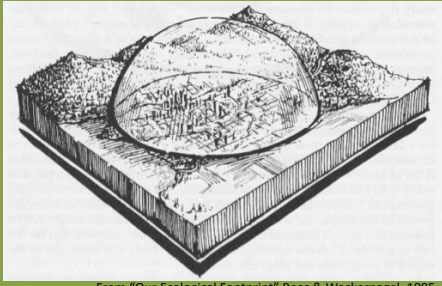


Nova Scotia and Climate Change

- More Extreme Weather
- Increasing Temperatures
- Vector-borne Diseases
- Emergencies
- Flooding
- Rising Tides
- Water Contamination
- Ocean Acidification
- Disruption to Marine Ecosystems
- Agricultural Impacts
- Infrastructure Vulnerability

Ecological Footprint



From "Our Ecological Footprint" Rees & Wackernagel, 1995

How big would a glass hemisphere need to be so that a city under it could sustain itself exclusively on the ecosystem contained?

Ecological Footprint – links to activities

The Ecological Footprint



Mathis Wackernagel

EF measures all: 1) cropland, grazing land, forest and fishing grounds required to produce the food, fibre and timber it consumes; 2) space for infrastructure; and, 3) space needed to absorb wastes, including those emitted while producing energy.

Ecological Footprint of Nations

Country	EF (Global Hectares/person)
Australia	9.31
USA	8.22
Canada	8.17
UK	7.92
New Zealand	5.6
China	3.38
India	1.16

This table below is based on 2012 results (National Footprint Accounts edition 2016)

Current Global Human Footprint – about 2.3 hectares/person
 Sustainable Footprint – about 1.8 hectares/person
 Globally humans are using 1.7 Earth's worth of biocapacity

Change is afoot all around us!

If Culture is an expression of our relationships in the world over time, and our world is changing, then...

... how can heritage and museum organizations foster creative adaptation that helps our living culture thrive?

Museums as 'catalysts of cultural change':

your gut reaction...

- curious?
- dismissive?
- excited?
- fearful?
- angry?
- optimistic?


As museum and heritage professionals I suspect we share a commitment to:

- fostering knowledge
- nurturing community well-being
- catalyzing public reflection and dialogue
- creating a shared vision of the future
- being relevant to community

Museums as 'catalysts of change':

- Whether?
- Why?
- What?
- How?
- Whether?

1. Whether?



No museum should feel forced to embark on this path!

- change can be tough & risky
- new skillsets will be required
- new kinds of resourcefulness
- humility, energy and tenacity

... however...

1. Whether?

...there are great opportunities!

- for enhanced public relevancy
- for engaging new stakeholders/partners
- for linking past, present, future

And there are some great potential partners already on this path, some who recognize the need to address the challenges on a cultural level

New Partnerships: Gus Speth, on Climate Change Science & Culture

"We scientists don't know how to do that"

"I used to think the top environmental problems were biodiversity loss, ecosystem collapse and climate change.


I thought that with 30 years of good science we could address those problems.

But I was wrong. The top environmental problems are selfishness, greed and apathy...

...and to deal with those we need a spiritual and cultural transformation

- and we scientists don't know how to do that."

Gus Speth



New Opportunities: UN Sustainable Development Goals



THE GLOBAL GOALS
For Sustainable Development

<http://17goals.org>

2. Why?

- **Change is already happening – and its cultural!**
– Globalization, Pluralization, Urbanization, Climate Change
- **We can help shape change... or be pushed along**
- **Change can be adaptive or non-adaptive**
- **Culture is dynamic and continuously changes...**
sometimes change is slow, other times fast
- **Humanity's creative muses have great potential**



- ### 2. Why?
- #### Changes in Museum Realities
- Declining attendance
 - Declining tourism (in some ways this is a good thing)
 - Declining core funding and grants
 - Increasing reliance on revenue-raising activities
 - Increasing admission prices
 - Museum jobs generally pay poorly
 - Growing professional sense - need to be more relevant
- => Retool for outcomes/impacts, not just outputs



3. WHAT?

A 'change agent', is likely to...

- be tuned in to the forces shaping the living culture
- help assemble stakeholders to co-create a vision for all to 'own'
- help identify & prioritize the trends that demand attention
- help identify forces that shape trends in community/society
- help co-create innovations => meaningful, positive change
- mobilize insights from history & artists, youth and elders
- co-create effective measures track shifts in societal trends
- be humble in the face of the challenge
- NOT lead specific cultural changes (if they are facilitators)

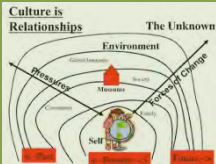
3. WHAT?

What Museums Can Offer:

- Public trust
- Perceived 'neutral' spaces
- Access to diverse stakeholders (?)
- Insights into the power of historical objects, stories, art to be relevant to both the present and future
- Can foster dialogue amongst scientists, artists, economists, business leaders, political officials, elders, youth, NGOs
- Can offer insights into challenges and ask good questions
- Humility about how challenging and messy all of this is



WHAT?



Possibilities for Museums:

- Focus on issues & trends that shape the living culture
- Build relationships amongst stakeholders - around the issues
- Help bring insights from the past into contemporary discussions
- Create a cultural vision with other stakeholders – a 'story of change'
- Have faith that your collections and building(s) will be vital – but may not be where your attention is always focused!


What if museums...
Shifted traditional programs to be more issue-based?
(Royal Saskatchewan Museum 'The Human Factor')



What if museums...
Developed research agendas based on contemporary cultural issues?

Human Ecology Program
Research Questions:

- What do cultures of sustainability look like?
- How can they be fostered?
- What makes or would make them resilient?
- What indicators do they use, or need to develop, to help them adapt to changing conditions?
=> And what if heritage sites and smaller museums partnered with the larger organizations?



© Douglas Worts

What if museums...
Create more issue-based programs?



RACE: are we so different?
Science Museum of Minnesota

What if museums...
Collaborated more with artists & scientists in public places?



<http://www.jennybergstrom.com/scripts/Page.asp?id=297>
Jenny Bergstrom (Sweden) "This is the Air we Breathe..." 4


What if Museums...
Facilitated important public conversations



Talking climate with the Alberta Narratives Project

September 25, 2018 ClimateOutreach.org

How?
Museum Associations - Rising to Challenge




www.museumassociation.org/museums-change-lives

Museums:

- enrich the lives of individuals,
- contribute to strong and resilient communities, and
- help create a fair and just society.

➤ Museums in turn are immensely enriched by the skills and creativity of their public.

How?



Principles: <http://happymuseumproject.org/about/why/principles/>

1. Create conditions for wellbeing	4. Be an active citizen
2. Pursue mutual relationships	5. Learn for resilience
3. Value the environment and be a steward of the future as well as the past	6. Measure what matters

How?



<http://happymuseumproject.org/resources/story-of-change/>

Story of Change Planning

Articulate:

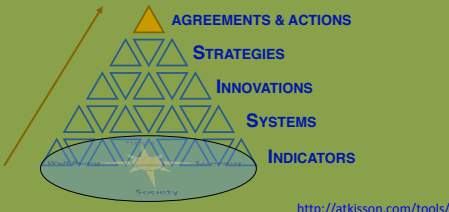
- assumptions about community needs/opportunities
- assumptions about intended impacts
- assumptions about stakeholders
- assumptions about co-creation

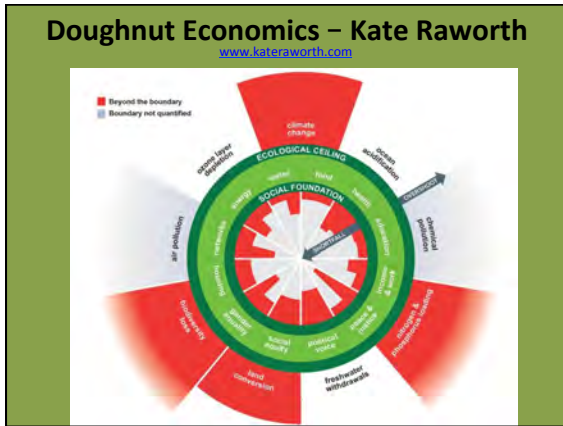
How?

The Pyramid Process

Builds understanding, creativity, skill and agreement

Resulting in Trust, Commitment, and Disciplined Implementation





... revisiting Whether?

Being an 'Agent of Change' is both
a Challenge and an Opportunity:

It will require...

- Revisiting **missions**
- Clarifying **cultural issues & needs**
- **Experiments** - new approaches to community engagement
 - Planning for **cultural impacts**
 - **Measuring what matters**



