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Co-creating foresight culture in government
Van Alstyne, Greg

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Co-Creating Foresight Culture in Government

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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)
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.
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 U foresight and innovation model
OCAD U foresight and innovation model
OCAD U foresight and innovation model

- Futures
- Systems thinking
- Visual thinking

- Business
- Design

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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 Centraide 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]
Project 1

Economic Futures for Ontario 2032 (EFO)
An Ontarian-Centred Foresight Project

Over the next twenty years, how might changes on the horizon alter Ontario’s economy?

What might an Ontarian living in that future expect?

http://www.ontariotravelinformation.ca
## International Precedents

### International technology and Innovation foresight programs, 1990–2008

<table>
<thead>
<tr>
<th>Country</th>
<th>Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>United Kingdom Foresight Program</td>
</tr>
<tr>
<td>France</td>
<td>FutuRIS; AGORA 2020; INRA2020</td>
</tr>
<tr>
<td>Germany</td>
<td>T21; Delphi series; Futur program</td>
</tr>
<tr>
<td>Finland</td>
<td>Finnsight; SITRA Foresight</td>
</tr>
<tr>
<td>Norway</td>
<td>VERDIKT</td>
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<tr>
<td>European Union</td>
<td>FOREN; COST; eFORESEE; NEM</td>
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<tr>
<td>USA</td>
<td>Metaverse Roadmap; 21st Century Challenges GAO</td>
</tr>
<tr>
<td>Japan</td>
<td>Delphi series, 1969–present</td>
</tr>
<tr>
<td>Brazil</td>
<td>Brazil 3 Moments; Prospectar; TFP Brazil</td>
</tr>
<tr>
<td>China</td>
<td>TF Toward 2020; TF of Priority Industries</td>
</tr>
</tbody>
</table>

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:
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

http://www.flickr.com/photos/tom_lin/3268927302/
Trends

Precious Water
BRICS + The Next 11 Markets

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

Political-Economy

Fiscal Federalism

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

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

- interconnected + emerging economies
- climate change
- game-changing technologies
- ubiquitous
- concentrated
- progressive
- volatile
- friendly
- unfriendly
Four Scenarios

- **iSurvivor**
  - interconnected+emerging economies
  - climate change
  - game-changing technologies

- **Northern Stars**
  - ubiquitous
  - game-changing technologies

- **Dark & Stormy Night**
  - unfriendly

- **Ontario Galactica**
  - friendly
  - volatile
  - concentrated

**Themes:**
- climate change
- interconnected+emerging economies
- game-changing technologies
- ubiquitous
- unfriendly
- friendly
- volatile
- concentrated
- progressive

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Greg Van Alstyne | sLab | OCAD University
## Scenarios Attributes

<table>
<thead>
<tr>
<th>Interconnected Economies</th>
<th>Unfriendly</th>
<th>Unfriendly</th>
<th>Friendly</th>
<th>Friendly</th>
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<tr>
<td>Climate Change</td>
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<td>Ubiquitous</td>
<td>Concentrated</td>
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<td>Ubiquitous</td>
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<tr>
<td>Scenario Title</td>
<td>iSurvivor</td>
<td>Dark and Stormy Night</td>
<td>Ontario Galactica</td>
<td>Northern Stars</td>
</tr>
</tbody>
</table>
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

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“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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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

<table>
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Illustration: (cc) Ryan Lake

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<table>
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<td><strong>Climate Change</strong></td>
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Illustration: (cc) Ryan Lake

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Ontario Galactica

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<td>Technologies</td>
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Illustration: (cc) Ryan Lake

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## Northern Stars

<table>
<thead>
<tr>
<th>Climate Change</th>
<th>Progressive</th>
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<tbody>
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<td>Interconnected Economies</td>
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<td>Game-changing Technologies</td>
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</table>

Illustration: (cc) Ryan Lake

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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 little 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?

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

What was memorable for you?

Hearing the depth of thought. Young people have experiences - more than perhaps you'd allow a decision maker to give credit for. I.e. final decisions/approvals are always made by senior (and frequently older) decision makers.

What needs improvement?

- more lead time before the workshop to plan the schedule
Feedback: Exit surveys

What is your overall opinion of this workshop?

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

What was memorable for you?

SCENARIO DEVELOPMENT, UNPACKING AND 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

<table>
<thead>
<tr>
<th>PRIORITY AREAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statutory requirements (e.g. Official Language): policy approach to continue</td>
</tr>
<tr>
<td>Budget envelopes - current approach (e.g. MBF): sunset in 2014: continue reporting requirements</td>
</tr>
<tr>
<td>Functional (e.g. interdisciplinary, KMB, new scholars): embedded in program design</td>
</tr>
<tr>
<td>Future Challenge Areas: &quot;géométrie variable&quot; approach (see possible scenario below)</td>
</tr>
</tbody>
</table>

Scenario: Selected FCA

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

PERFORMANCE METRICS
- Establish Baselines
- Set Targets & Timelines
- Measure & Report
- Refine & Recalibrate

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

Medium to strong capacity NOW

Corporate Activities:
- Policy & communications activities by SSHRC

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

Little existing capacity NOW

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

DEVELOPING TALENT + INSIGHT

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

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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?”

1. **Advancing a diverse and inclusive society**
2. **Enabling equitable access to ICT**
3. **Governing ourselves responsively**
4. **Designing sustainable cities**
5. **Overcoming fear of change**
6. **Including indigenous rights in planning**
7. **Transitioning to a digital economy**
8. **Upgrading transportation systems**
9. **Stewarding regional ecosystems**
10. **Supporting our aging population**

Levels:
- **Level V**: Most influencing
- **Level IV**: Significantly Influencing
- **Level III**: Influenced
- **Level II**: Highly Influenced
What is Foresight? Video

“Policy Horizons Canada has a mandate from its Deputy Minister Steering Committee (DMSMC) 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

What is it?
- Foresight
  - How is it done?
    - Horizon scanning
    - Environmental scanning
    - System mapping
    - Scenario planning
  - What are the outputs & outcomes?
    - Policy briefs
    - Insights
    - Foresight studies
    - Scans
    - Strategies
    - Policies
  - What is it good for?
    - Clarifying / testing core planning assumptions
    - Identifying vulnerable assumptions
    - Discarding obsolete assumptions
    - Understanding the system
    - Developing early warning systems
    - Identifying critical uncertainties
- Human Trait
  - Thinking about the future
  - Considering a problem
  - Exploring options
  - Weighing pros and cons
  - Developing mental models
- What foresight is not
  - Prediction
  - Blue sky thinking without rigour
  - Exploring how changes might evolve
  - Creating new policy challenges and opportunities
  - Exploring range of futures to develop robust policies and strategies to mitigate threats to take advantage of opportunities to move towards a desired future

Why do it?
- Better understanding
- Emerging developments
- Shape decisions
- Long term consequences
- Increasing interdependence of issues
- Economic
- Social
- Environmental
- Technological
- Increasing complexity and uncertainty
- Rapid change
- Low tolerance for risk
- To deal with rapid change
- In a complex world
- Buy time
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)

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