



Royal Military College Saint-Jean and Centre for National Security Studies

## Symposium on Systems Thinking and Design

### Panel 3

### Design and Systems Thinking Outside of the Military



Moderator:

**Mr. Francis Clemont**, Royal Military College Saint-Jean

Panelists:

**Mr. Charles van der Donckt**, Global Affairs Canada

**Ms Mithula Naik**, Central Innovation Hub, Privy Council Office

**Mr Fodé Beaudet**, Centre for Intercultural Learning, Canadian Foreign Services Institute

**Dr Francis Gosselin**, President, FG8 Consulting

**Dr Laurent Hébert-Dufresne**, Santa Fe Institute and the Institute for Disease Modeling

# Mr. Charles van der Donckt

## Deputy Director, Peace Operations, Stabilization and Conflict Policy Division, Peace and Stabilization Operations Program (PSOP), Global Affairs Canada

Dr. van der Donckt joined the Stabilization and Reconstruction Task Force (now PSOP) in the Department of Foreign Affairs, Trade and Development (DFATD) in 2015. He has held a variety of positions in the department since 1994, including in the Policy Planning Secretariat, the Security and Intelligence Bureau, as well as in the Physical Security Abroad Division. Dr. van der Donckt was the Political Advisor to the Commander of ISAF's Regional Command South (HQ RC South) in Kandahar from January 2008 to May 2009 and later served as Director of Policy in the NATO Senior Civilian Representative Office in Kabul (2011-2013). He has served in Canadian missions in Australia and Pakistan as well as in the Privy Council Office in Ottawa. Dr. van der Donckt holds an MA in International Relations from Université Laval (Québec) and a PhD in Political Science from the Australian National University's Research School of Pacific and Asian Studies (Canberra).



# Human Centered Design IN THE PUBLIC SECTOR

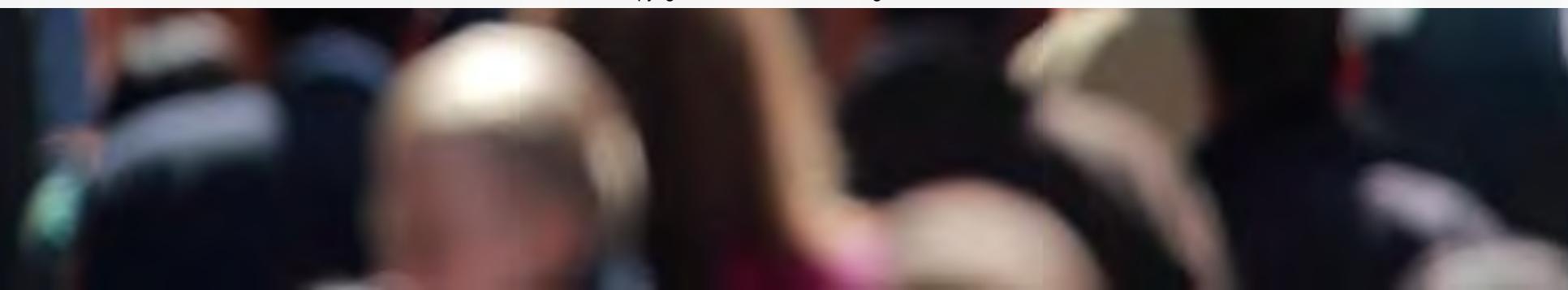


Royal Military College  
Saint-Jean

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Mithula Naik, Design Researcher @ Innovation Hub, Privy Council Office

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# Helmet design for women in India





'Extreme users' inform the needs of the wider population

Source: <https://www.flickr.com/photos/cfcombatcamera/33522120565/in/photostream/>





We spend a lot of time designing the bridge, but not enough time thinking about the people crossing it

*Dr. Prabjot Singh*



# Design is generative

UNCERTAINTY/EMERGING PATTERNS

CLARITY/FOCUS

focus of design-driven innovations (definition of new meanings)



**STRATEGY/VISION**

stakeholder engagement  
situational analysis



**INSIGHTS**

design research  
technological research



**CONCEPT**

co-design  
prototyping  
customer validation



**DESIGN**

product development  
interface design, visual design  
validation + metrics

Design is iterative



A group of people in an office hallway are gathered around a wall covered in numerous colorful sticky notes. The sticky notes are in various colors (yellow, orange, blue, pink, green) and contain handwritten text. The people are looking at the wall with interest, and one man in the foreground is pointing at a note. The hallway is lit with recessed ceiling lights, and a green exit sign is visible in the background.

Design is collaborative

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# Design in Government

## SERVICE DESIGN

SERVICE DESIGN

Redesigning front line services to become more citizen-centred. Often focused on achieving a better user experience while using less resources.

CORPORATE SERVICE DESIGN

Redesigning internal support services (HR, Finance, procurement) and better connecting and integrating them with policy. Often focused on a more conducive enabling environment for innovation.

## SYSTEMIC DESIGN

STRATEGIC & POLICY DESIGN

Supporting policy-making. Often focused on fuzzy front end of policy development to understand a complex policy problem, engage more effectively with citizens and stakeholders, and generate policy ideas.

TRANSITION DESIGN

Helping tackle complex challenges that require systems change. This requires longer term partnerships and convening multi-stakeholders group between government, industry, academia and NGO's.



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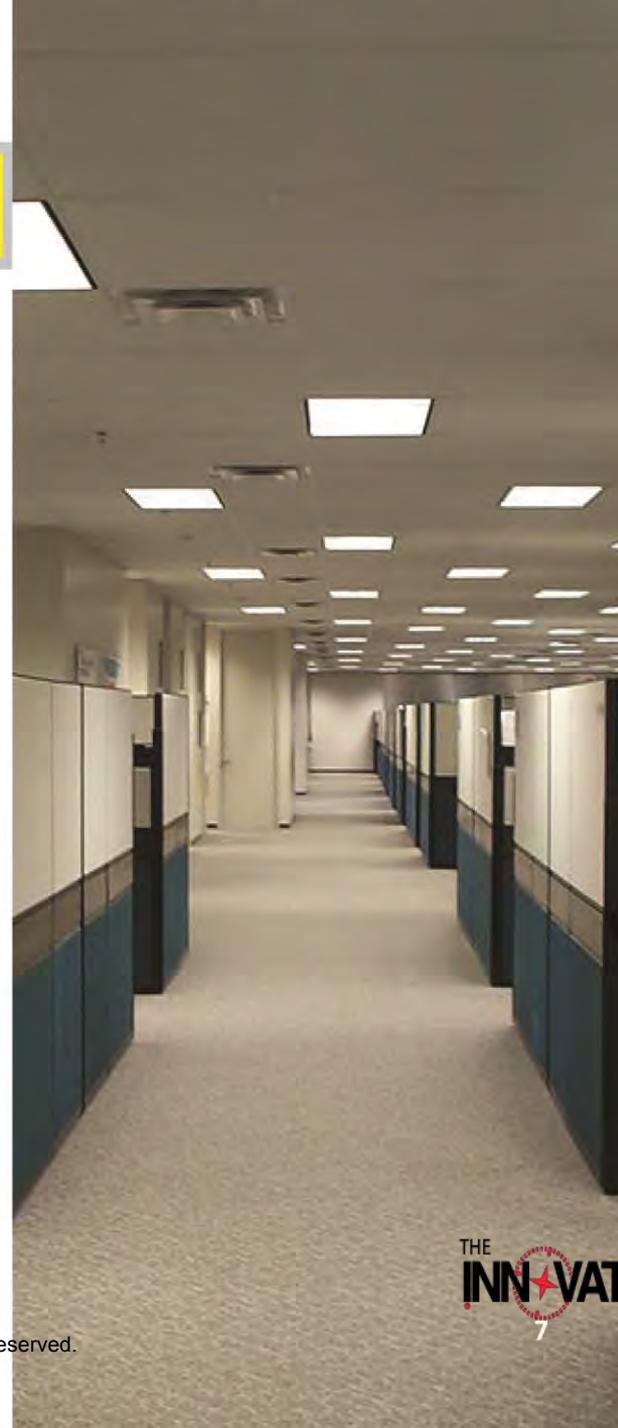
*Designing interventions to improve the  
organizational culture for persons with  
disabilities in Health Canada*

## THE CHALLENGE

The 2014 public sector employment survey results showed that persons with disabilities expressed less positive opinions on staffing and were victims of higher discrimination (26% vs. 7%) and harassment (65% vs. 4%) compared to the general public service population.

Health Canada, in collaboration with the Hub, identified two distinct challenges:

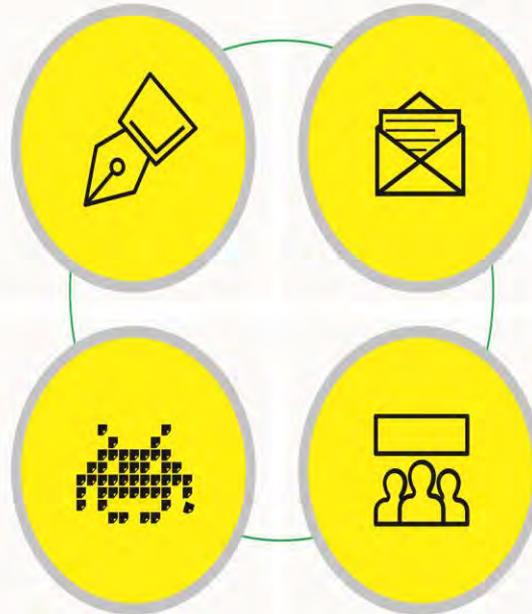
- Programs and services in the workplace not meeting the needs of persons with disabilities.
- Appropriate services being poorly implemented.



# METHODOLOGY

Letter writing  
exercise

Letter analysis



Service  
blueprinting

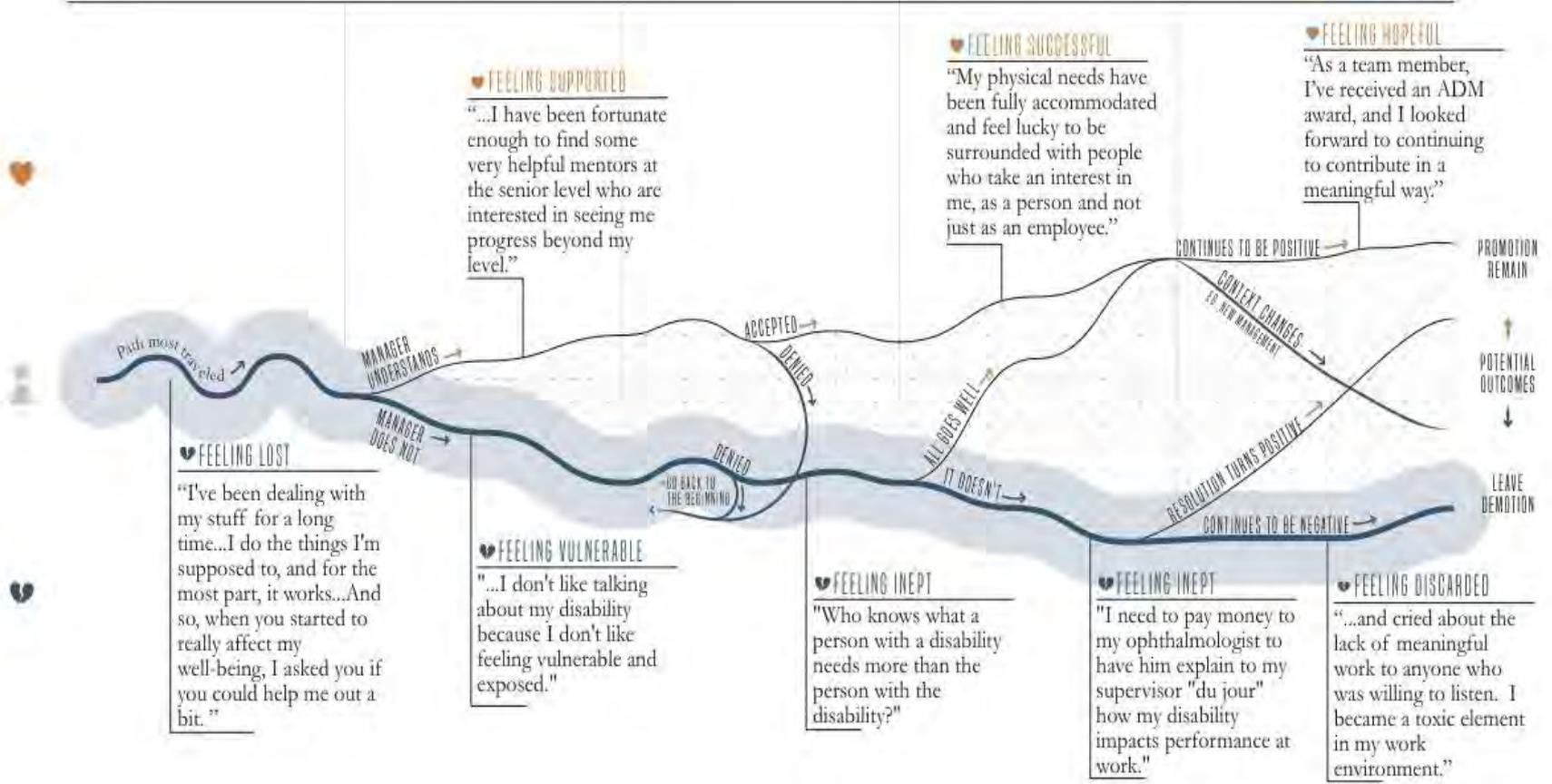
Ideation  
workshops

# THE JOURNEY OF ACCOMMODATION

PERSONS WITH DISABILITIES PROJECT, HEALTH CANADA + INNOVATION HUB, PRIVY COUNCIL OFFICE



MANAGE [ user ]	DIVULGE [ user, management ]	LITIGATE [ user, management, doctor, corporate services ]	ACCOMMODATE [ user, management, team, corporate services ]	CHAPTER ENDS [ user, management, team, corporate services ]
Person is trying to manage on their own, unsure or where or who to consult.	Managing on their own becomes too much and need to talk about their disability.	Go through the application, back and forth between multiple parties.	Accommodation is put into place. This could take months.	A resolve occurs. This could be positive or negative and can initiate another pass through.



# OUTCOMES AND IMPACT



## VALIDATION: EVIDENCE BASED

Findings were validated by the self-identified persons with disabilities, the Ombudsman's Office and some Health Canada public servants.



## AWARENESS

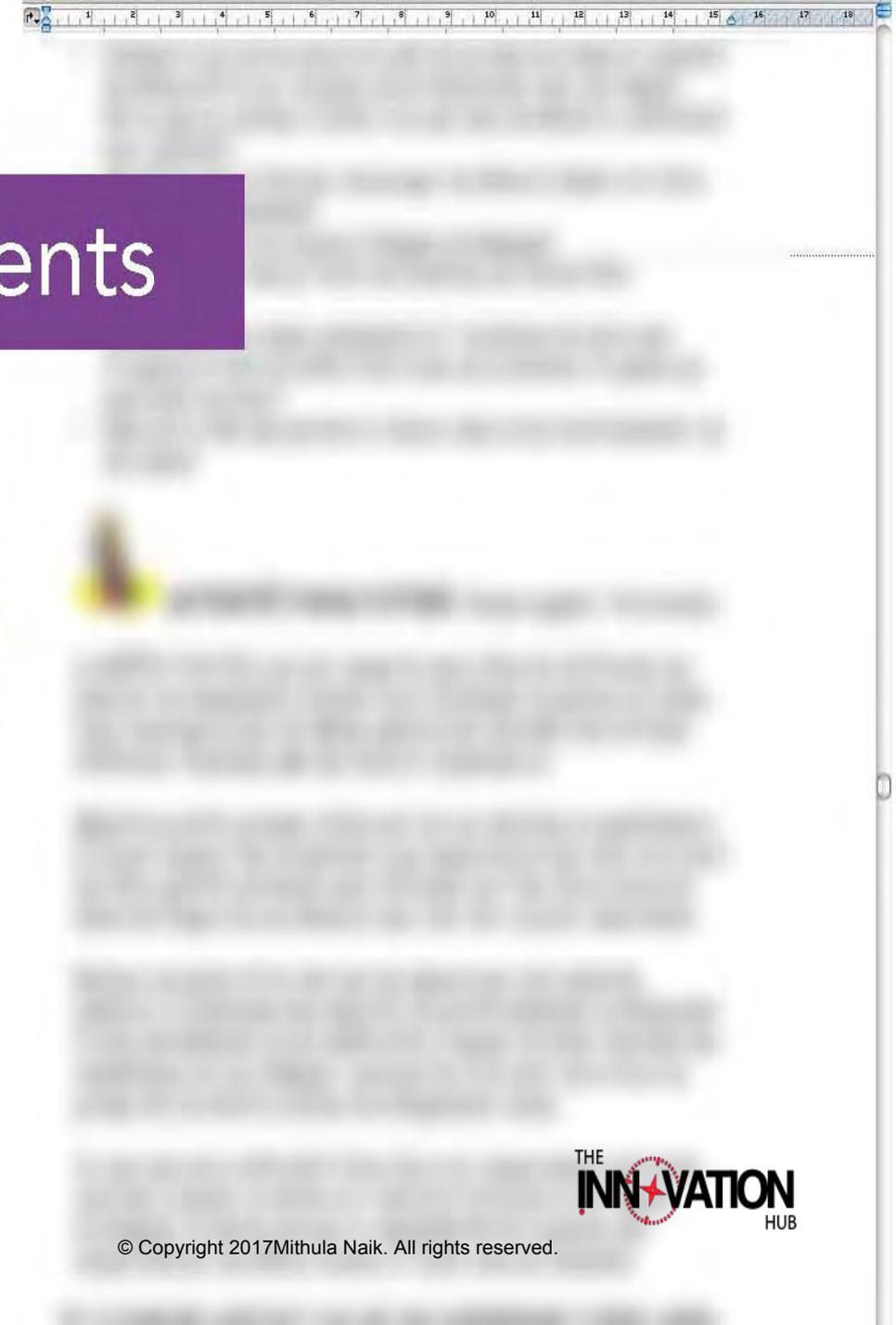
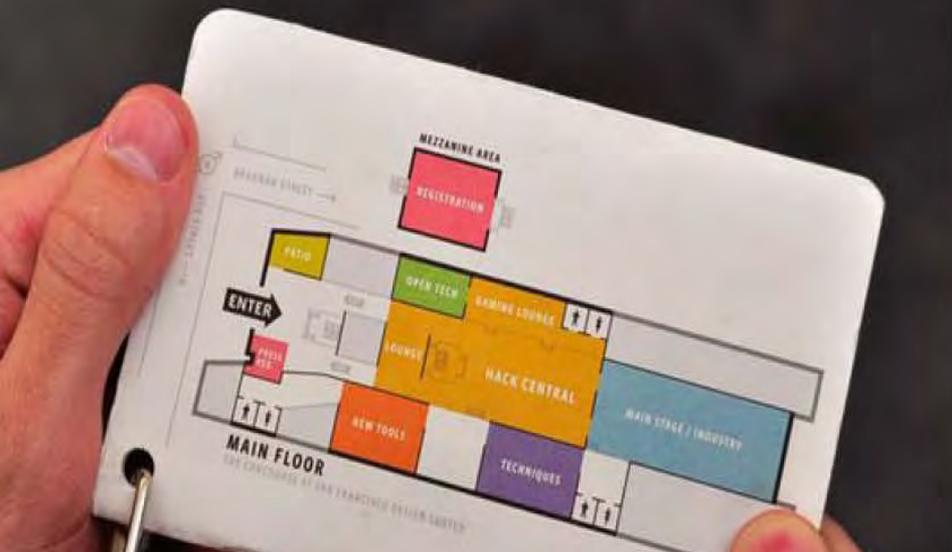
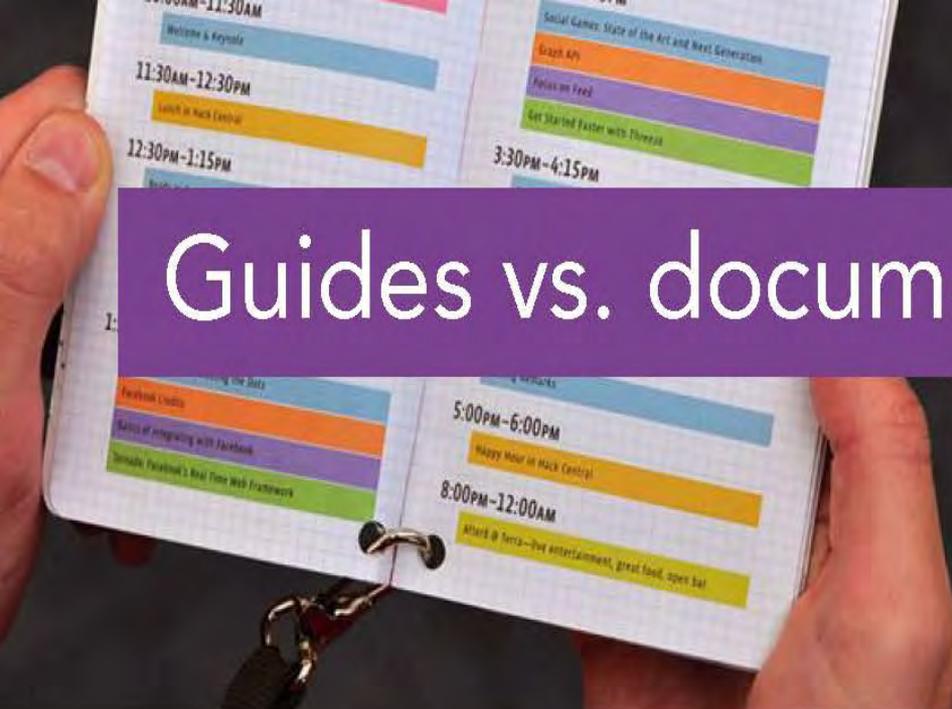
Five workshops demonstrated increased awareness and interest within Health Canada and with other departments, such as the Office of Disabilities Issues from Employment and Social Development Canada.



## RECOMMENDATIONS

Key themes diagnosed issues such as operational inefficiencies and persons with disabilities pain points. Results were received with highly positive feedback, and they are reviewing options now.

# Guides vs. documents



# Reduce employee attrition to long-term leave:

- Long wait times to receive accommodations →
  - Employees receive mixed messages from management →
- 
- Step-by-step, augmented approach to accommodations
    - **Standardizing** the process
    - **Clarifying** an employee's short-term leave-of-absence
    - **Flexible** work schedule/teleworking option
    - Need for workplace accommodations
    - Note employee's **back-to-work** accommodation requirements

## Benefits:

Increased healthy workplace alternatives  
Increased mental health of employee and team  
Human resources: avoid costly rehiring  
Financial resources: avoid costly retraining

# Revisiting what matters:

- User centricity
- Embracing complexity
- Building alliances for change
- Impact emphasis





# How can design serve cultures-in-transition?

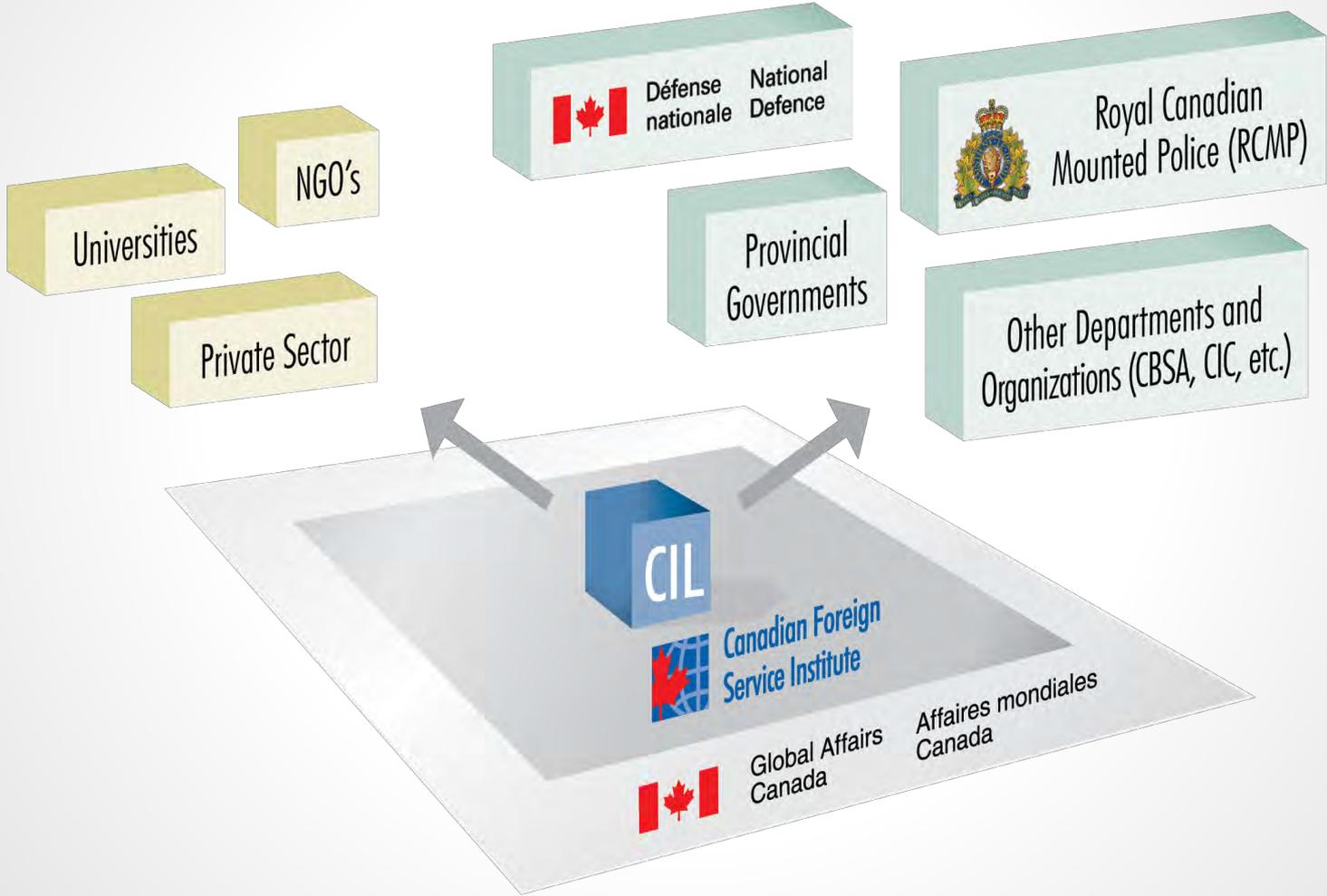
Systemic and systematic  
approach to change

Fodé Beaudet,

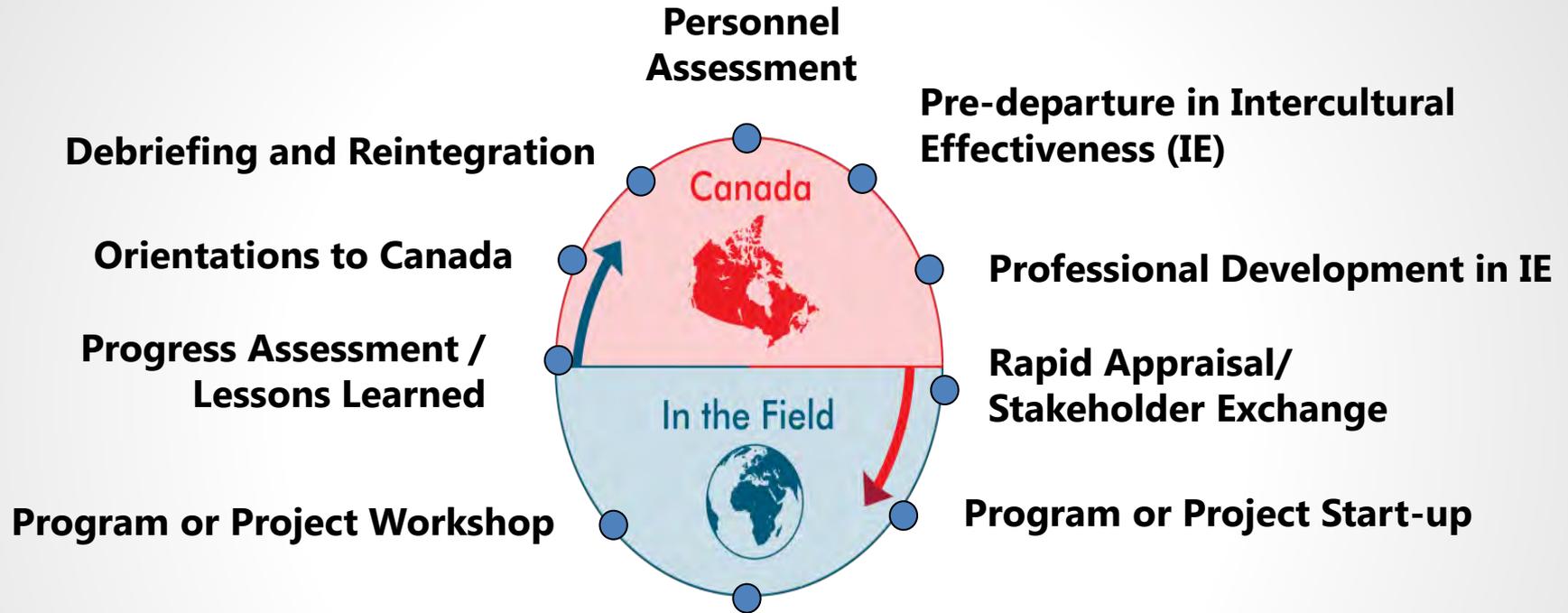
Senior Learning Advisor, Centre for Intercultural Learning, Canadian Foreign  
Service Institute, Global Affairs Canada



# The Centre for Intercultural Learning (CIL)



# CIL Services



## Capacity building courses

- Results-Based Management (RBM)
- Facilitation Training and Capacity Building (FTCB)

# Content

- Clarifying terms
- Paradox: how « success » within professional knowledge can strengthened silos
- Example: systemic and systematic intervention (Winter of Discontent, Middle East)
- Exploring a design to serve cultures-in-transition

# Clarifying Terms

## Design

Changing existing conditions into preferred ones (Herbert Simon)

Adult Education Design Model (Kolb)

## Systemic

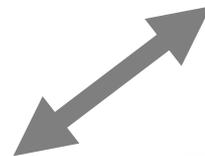
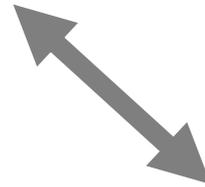
Entry points within whole-systems

## Systematic

Methodologies and steps to design.

## Cultures-in-Transition

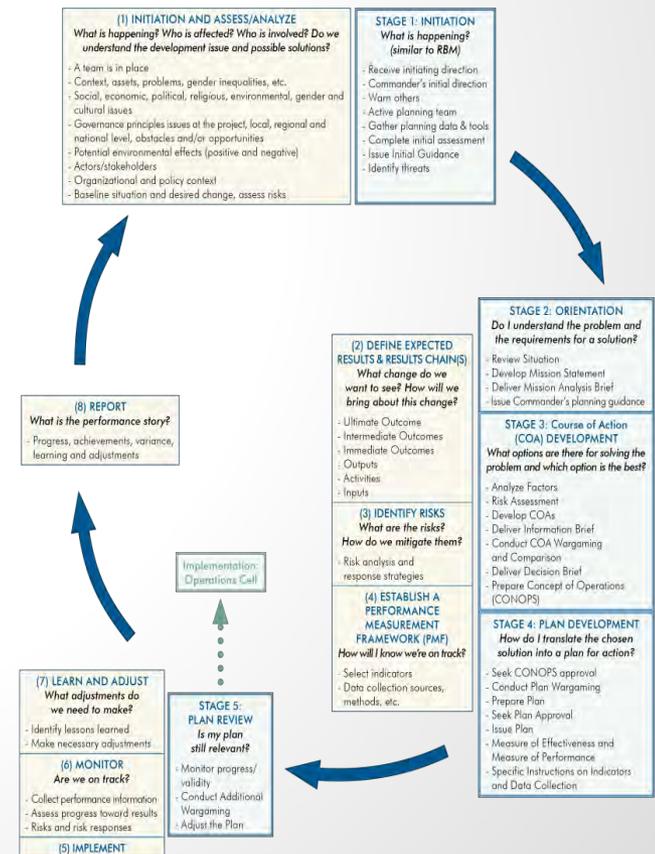
The social identity of groups and sub-groups and their shared meaning as they struggle through the tension of preserving/ transforming who they are.



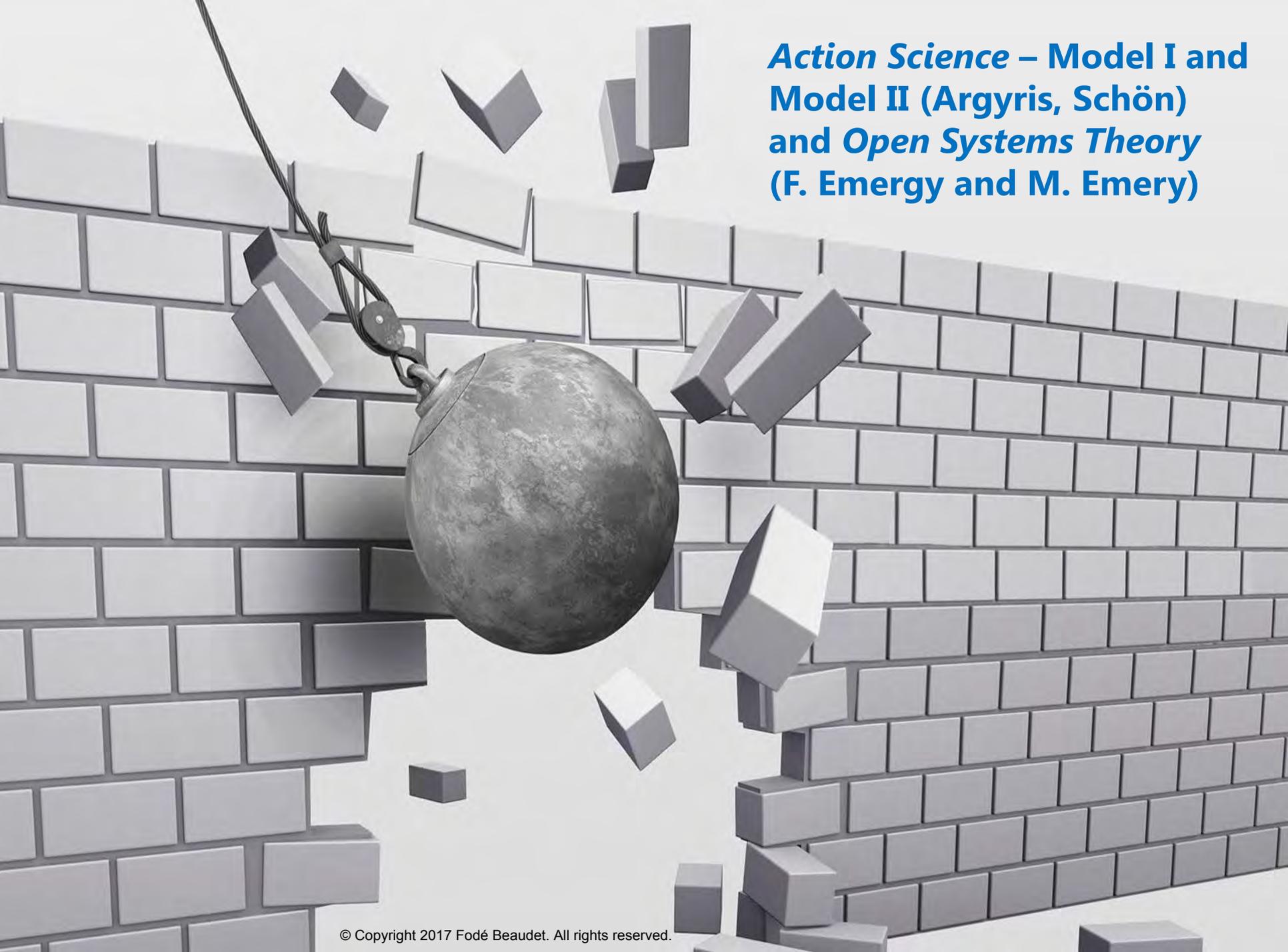
# Paradox: How success within professional knowledge can strengthened silos

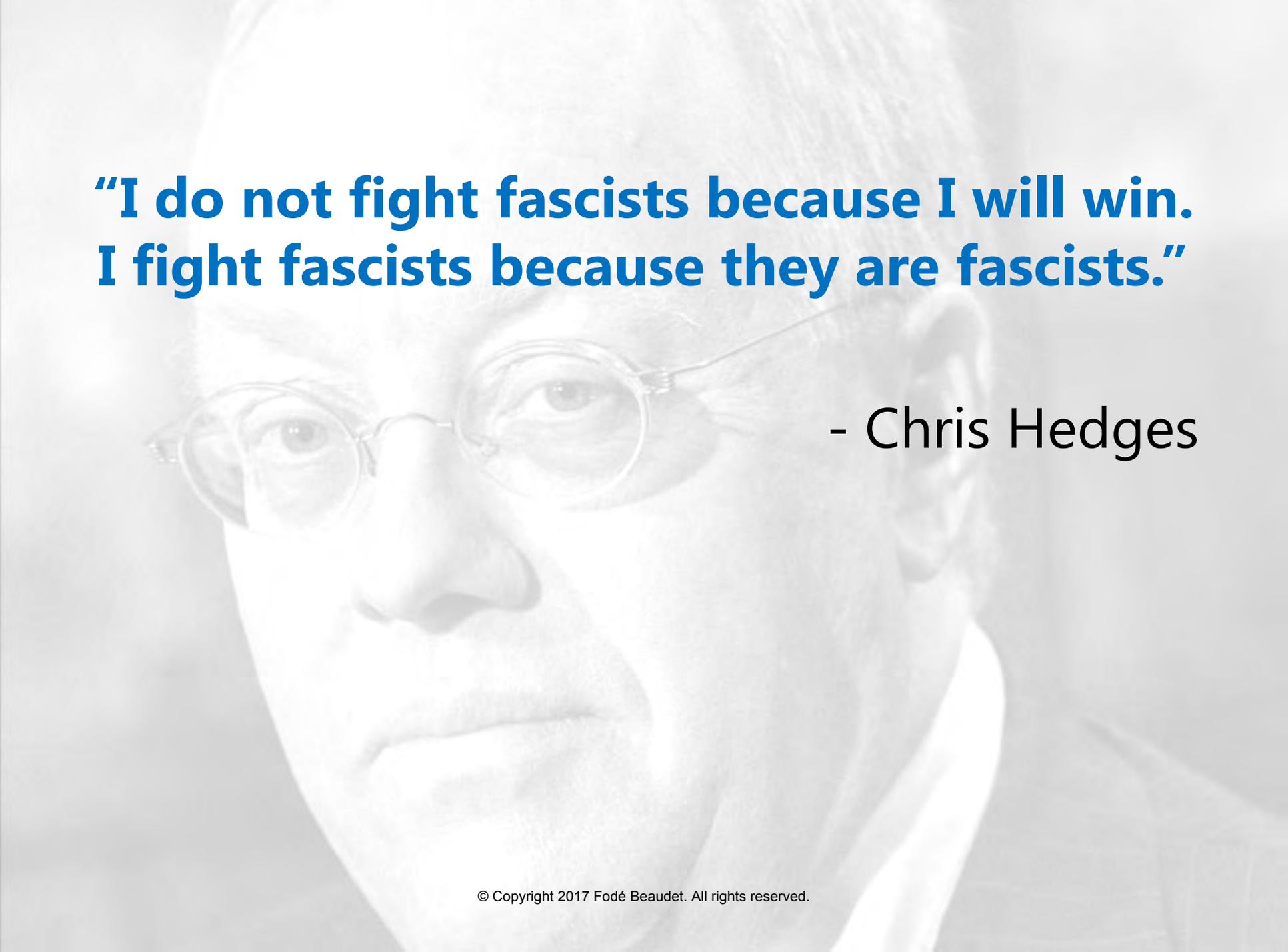
“The practitioner conducts an experiment in reframing the problematic situation. But how is such experiment to be evaluated? The practitioner judges his problem solving effectiveness in terms of an objective function, but how might he to judge the problem setting which establishes the objective function?”

- Schön, The Reflective Practitioner



***Action Science – Model I and  
Model II (Argyris, Schön)  
and Open Systems Theory  
(F. Emery and M. Emery)***



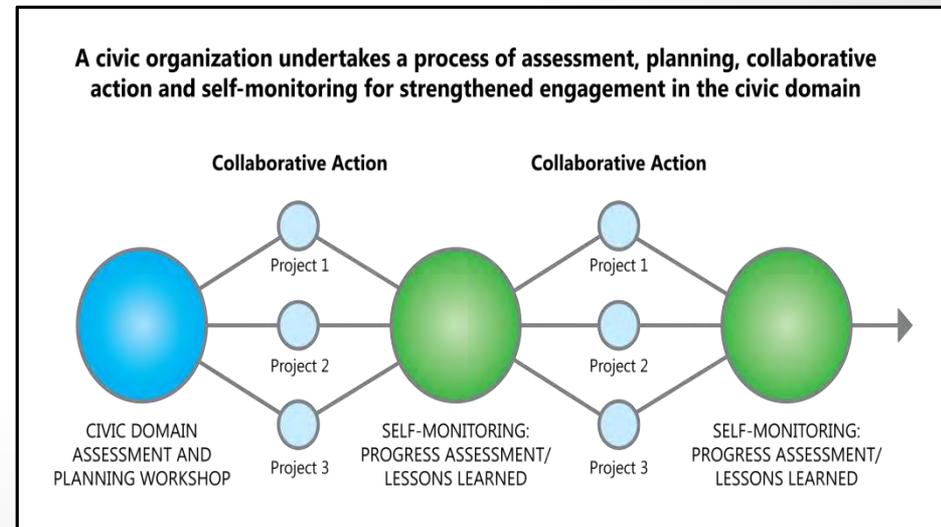
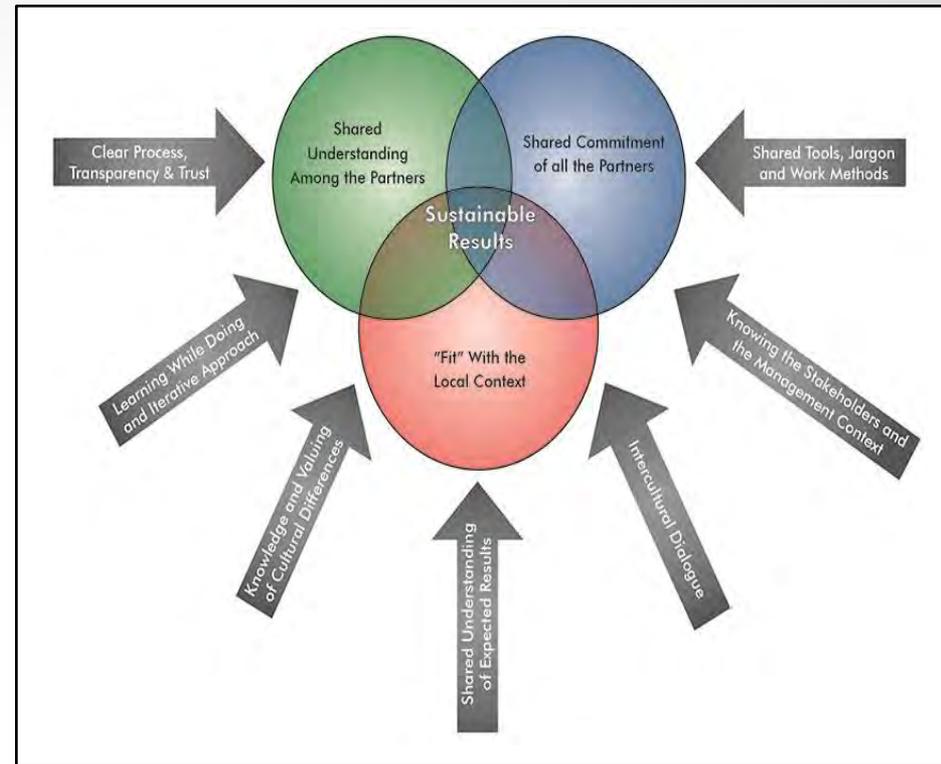


**“I do not fight fascists because I will win.  
I fight fascists because they are fascists.”**

- Chris Hedges

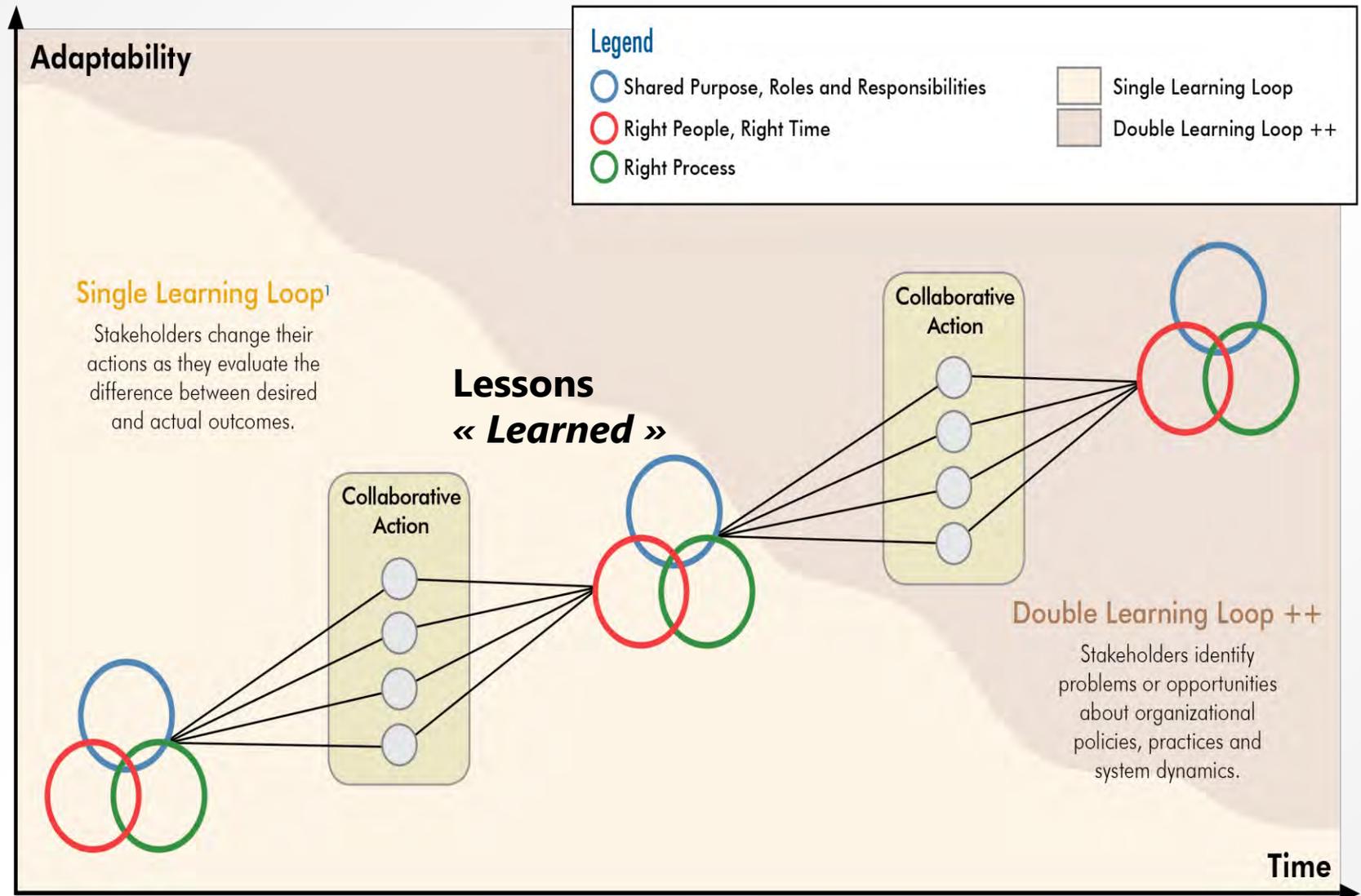
# Systemic and Systematic Intervention– Facilitation Training and Capacity Building (FTCB): Winter of Discontent (Middle East)

- Participatory
- Adult Education Design Model (Reflection-in-Action)
- Facilitation vs expert-driven content
- Iterative



# Systemic and Systematic Approaches for Cultures-in-transition

## Exploring Action Research and Social Innovation Labs



# Discussion



# Invitation

## Interested to explore Action Research?

Contact:  
[fode.Beaudet@international.gc.ca](mailto:fode.Beaudet@international.gc.ca)



Dr. Francis Gosselin

fgg8



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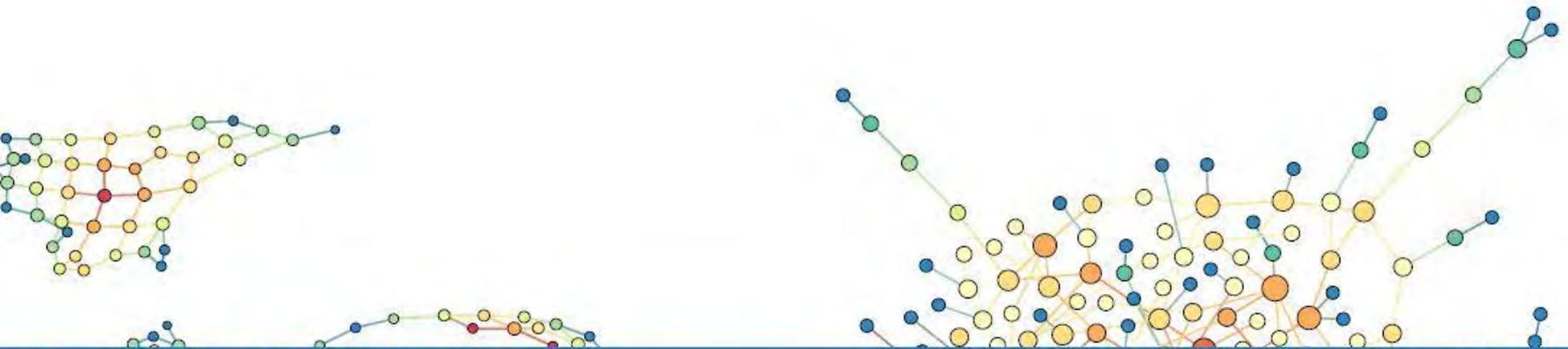
INTELLECTUAL VENTURES

# Plans pandémiques dans un monde complexe

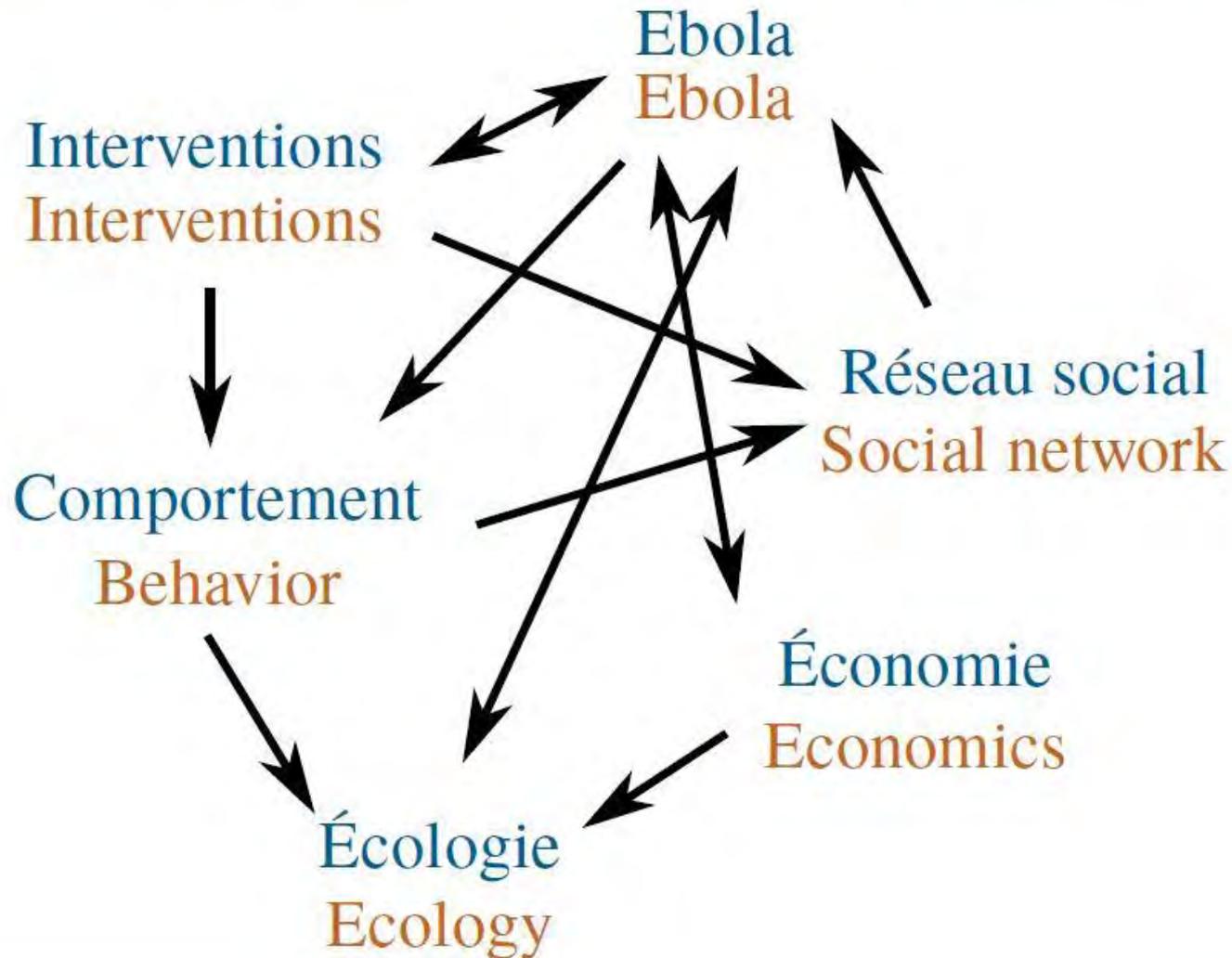
## Pandemic preparedness in a complex world

Laurent Hébert-Dufresne

laurent@santafe.edu :: @LeCompteDeLHD



# Systemique d'une pandémie / System view of a pandemic



Les conséquences imprévues des interventions de santé publique.

The unexpected consequences of public health interventions.



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# How the Fight Against Ebola Tested a Culture's Traditions

To stop infected bodies from spreading the disease in Sierra Leone, health officials persuaded local leaders to change how villagers mourned.

By **Amy Maxmen**, for National Geographic

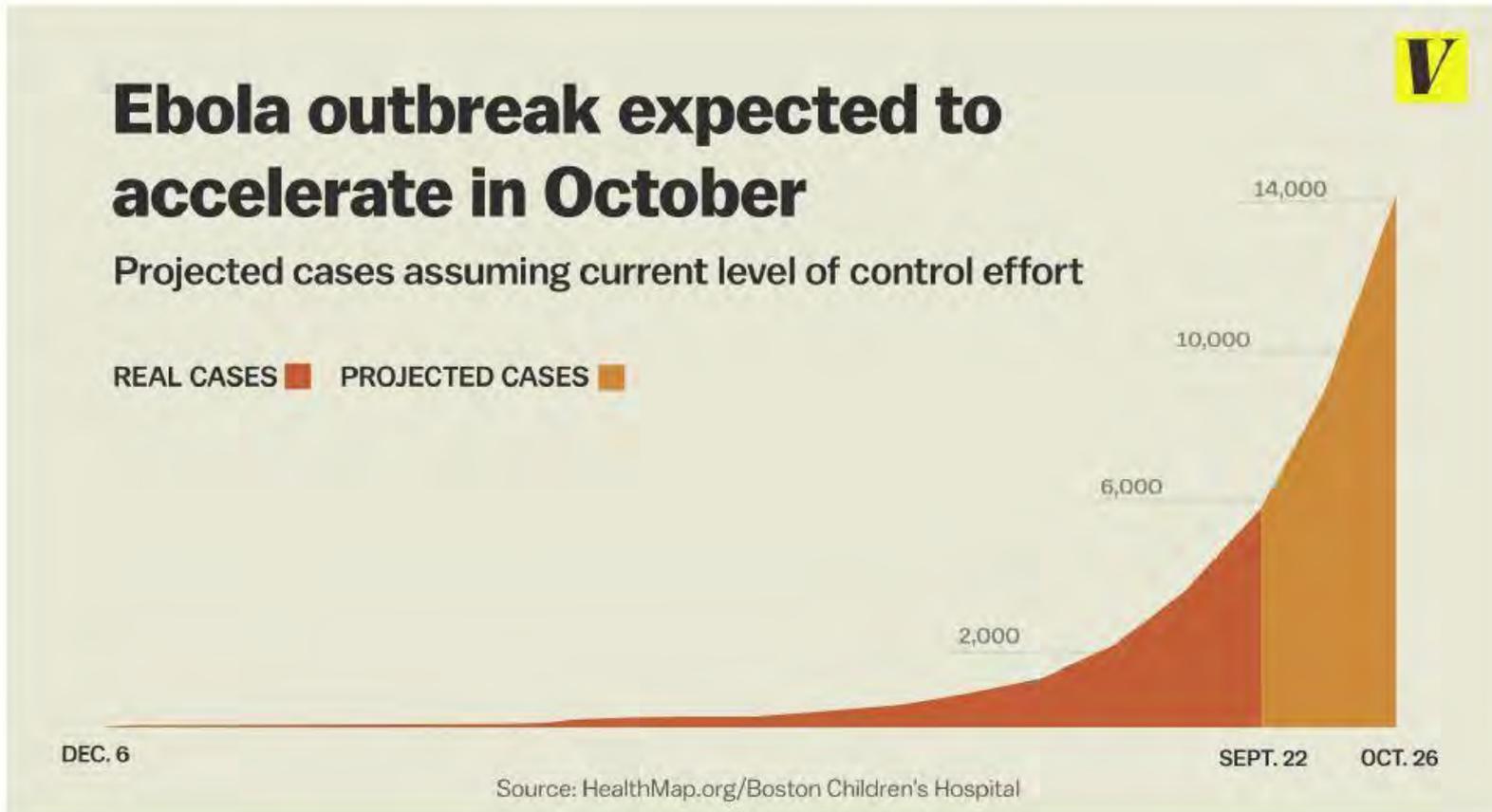
Photographs by **Pete Muller**, for National Geographic

PUBLISHED JANUARY 30, 2015



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# Prédire les cas futurs / Predicting future cases



Les données (différentes) sont le futur du domaine:  
comportements, réseaux sociaux, peurs, . . .

Future of the field is (different) data:  
behaviours, social networks, fears, . . .

ACCUEIL | INTERNATIONAL

## Le virus Ebola fait 887 morts, l'armée mobilisée en Sierra Leone et au Liberia

PUBLIÉ LE LUNDI 4 AOÛT 2014 À 12 H 16 | Mis à jour le 4 août 2014 à 18 h 05



Au Sierra Leone, des employés de Médecins sans frontières donnent à manger à des patients mis en isolation. Photo : Stringer/Reuters

**L'épidémie de virus Ebola a fait 887 morts en date du 1<sup>er</sup> août, a indiqué lundi l'Organisation mondiale de la santé. En Sierra Leone, l'ampleur de l'épidémie est telle que le président a annoncé une mobilisation générale.**



Radio-Canada avec Reuters et Agence France-Presse

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Publié le 30 décembre 2014 à 14h59 | Mis à jour le 04 février 2015 à 19h24

## Ebola: une équipe médicale de l'armée canadienne s'établit en Sierra Leone



Les 37 médecins, infirmières, ambulanciers et employés de soutien de l'armée se sont attelés à leurs nouvelles tâches mardi, dans une clinique administrée par les Britanniques à Kerry Town. 

PHOTO FRANCISCO LEONG, ARCHIVES AFP

La Presse Canadienne  
OTTAWA

ma.PRESSE



Ajouter



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# Un nouveau type de données / A new type of data

14. Ebola related most common concerns expressed?	15. Most commonly asked questions?	16. What did the community initially assess and rank as key risks for catching Ebola?	17. What bye-laws have been developed on Ebola in this community? Please any examples of bye laws implementation.	18. What else did you hear in the community discussions that you think is important to note?
1. How to treat a survivors 2.If some one is been infected, will there be possibility for him/her ?	1. Vomiting 2.Urine 3. Sexual intercourse 4.Touching dead body 5. Eating bush animals	1.strangers are not allow in their community 2.No one is allow to move around their community after 9pm 3.No funeral is accepted 4.No public gadering	The community made an apeal to Restless development that they need buckets and chlorine to do their hand washing	Ebola has made most of their girl child education has droped
1. How to leave with Ebola survivor? 2.How the poligamous will leave in the community?	1. Sexual intercourse 2.Vomiting 3.Body contact 4.Shap objects (Razor blade)ect	1.Public gadering law breaker fine is Le200.000, except on Ebola sensitization 3. No stranger will be accomodated in their community fine is Le500.000	The community made an apeal to Restless development that they need buckets and chlorine to do their hand washing	Cultural and socila activities has stoped because of Ebola
1.How to prevent yourself from Ebola? 2.what is the aims and objective of Restless in their community? 4. Where did Ebola started?	1. Vomiting 2.Eating bush animals 3.Sexual intercourse 4.Body contact	Stranger is not allow in their community to stay 2.No public gathering is allow in their community.	The community made an apeal to Restless development that they need buckets and chlorine to do their hand washing	They urged every one to continue with individual prayer for Ebola to come end
1. How Ebola started in Sierra Leone? 2.How to prevent from Ebola?	1.Bush animals 2.Touching dead body 3.Body contact 4.Urine	No cultural practices 2.No public gathering in their community. 3.No funeral	The community is asking the Government to help them with bucket and chlorine to continue with hand washing	The education in Sierra Leone has disturbed
1. The town chief asked when Ebola will come to an end? 2.The Youth leader asked that if they are allow to eat animals in the town?	1.Touching of an infected person 2.Eating fruits that have been eating party by animals like bats, monkey 3. Touching Ebola dead body	1. No stranger is allow who have been out for 3-4 days in their community 2.any one who in found eating bush animal will pay a fine of Le 200,000 3.No body is allow to keep a sick person in the house the fine is Le 500,000	1.The chief strongly advised his people not to have contact with a woman whom you did know, if any one is found will pay a fine of Le70,000 to the community people	They are worry if there is going to be good education for the coming 2 years
animals in the town?	3.Touching dead body	social activity is allow	sensetization or talk	the bag is major concern
palm tree and die?	3.Eating bush animals	soap at all time.	case in their community	the community
moverment	there be possibility for him/her ?	Eating bush animals	public gadering	washing
They belive Ebola is real	will leave in the community?	(Razor blade)ect	fine is Le500.000	washing
animals	started?	3.Sexual intercourse 4.Body contact	community.	washing
? Education has stoped	Ebola?	body 2. Body contact 4.Urine	funeral	hand washing

Si vous avez des questions / If you have any questions

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