

Synoikismos

Overcoming the Terrorism of the Either/Or

Professor Ann Dale
Canada Research Chair in Sustainable Community
Development
Royal Roads University
www.crcresearch.org

Thursday, 31 May, 12

honoured to be here to share my ideas, feel I have come a long way in my career, geographical disability (example)

borrowed shamelessly from a 1976 paper by Soja entitled Writing the City Spatially

want to talk about the structures that so influence the either/or of the academy and first, deconstruct the academy and, many geographers, for example, Edney (1993) have long grappled with deconstructing mythical boundaries between the 'arts and 'sciences'

and then, reconstruct, hopefully convincing you that embracing the edges of disciplines is where the action is

for edges are vey creative spaces, when two ecosystems meet, the greatest diversity

plan to talk for about 30 to 40 minutes, and then would like to have a dialogue with you, to share your ideas

- explored themes of place, scale, diversity and limits in my first CRC
- space, my dance with geography

Thursday, 31 May, 12

my own research took me a long time to get to geography, but the more I explored my CRC themes of place, scale, diversity and limits, it naturally led me to the concept of space and thus I began to dig more deeply the geographical literature

although I work with some 'reformed' geographers and all of my research projects are informed by advisory committees and my CRC with a Board of Directors in which I deliberately structured to fill my 'gaps' (mainly ecology) and to bring policy and civil society perspectives to my research, I have neglected to reach out to geography

equally, geography may have neglected to reach out to the sustainable development community, as it emerged in the early 1980s

recent GAGSLIST debate over the suggestion to move physical geography to earth sciences

our culture is such that the disciplines will defend themselves against any structural change (example of the NRTEE)

over three hundred years ago, Leibnitz suggested that university organization in terms of faculties, impeded the expansion of knowledge across and beyond disciplines

we all suffer from solitudes (between the natural social sciences), silos (disciplinary rigidities) and stovepipes (personal lens--specialism, gender, age, training and seniority)

elegant quote by Phil Dearden, again in the recent CAGSLIST debate, "We need more appreciation of spatial differences in impacts and response, more integration of the biophysical and social sciences in designing effect response mechanisms and overall more applied research on sustainability, all hallmarks of the geographical endeavour".

it is the research context, the problem that should determine the method, whether disciplinary, inter- or transdiscipline, or a mixed methods approach

The Context

- **messy, wicked problems, deeply coupled**
- beyond any one sector ...
- scientifically complex and bio-complexity
- geographically unfocussed
- **any one discipline to solve**
- embedded in landscapes that are rapidly changing

Thursday, 31 May, 12

what is our contextual appreciation? We are dealing with problems that are . . .with potentially devastating effects?

our world is now hyper connected through globalization and our use of the internet may be changing the nature of our relationships and our identities in ways we are just perceiving

most fundamental change is the co-evolving nature of ecological and human systems which makes scientific certainty and complete information impossible, both of which have their own complexities

and a problem such as sustainable development is never attainable, it is a constantly moving target

Thursday, 31 May, 12

clearly, the main challenges of the anthropocene era are transdisciplinary problems and will continue to be so in the foreseeable future

would like to read a quote from a 19th century French philosopher, Claire Demare, who has greatly influenced my thinking and for me, aptly describes the structure of our knowledge systems, and the terrorism of either/or

“You proclaim two natures? Indeed, tomorrow, depending on how many declare themselves to belong to the one or the other. . .
You’ll make one, perhaps involuntarily, predominate over the other, and soon we’ll have a bad and good nature, an original sin. . .
You shall be the God and I shall be the devil.”

What, then, are our failures, in addition to the social sciences still considered by many to be a ‘suppository’ to the natural sciences

Perhaps this might eliminate the framing of both as the ‘hard’ versus the ‘soft’ sciences--for how one frames an issue is critically important

Our Failure

- to communicate
- the science to the public(s)
- and the **urgency** of the problematique

Thursday, 31 May, 12

perhaps our greatest failure is to communicate/or transfer our knowledge to government decision-makers, and with the current federal administration, the local level may be the most important

given our context, we have a serious disconnect with the nature of the challenges that demand unprecedented collaboration between researchers, practitioners, social innovators and civil society leaders

we need greater consensus between the sciences about the uncertainties and how to frame those uncertainties to contribute to evidence-based policy-making, when that space opens up again, to avoid contributing to the obnoxious political polarization between jobs and the environment, that maintains the space for the traditional 'vested' interests

for example



Thursday, 31 May, 12

policies developed under each of these scenarios would be radically different

we often have little scientific consensus on the appropriate scale for resolution, a focus for action, for example, with biodiversity--at the species, population or habitat level or all three simultaneously

we need greater scientific consensus on what kinds of thresholds we are facing and how soon, which can only come from more integrative science

so, what are our challenges?



Thursday, 31 May, 12

policies developed under each of these scenarios would be radically different

we often have little scientific consensus on the appropriate scale for resolution, a focus for action, for example, with biodiversity--at the species, population or habitate level or all three simultaneously

we need greater scientific consensus on what kinds of thresholds we are facing and how soon, which can only come from more integrative science

so, what are our challenges?



Thursday, 31 May, 12

policies developed under each of these scenarios would be radically different

we often have little scientific consensus on the appropriate scale for resolution, a focus for action, for example, with biodiversity--at the species, population or habitate level or all three simultaneously

we need greater scientific consensus on what kinds of thresholds we are facing and how soon, which can only come from more integrative science

so, what are our challenges?



Thursday, 31 May, 12

policies developed under each of these scenarios would be radically different

we often have little scientific consensus on the appropriate scale for resolution, a focus for action, for example, with biodiversity--at the species, population or habitat level or all three simultaneously

we need greater scientific consensus on what kinds of thresholds we are facing and how soon, which can only come from more integrative science

so, what are our challenges?

Either/Or

The Loss of the Middle

- continued polarized dialectical debate
- false dichotomies, artificial separations
- are we even asking the right ‘big sticky’ questions

Thursday, 31 May, 12

and we have to question as researchers--are we even asking the right questions--the big 'sticky' ones and clearly most of the big sticks facing modern society are ultimately, not necessarily those of scientific or managed origin, rather it is about people, their diverse cultures, interests, visions, priorities and needs (Norgaard, 1994) as well, we need to think about the 'relevance gap' between research agendas and the Canadian public(s) this relevance gap was revealed in the 2009 SSHRC report entitled, What Have We Learned ABOUT 'Capturing Impacts' in the Social Sciences and Humanities Canadians viewed family security, peace, equality, respect and justice as the most important guiding life principles for Canadians--protecting and preserving culture and heritage and a creative world, rich in arts and cultural activity ranked lower. Environment, poverty reduction, health, employment and education were top-ranking investment priorities. In contrast to the public, social science and humanities researchers thought the defining agendas and excellent scholarship were the most important characteristics defining high quality research. There was also a tendency to view multidisciplinary collaboration and "value for money" as least important. Researchers viewed employment, public safety, economic activity and natural resource production as much lower priorities than did the general public. The researcher who compiled this data from a national survey of 1,920 Canadians and 366 researchers, argued it highlighted the need for greater integrated thinking when considering research and innovation

What are our challenges?

Challenges

- **disciplinary** structure of the academy
- lack of integration within and between disciplines
- what makes a good researcher?
- intellectual homelessness (Golde & Gallagher, 1999)
- failure of geography to **embrace** sustainable development

Thursday, 31 May, 12

we are still faced with artificial dualisms, and separations that reinforce the dichotomy of either/or

solitudes (between natural and social sciences), the silos (between the disciplines) and the stovepipes within (for example, between physical and human geographers)

we are challenged by research funding vehicles that focus on short term wins

CFI privileges funding for 'hard' infrastructure, although there is some softening, but not enough (example of Royal Society)

a culture that prizes individual inquiry over collaborative inquiry--the tyranny of sole authorship

in her big thinking talk at noon today, Janine Brodie, Trudeau Fellow, spoke about how a lot of creative research is ruled out by the peer-review system and that we have been put on a wheel that governs us that makes us increasingly irrelevant to the broader publics

that we live in a world of connected shared fates and critical work is needed by academics to give this meaning

So, how do we break down the walls?



Thursday, 31 May, 12

Through synoikismos, the name given to polis formation by the Greeks, **synoikismos**, literally a “gathering together.” Synoikismos could take one or both of two forms—it could be a physical concentration of the population in a single city or an act of purely political unification that allowed the population to continue living in a dispersed way.

it is critical to bring back the middle,

Overcoming the Terrorism

- inter- and **transdiscipline**
- **intersections** within disciplines
- collaboration between disciplines
- the **'edges'**
- emergent bridging disciplines

Thursday, 31 May, 12

through more integrative sciences and inter- and transdiscipline research, particularly important for anyone concerned with sustainable development, urban sustainability, and climate change adaptation and mitigation
for example, we have now seen four major environmental waves, and every one of them has been trumped by the economic agenda. I have previously argued we have been more successful at reconciling the environment and economic imperatives, than the social, however, I am now wondering about this, as politicians continue to be successful at sustaining the jobs versus the environment dichotomy
rather than seeing growth and the environment, frequently identified as opposites (A and non-A) by politicians, as complementary, they remain polar opposites. By sustaining this dialectic position, vested interests maintain the status quo
such opposition could be solved from the biocentric level of more integrative science through which growth and environment, as complementary opposites, becomes a unified development, the included. Recall the relevance gap and the high ranking of job security by Canadians
"Discipline and transdiscipline must be understood as complementary. The transit from one to the other, attaining glimpses from different levels of reality, generates reciprocal enrichment that may facilitate the understanding of complexity. Transdisciplinarity, more than a new discipline or super-discipline is, actually a different manner of seeing the world, more systemic and more holistic (Max-Neef, 2005).
we need more fluid disciplinary structures that facilitate more interactions between and within disciplines, for greater collaboration between the humanities, the natural and the social sciences
more space to self-organize at the edges

How do we enlarge this space?

Re-Enlarging the Research Space

- challenge, foresight function in the granting councils (big, sticky questions)
- **integrated** natural and social sciences
- more SSHRC interdisciplinary committees
- new metrics

Thursday, 31 May, 12

foresight activities are conducted to anticipate major societal future challenges and provide support to current decision-making

to identify emerging research areas and avoid privileging the past, way of promoting where there are the new opportunities and new relationships

European framework allocates a certain percentage of funding to what they refer to as the grand challenges

buffer against government intervention, every 3–5 years, initiate a foresight dialogue between researchers, practitioners and policy-makers to identify the emerging grand challenges

having in place foresight mechanisms against which objectives and indicators are framed

buffer the relevance gap--the gulf between the research that society most requires and the research that is produced (Donovan, 2007)

more SSHRC inter not multi-disciplinary committees--they would argue they have the former, I argue the latter

and we more more researchers with interdisciplinary expertise, who do or have done interdisciplinary research to step up to the plate as committee members

Transdiscipline Skills

- **interpersonal** and intrapersonal (trust)
- **cognitive** (differentiating, reconciling, synthesising) (Lyall & Meagher, 2012)
- **communicating** across disciplinary, epistemic and methodological boundaries
- **scholarship of integration** (Luttuca, 2001)
- **collaboration** knowledge mobilization

Thursday, 31 May, 12

ability to work in teams of varying sizes and complexity

negotiating and problem-solving, managing interpersonal relationships and conflict

trust critically important, in the ability of one's self to keep searching for integration, to live in the tension of the 'void' at the beginning, to test out a range of possible boundaries to the problem to see which gives the best 'fit'

dealing with multiple domains of literature, inputs from several knowledge domains, ability to synthesize large amounts of information

hold the tension between breadth and depth

striving to achieve "pursuit of a conversation aimed at enhanced understanding rather than victory for one point of view" (Szostak, 2008)

communicating and framing problems jointly

ability to sustain on-going dialogue and connections between researchers, practitioners and civil society

tools for enhancing interdisciplinary communication--structured dialogue, integrated timeline (brainstorm about historic events), mind mapping (brainstorm factors and drivers), cross-impact analysis (explore the relationships between each major theme identified in the mind-mapping exercises), imaging the ideal, and backcasting (Winowiecki, 2011)

use of strategic questioning

integrated rather than 'compartmental' writing, depends upon ability to synthesize information in a cohesive story

collaboration within and outside the academy, collaboration, again, it appears to be a skill that everyone thinks they have, critical to this type of research

collaboration is inherent to social innovation which can be defined as the generation and implementation of new ideas about social relationships and social innovation.

Optimizing its benefits necessitates the involvement of elites who control organizational decision-making. . .all necessary if we want to make a difference with our research, and as Janine referred to, reclaim that which has been written out of the discourse

How?

Knowledge mobilization

- social media
- HEADTalks
- transdiscipline diffusion



Big **Sticky** Questions

- rethinking **growth**
- environment and **climate change**
- **urban** sustainability
- inverting the pyramid of **power**
- natural resource **limits**
- **spatial justice**

**It is time to decolonize our universities and learn
from the diverse ecologies of knowledge about
how to live sustainably.**

Dr. Rajesh Tandon, UNESCO Chair, Community Based Research and Social Responsibility in Higher Education

Transdisciplinarity, more than a new discipline or super-discipline is, actually, a different manner of seeing the world, more systemic and more holistic.

Max-Neef, 2005

More interaction between the natural and social sciences is necessary, and the lack of effective dialogue between science and social policy is hampering the implementation of adaptation measures.

Dirk Hoffman, Executive Director of the Bolivian Mountain Institute

day and night, particle and wave, sun and moon, male and female, reason and emotion, logic and intuition, discipline and transdiscipline not as dichotomies, but as complements that converge and merge without losing their identities.

Max-Neef, 2005