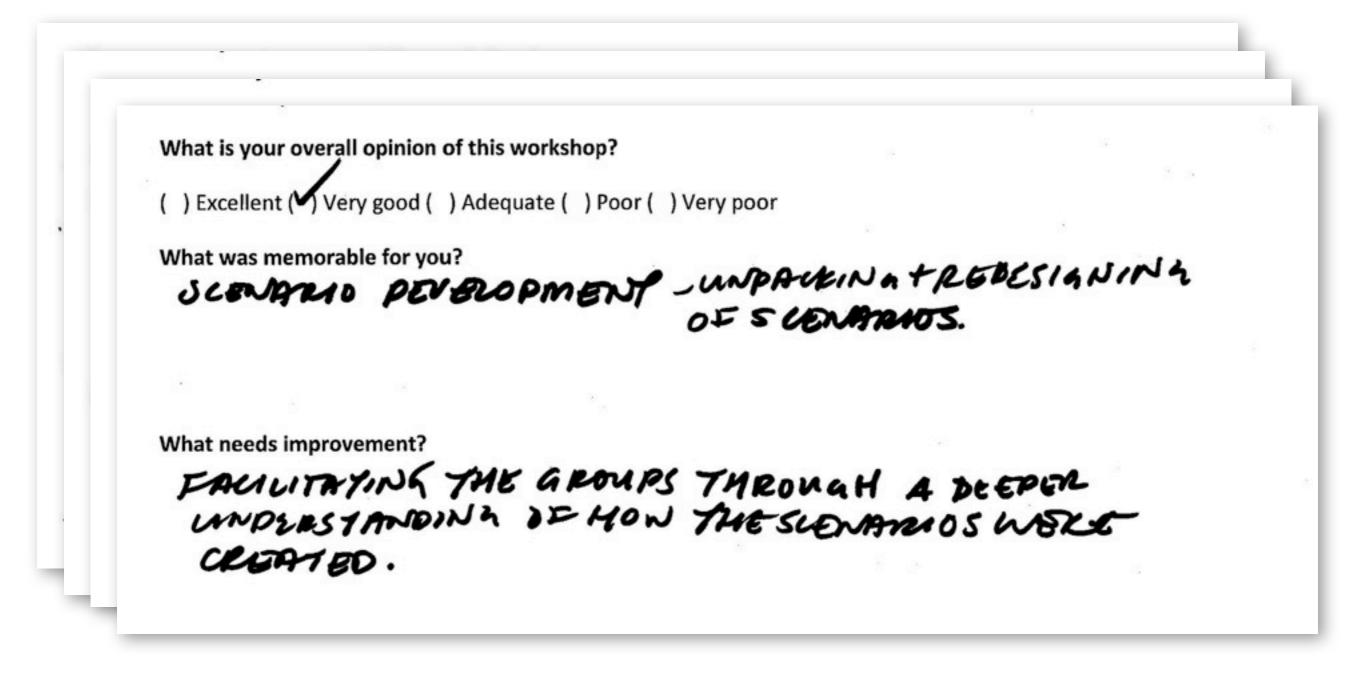
Feedback: Exit surveys

What is your overall opinion of this workshop?

( ) Excellent (X) Very good ( ) Adequate ( ) Poor ( ) Very poor

What was memorable for you?

· excellent background work in scenario-building — this meant we could step right in with edlee preparation

What needs improvement?

· some elements of the scenarios were simplistic — perhaps a necessity given the timelines?

– more private sector participation would be helpful. – I was the only 1 in 2 groups!

Feedback: Exit surveys

What is your overall opinion of this workshop?

(✓) Excellent ( ) Very good ( ) Adequate ( ) Poor ( ) Very poor

What was memorable for you?

What needs improvement?

This needs to be carried out among 20 year olds and 10 year olds to determine the different outlooks among age groups.

Feedback: Exit surveys

What is your overall opinion of this workshop?

(X) Excellent ( ) Very good ( ) Adequate ( ) Poor ( ) Very poor

What was memorable for you?

Hearing the depth of thought. Young people have experia[n]
d opinions — more than perhaps gov't allows a
gives credit for. I.e. final decisions/approvals

What needs improvement? are always made by senior (+ therefore
frequently older) decision makers

(— more lead time before the workshop! to plan
schedule

Feedback: Exit surveys

What is your overall opinion of this workshop?

( ) Excellent (✓) Very good ( ) Adequate ( ) Poor ( ) Very poor

What was memorable for you?
SCENARIO DEVELOPMENT — UNPACKING + REDESIGNING OF SCENARIOS.

What needs improvement?
FACILITATING THE GROUPS THROUGH A DEEPER UNDERSTANDING OF HOW THE SCENARIOS WERE CREATED.

SSHRC — Imagining Canada's Future

Canada's Social Sciences and Humanities Research Council (SSHRC), to foster "research preparedness," endorsed a project:

"to identify future challenges areas for Canada in an evolving global context that are likely to emerge in five, ten and twenty years and to which the social sciences and humanities research community could contribute its knowledge, talent and expertise."
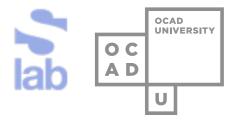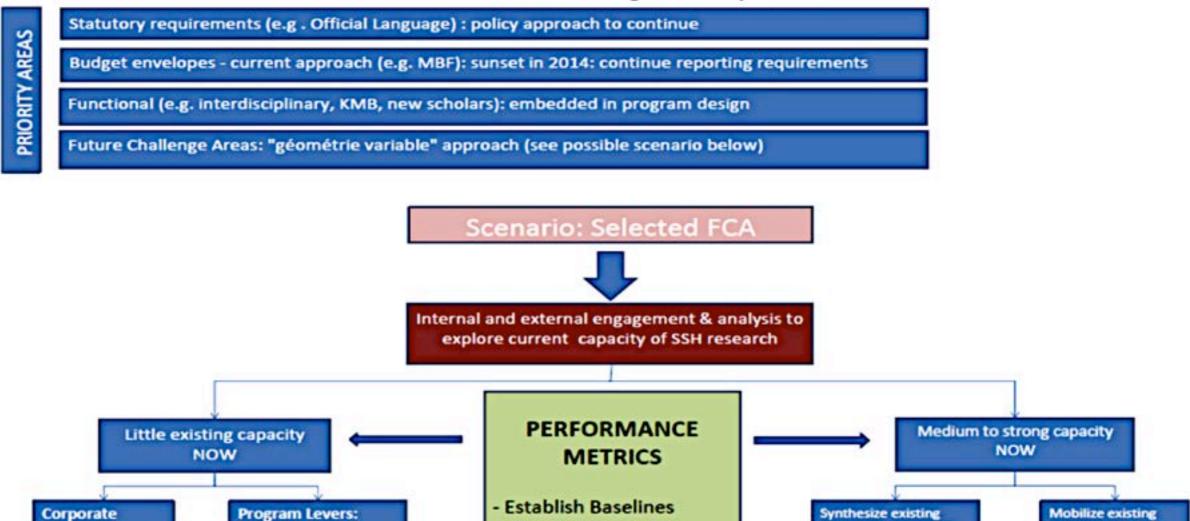
Process

Figure 1: Implementation Flow Chart
Future Challenge Areas - April 2013

PRIORITY AREAS

Statutory requirements (e.g . Official Language) : policy approach to continue

Budget envelopes - current approach (e.g. MBF): sunset in 2014: continue reporting requirements

Functional (e.g. interdisciplinary, KMB, new scholars): embedded in program design

Future Challenge Areas: "géométrie variable" approach (see possible scenario below)

Scenario: Selected FCA

Internal and external engagement & analysis to explore current capacity of SSH research

Little existing capacity NOW

Medium to strong capacity NOW

PERFORMANCE METRICS

- Establish Baselines

- Set Targets & Timelines

- Measure & Report

- Refine & Recalibrate

Corporate Activities:

Policy & communications activities by SSHRC

Program Levers:

- Flag in RFP
- Dedicated funding
- Peer outreach
- Committee structure
- Experimental Work (sandpits)

Synthesize existing knowledge to identify gaps & refocus subquestions

Refresh sub-questions on a regular basis

Mobilize existing knowledge particularly to non-academic audience

- through PA
- corporate activities

Consider investing resources (time/money) in students & new scholars

DEVELOPING TALENT + INSIGHT

CONNECTIONS:
Mobilize knowledge & realize potential of SSH research for benefit on & beyond campus

Competitive Proposal

sLab led a regional panel proposal for Southern Ontario in response to SSHRC's call.

University partners: OCAD, Windsor, York, Ryerson, UOIT

Spanning Windsor to Oshawa, a "Golden Horseshoe" region including large-scale automotive production

Method: Structured Dialogic Design (SDD)

▸ Designed to address complex social / civic concerns
▸ Multi-technique foresight methodology
▸ Highly facilitated, structured inquiry

Dialogic Design offers to participant stakeholders:

▸ Strong, democratic consensus
▸ Conservation of autonomy, authenticity, commitment
▸ Mitigation of group cognitive and power bias
▸ Diagrammatic clarity

for more on SDD see
Christakis and Bausch (2008) *Harnessing Collective Wisdom*
http://harnessingcollectivewisdom.com/
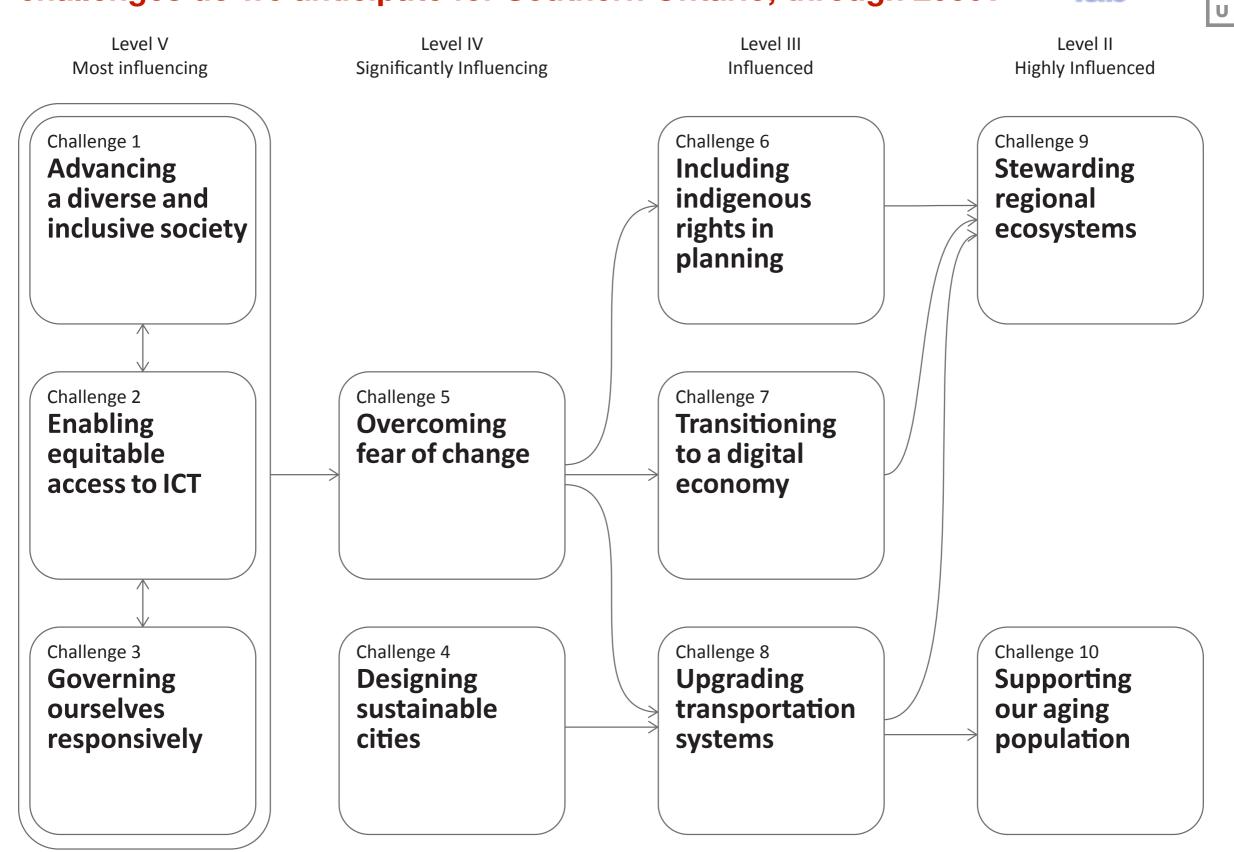
Method: Structured Dialogic Design (SDD)

"In the face of increasing urbanization worldwide, what future challenges do we anticipate for Southern Ontario, through 2030?"

Level V Most influencing	Level IV Significantly Influencing	Level III Influenced	Level II Highly Influenced

Challenge 1
Advancing a diverse and inclusive society

Challenge 2
Enabling equitable access to ICT

Challenge 3
Governing ourselves responsively

Challenge 5
Overcoming fear of change

Challenge 4
Designing sustainable cities

Challenge 6
Including indigenous rights in planning

Challenge 7
Transitioning to a digital economy

Challenge 8
Upgrading transportation systems

Challenge 9
Stewarding regional ecosystems

Challenge 10
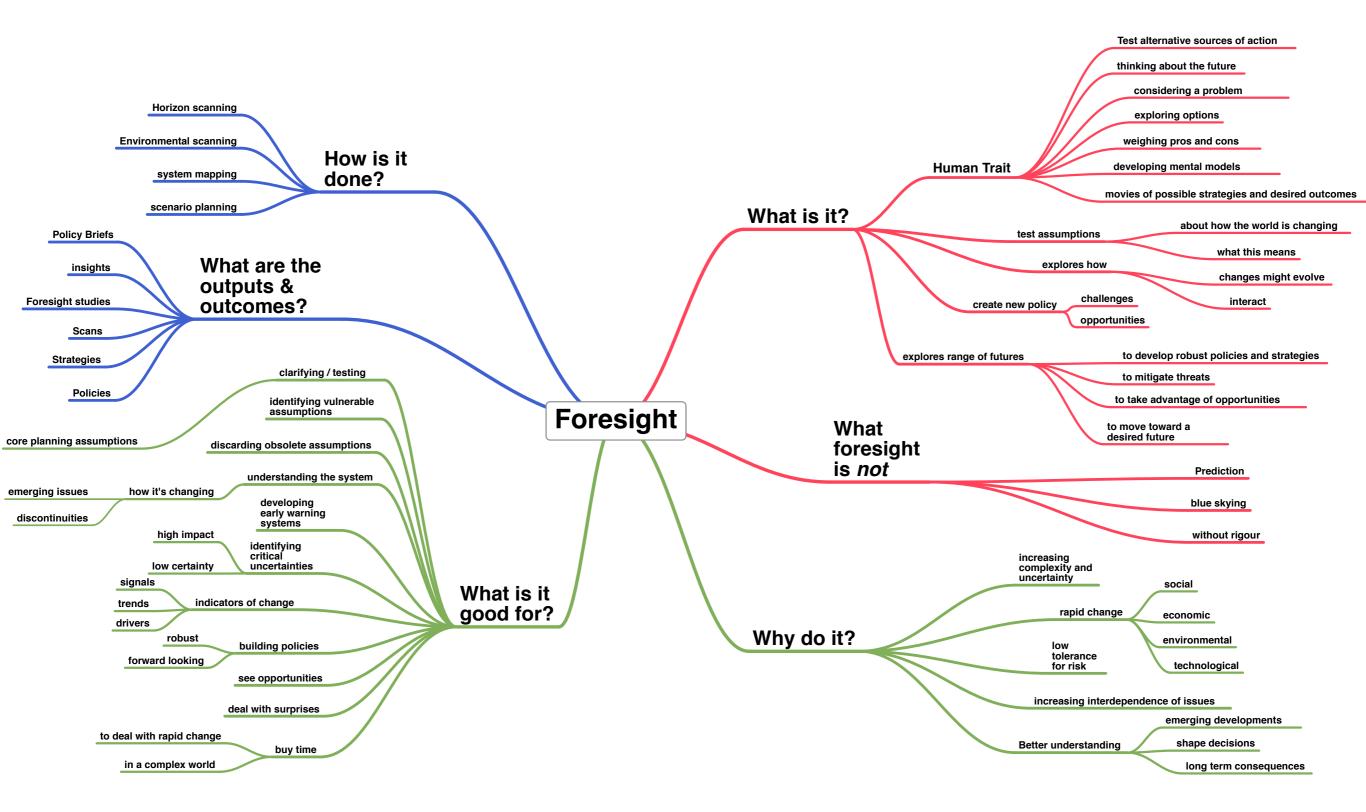**Supporting our aging population**

What is Foresight? Video

"**Policy Horizons Canada** has a mandate from its Deputy Minister Steering Committee (DMSC) to experiment with new ways of visualizing and communicating complex information.
We are looking for new and effective ways to visualize and communicate our findings to our DM Community and the larger policy community across the government.
This project engages an external professional...to build our capacity and to prepare a video on the meaning and benefits of foresight."
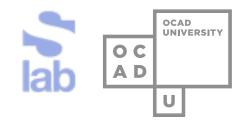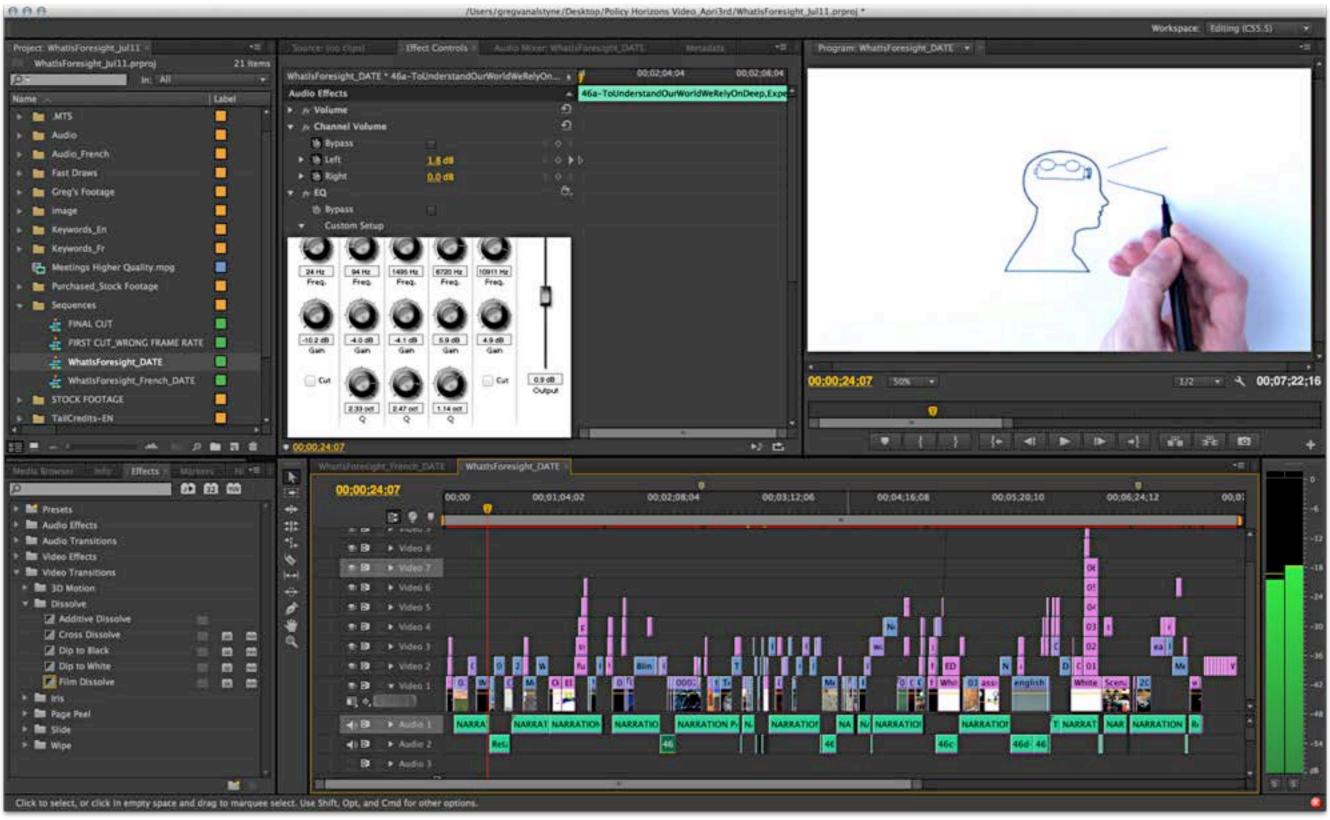**—Policy Horizons Statement of Work**
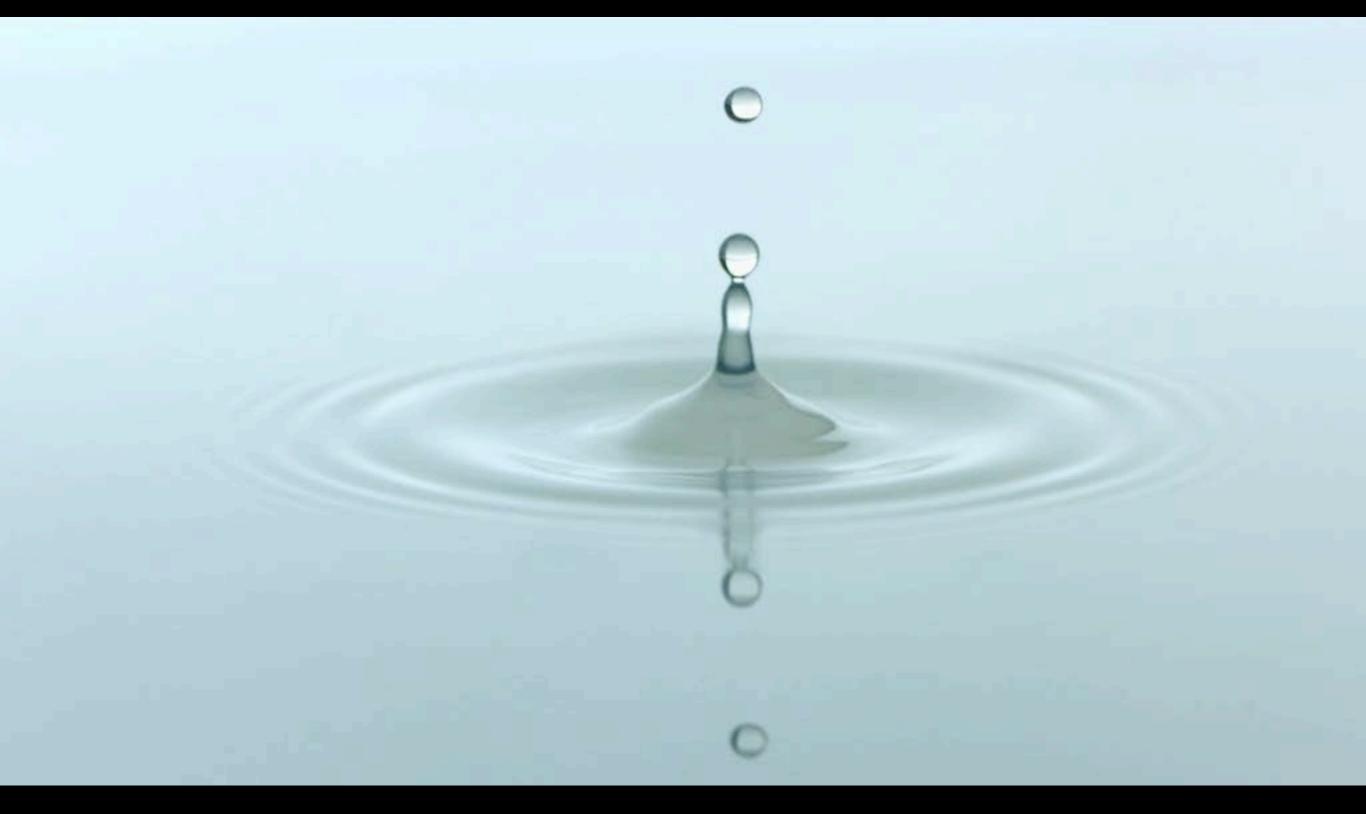
Planning and Scripting

Planning and Scripting

Shooting, Sharing, Curating, Editing

What is Foresight? (excerpt)
Policy Horizons Canada and sLab with Zancom Media
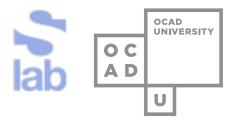
sLab researchers on these projects

OCAD Faculty
Jeremy Bowes
Nabil Harfoush
Peter Jones
Helen Kerr
Lenore Richards
Suzanne Stein
Greg Van Alstyne

Research Assistants
Alex Appugliesi
Madeline Ashby
Zan Chandler
Bev Dywan
Jazeen Hollings
Uma Maharaj
Richard Norman
Chloë Philip
Karl Schroeder
Petri Tanninen
Rob Tilley
Jonathan Veale
Josina Vink

Thank you!

More information:

Economic Futures for Ontario 2032

Internal project, not for publication.

SSHRC Panel on Urbanization through 2030

http://slab.ocad.ca

Policy Horizons Canada "What is Foresight?" Video

http://www.horizons.gc.ca (coming soon)

Greg Van Alstyne

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