

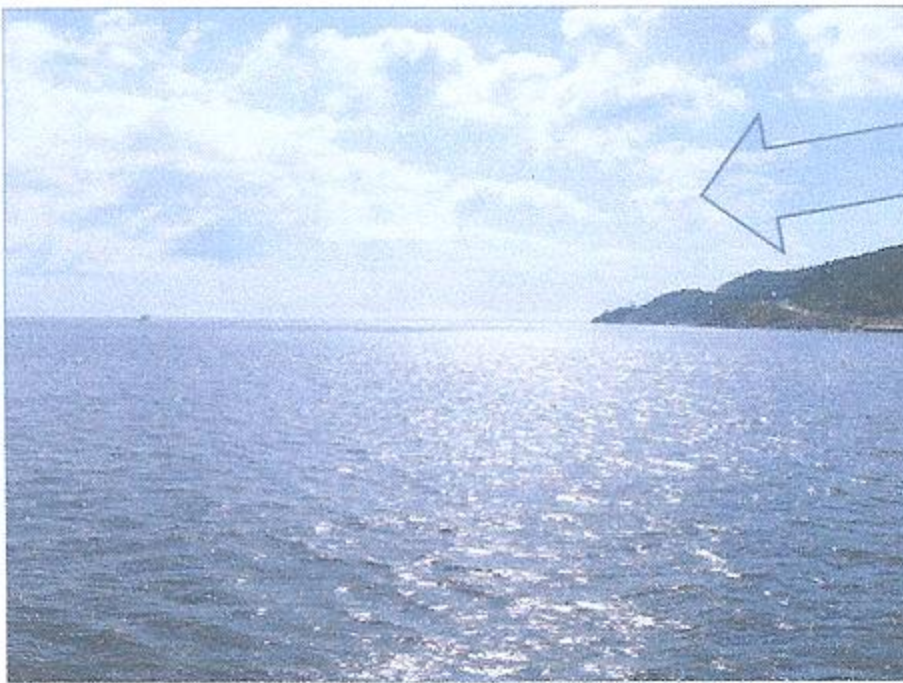
# Coastal Communities and Ecohealth

Nancy Doubleday<sup>1</sup> and Fikret Berkes<sup>2</sup>

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**1. Ecohealth is about ecosystems and human health, and sometimes about the health of ecosystems.** It is often described using keywords like “population health”, “epidemiology”, “emerging diseases”, and “chemical contaminants”, but to us relying on medically based descriptors seems to narrow a complex area of inquiry prematurely. Some of our formative experiences in ecohealth were with the Northern Contaminants Program (mainly Northwest Territories) and the James Bay area (Quebec), so we know that **the health of the land and waters is seen by indigenous peoples to be closely linked with human health and community health.**



**2.** This idea is relevant not only for indigenous people; it applies also for example to people of coastal areas, bays and estuaries, and lakes and rivers. Analytically, we are dealing with integrated human-environment or social-ecological systems, those that include social (human) and ecological (biophysical) subsystems in a two-way feedback interaction.

**3.** One implication of such a social-ecological systems approach is that we need to look at **feedbacks both ways and not only at the impact of the environment on health.**

A second implication is that we can no longer keep **research and policy for the environment separate from human health.**

**4.** The two need to be considered together, but very few studies do this.

Our broader objective is to **start a dialogue investigating a more comprehensive concept of ecohealth.**

## 5. KEY QUESTIONS:

If “ECOHEALTH” is MORE THAN biomedical science, what is it?

Does it include livelihoods, entitlements and access to resources? Community health and resilience?

Does it include “sense of place” and therapeutic landscapes? Social connectivity, reciprocity, and social capital?

But if ecohealth is everything, it is nothing. So what are the really important components of ecohealth? One way to investigate this is to begin by asking people what they consider as the key dimensions of ecohealth, and this is our starting point. The long term need is then try to incorporate these considerations into initiatives and policies that consider health and environment together.

Please join us for an initial conversation!

Monday, June 27 @ 4:30PM in The Secunda Boardroom, 4th Floor, Sobey Building.



## Coastal Communities and Ecohealth

Nancy Doubleday and Fikret Berkes

Ecohealth is about ecosystems and human health, and sometimes about the health of ecosystems. It is often described using keywords like “population health”, “epidemiology”, “emerging diseases”, and “chemical contaminants”, but to us relying on medically based descriptors seems to narrow a complex area of inquiry prematurely. Some of our formative experiences in ecohealth were with the Northern Contaminants Program (mainly Northwest Territories) and the James Bay area (Quebec), so we know that the health of the land and waters is seen by indigenous peoples to be closely linked with human health and community health. But this idea is relevant not only for indigenous people; it applies also for example to people of coastal areas, bays and estuaries, and lakes and rivers. Analytically, we are dealing with integrated human-environment or social-ecological systems, those that include social (human) and ecological (biophysical) subsystems in a two-way feedback interaction. One implication of such a social-ecological systems approach is that we need to look at feedbacks both ways and not only at the impact of the environment on health. A second implication is that we can no longer keep research and policy for the environment separate from human health. The two need to be considered together, but very few studies do this. Our broader objective is to start a dialogue investigating a more comprehensive concept of ecohealth. If it is not merely biomedical science, what is it? Does it include livelihoods, entitlements and access to resources? Community health and resilience? Does it include “sense of place” and therapeutic landscapes? Social connectivity, reciprocity, and social capital? But if ecohealth is everything, it is nothing. So what are the really important components of ecohealth? One way to investigate this is to begin by asking people what they consider as the key dimensions of ecohealth, and this is our starting point. The long term need is then try to incorporate these considerations into initiatives and policies that consider health and environment together.

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One implication of such a social-ecological systems approach is that we need to look at feedbacks both ways and not only at the impact of the environment on health. A second implication is that we can no longer keep research and policy for the environment separate from human health.

Please join us! for a conversation on  
ecohealth!

*When?* Monday, June 27 @ 4:30 pm

4:40 - 5:30 PM

*Where?* The Secunda Boardroom,  
4th Floor, Sobeys Building





# ECO — HEALTH

Home  $\approx$  Environment

Ecosystem / Biophysical / Human  
Ecological / Social  
Spirituality / Happiness

in Nature



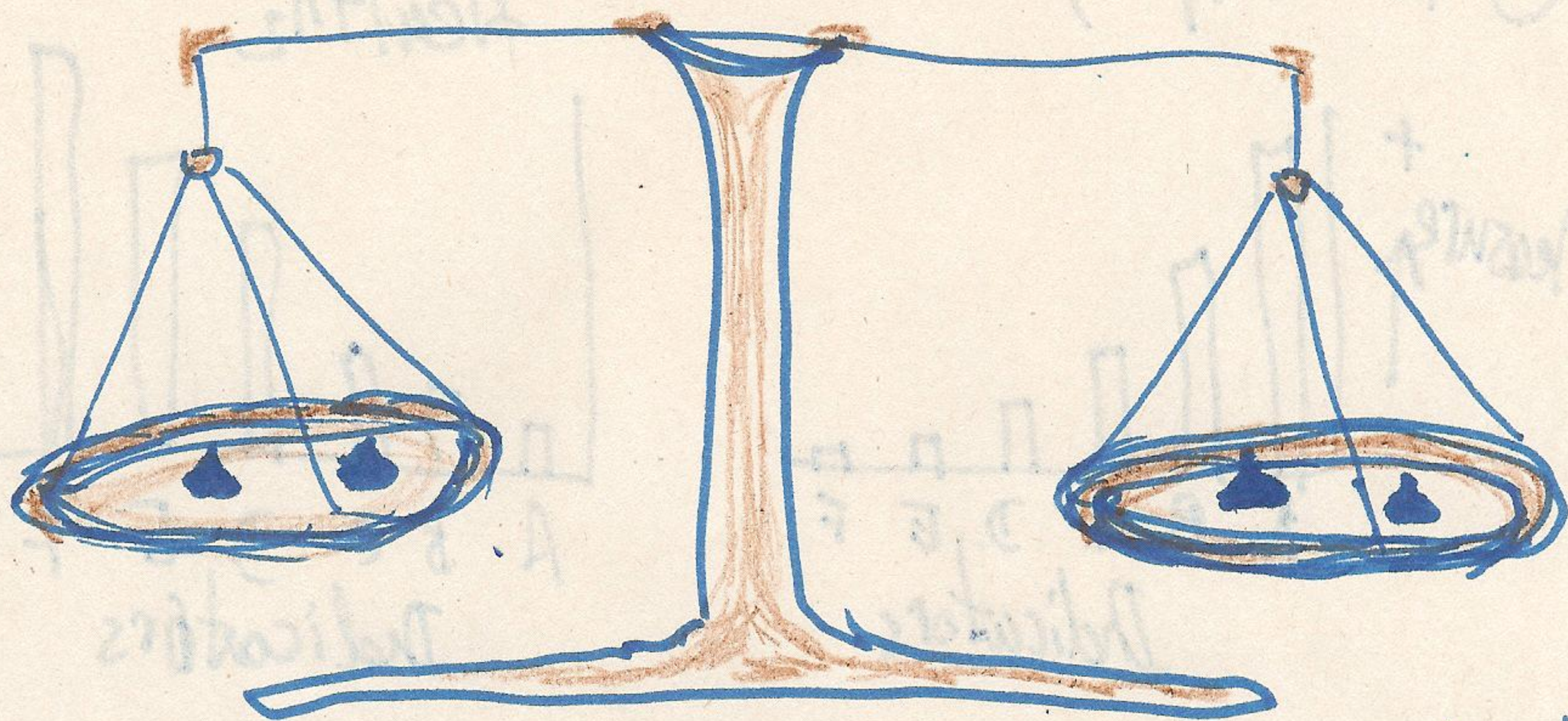
I WILL TRY PROTECT  
OUR PLANET FOR MY

GRAND KIDS FUTURE

I AM RESPONSIBLE

HUBERT SAULNIER





What is the difference between: ↖ indicators

$Health_1(\cdot)$  and  $Health_2(\cdot)$ ?

Can we say (in general terms - using appropriate Quantitative & Qualitative indicators) that

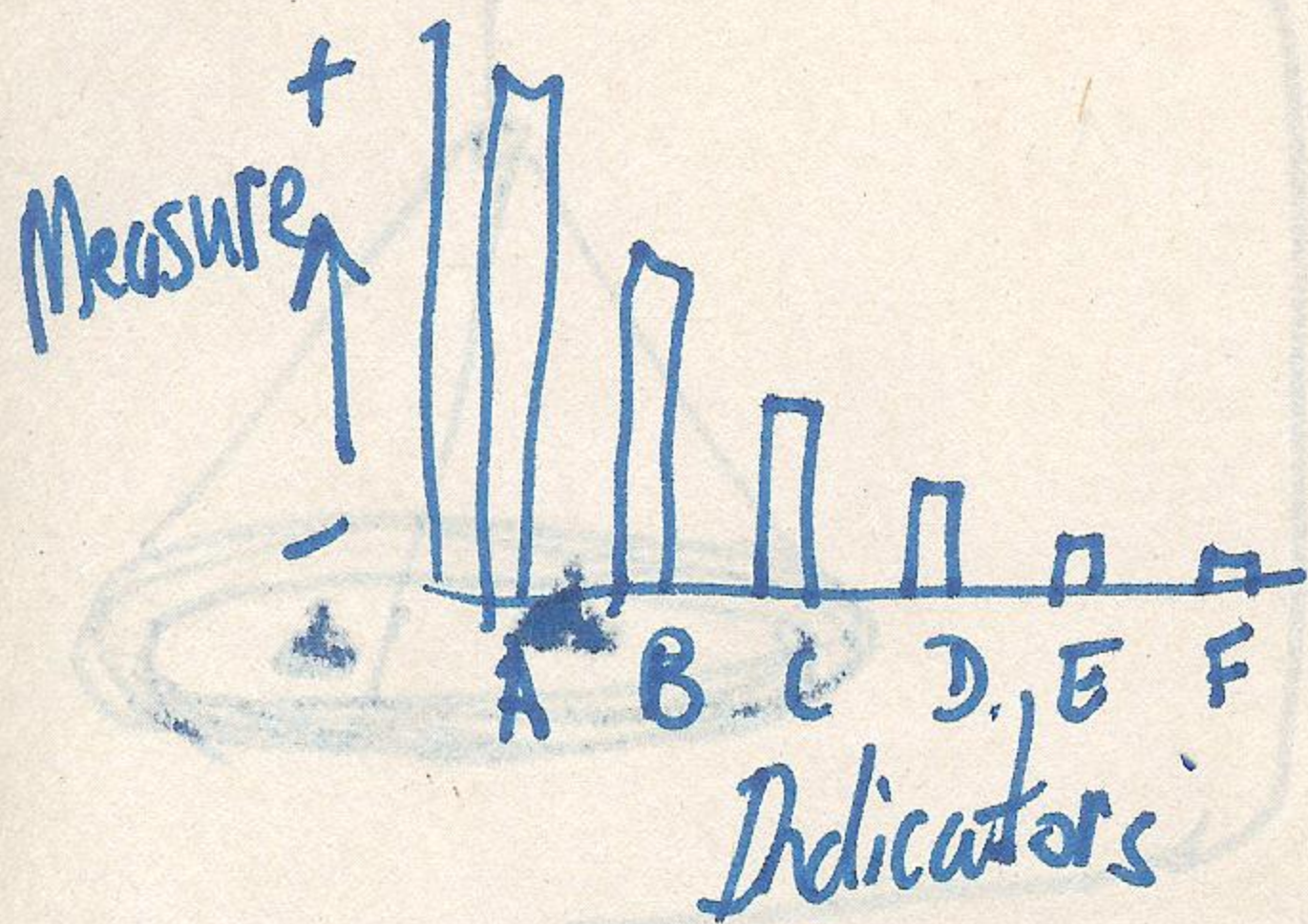
$Health_1(\cdot) < Health_2(\cdot)$

i.e.  $H_1(\cdot)$  'is preferred' to  $H_2(\cdot)$ ?

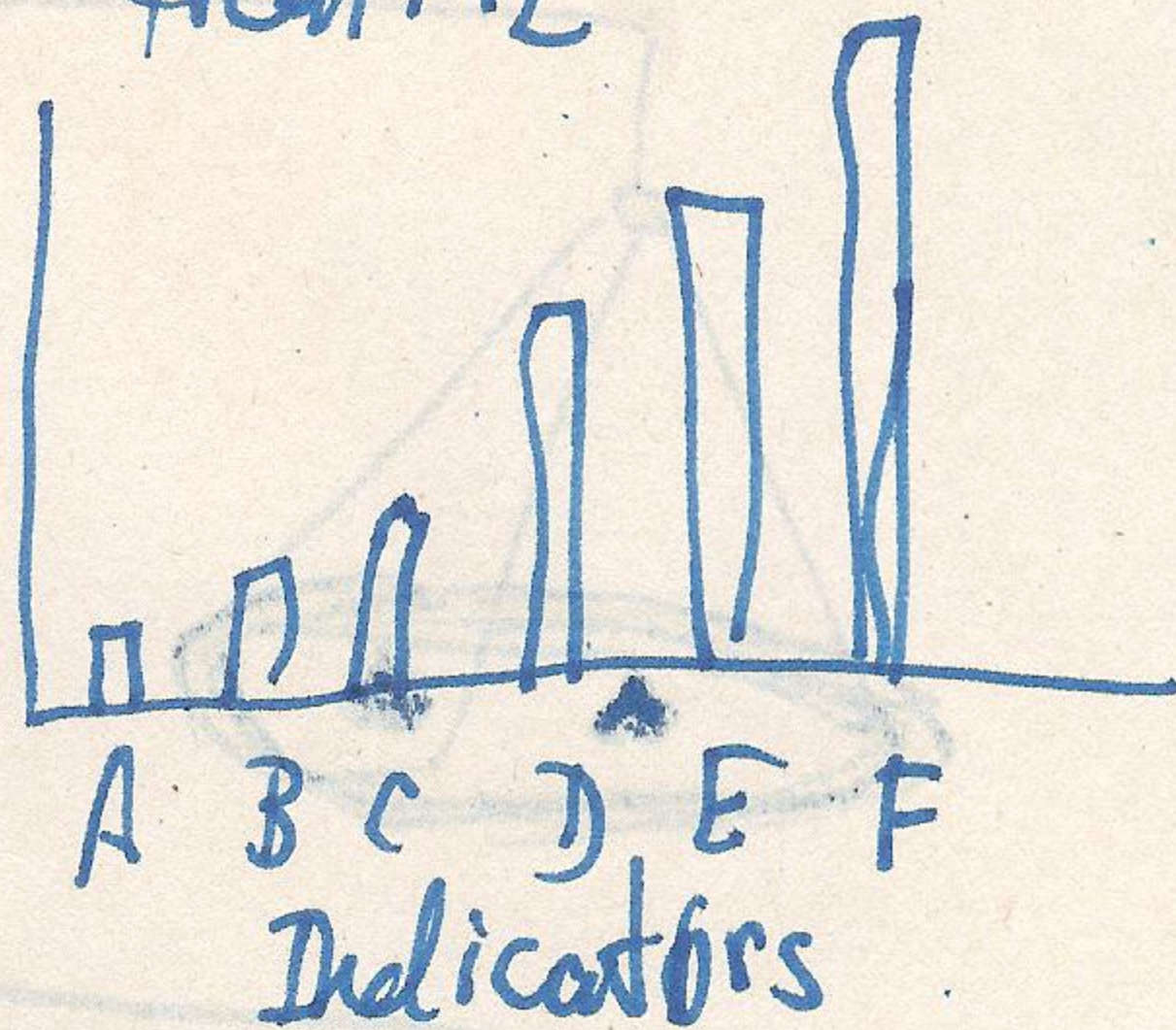
If the answer is 'No', then we should stop trying to make the comparisons - the "functions" are not functions that can be objectivized.



① Health<sub>1</sub>(.)

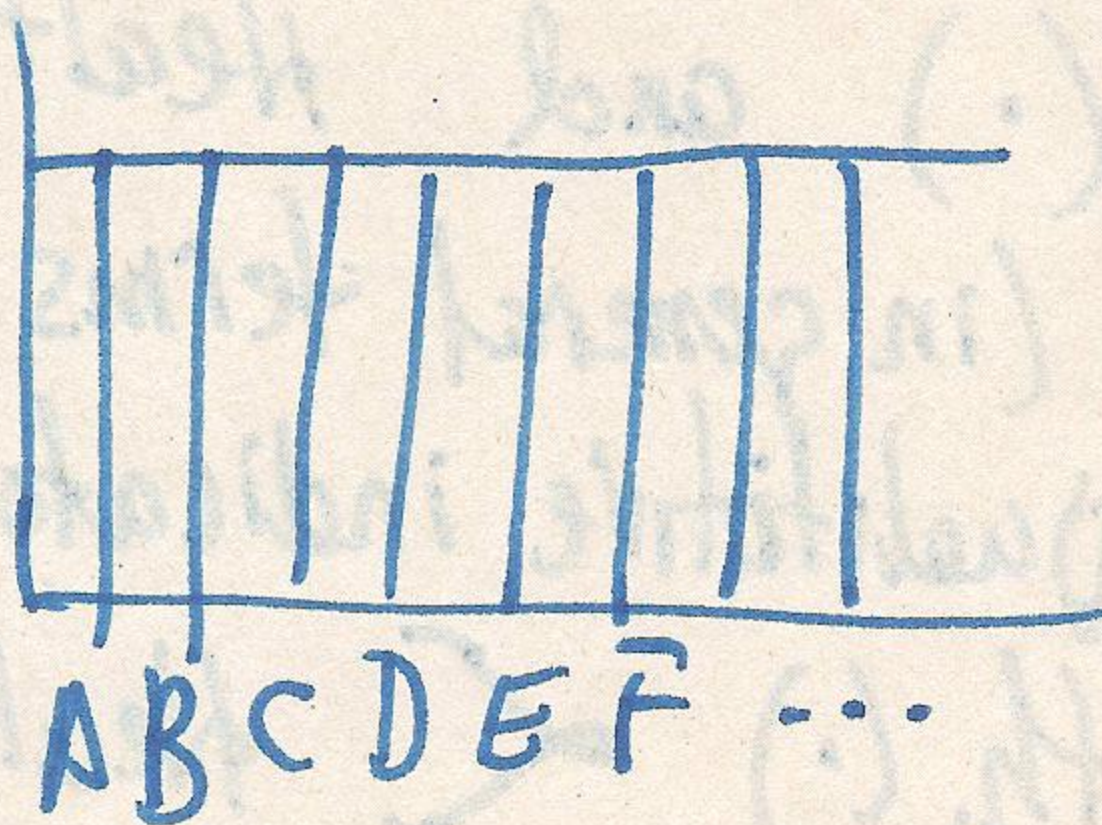


Health<sub>2</sub>



VS

"Balance" →  
?



D. Lane

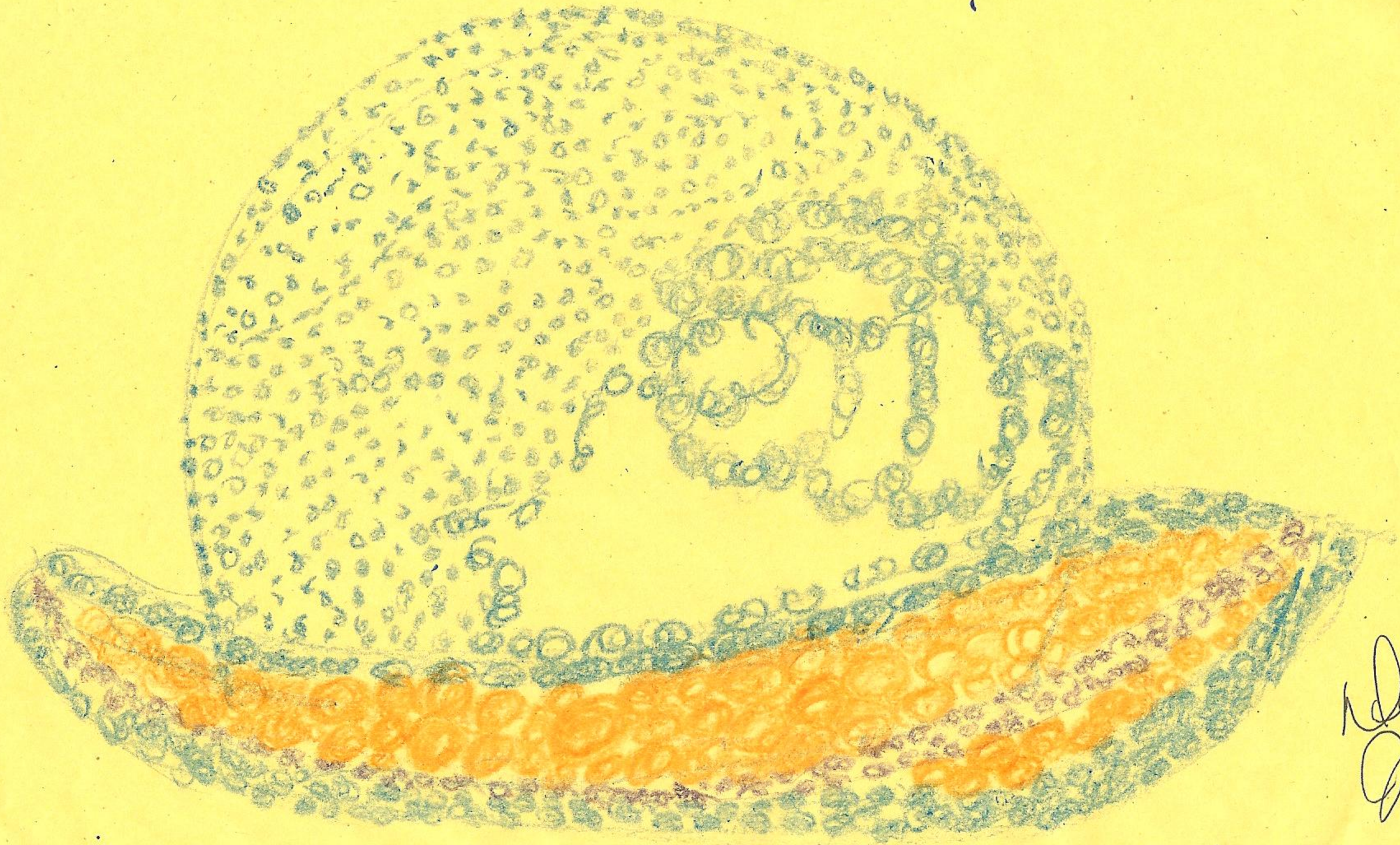


Eco health -

Engaged community  
Wellness deeply rooted in a  
sense of place + values

Community = Environment, town,  
family, group of trees, ocean, <sup>series</sup>  
social group, watershed... style





Denise Golden  
June 27/11

Each dot makes a point in creating the picture -  
But stepping back from looking at one point  
creates the whole picture



What is ecohealth? it is a new term  
It is something that is at risk  
by human activities

Ecohealth is being balanced  
at  $\rightarrow$  earth  
at  $\rightarrow$  the universe

Minerva Arce-Ibarra





claire  
Hutton



Climate change, can  
erode all  
the supports

Footpath

Barriers

clean air

clean water

clean  
soil

clean food

Supportive  
institutions

Safety

Belonging

social inclusion

Peace

Access

Opportunity

Capitalism/  
Specialization  
Globalization  
Systems' inertia  
Disempowerment  
Disconnection

greatest



# Ecohealth

Balance in an interconnected network

eco = home

System = coexistence

circular yes but spiral in continuity for individual  
to global sphere

eco = whole

web / network

one is all - all is part of one



# ECO HEALTH

Well-being  
of & from  
the Earth, our  
home.

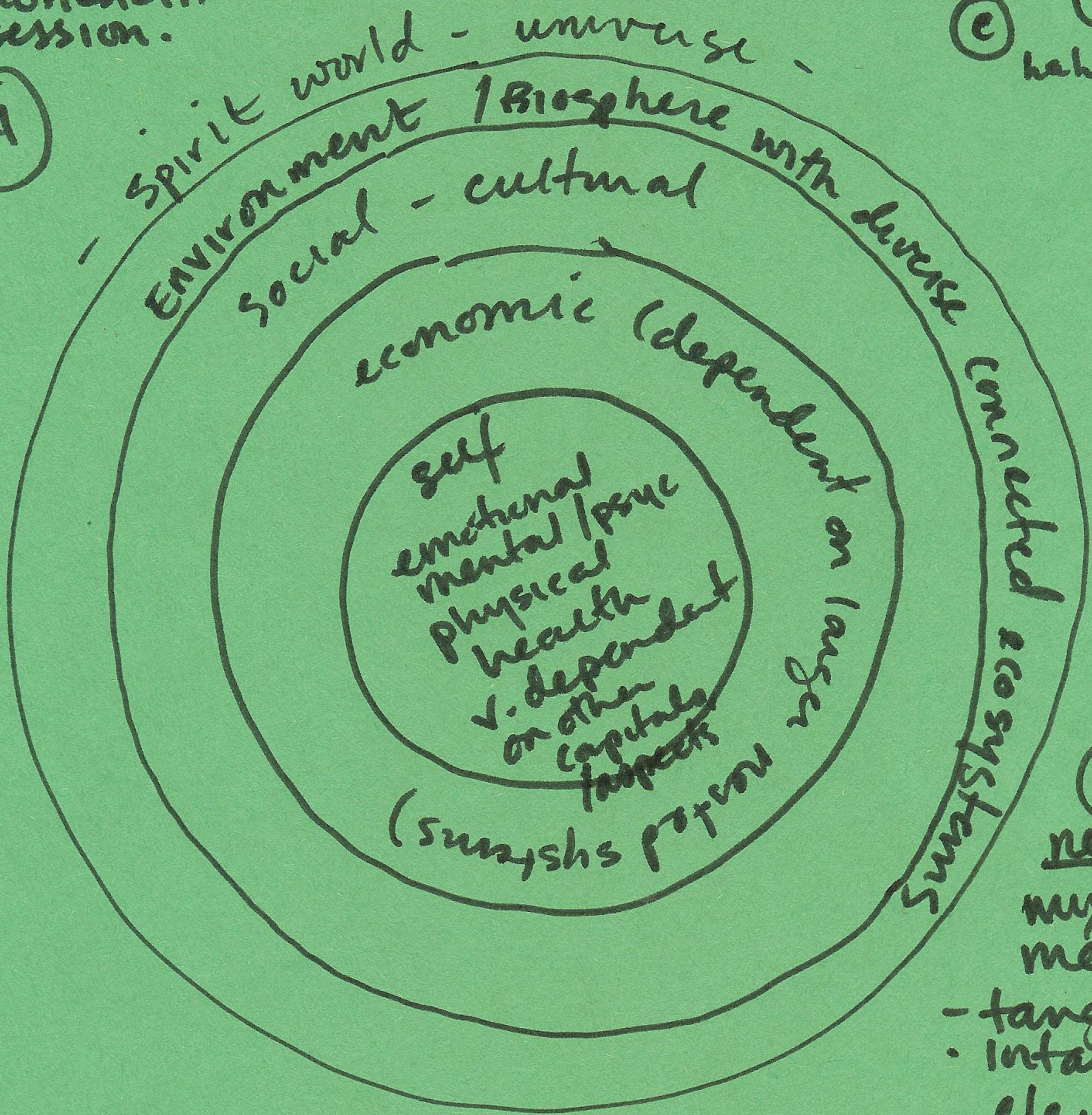
Barry Smith  
June 27, 2011



June 27, 2011  
People in Places  
EcoHealth  
Session.

putting in  
my dissertation  
© haha.

(A)

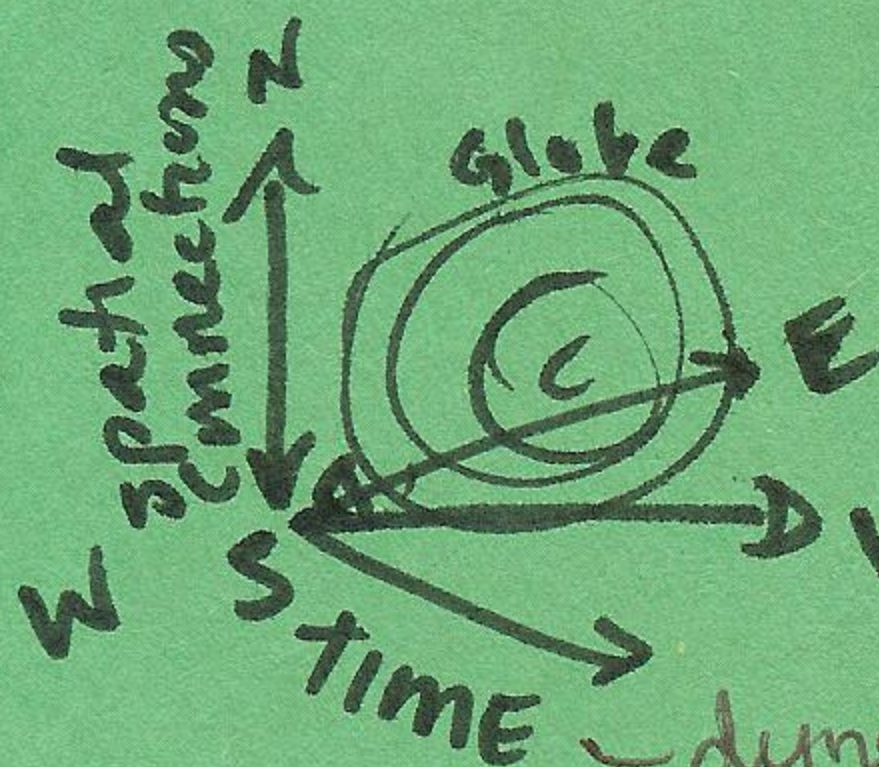


(B)

need  
mixed  
methods  
- tangible  
- intangible  
elements

Within context of change  
+ with many? 4? dimensions.

Nancy's  
insights.

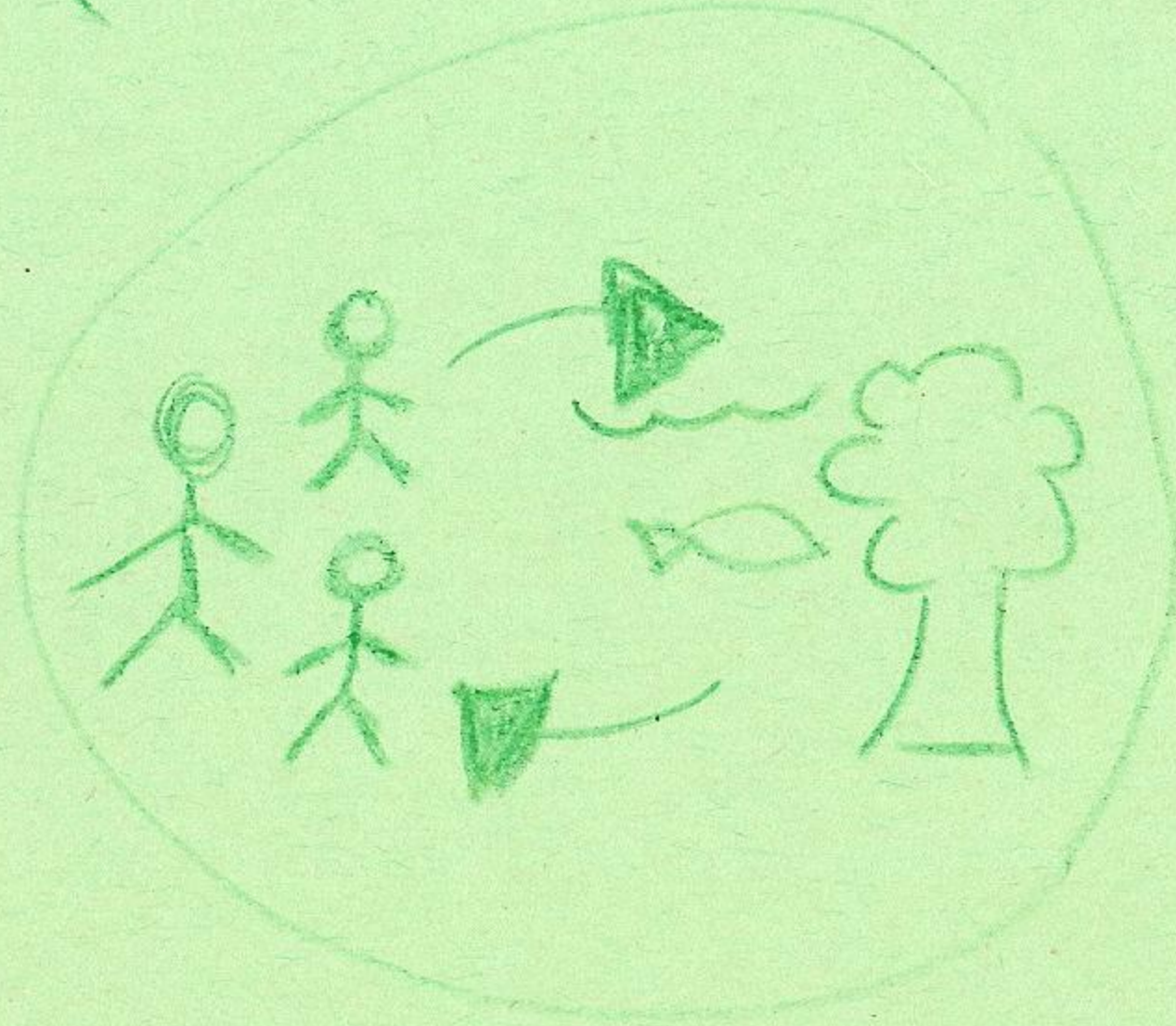


teleconnections  
wellness  
justice  
peace  
community  
ecosystems

Canadian Biosphere Res  
www.little-green-book.ca  
smendis@uwaterloo.ca

Sharmalene Mendis-Millard





- Communities as part of
- Symbiotic relationships to earth
- strong localized relationships  
human/natural resource
- local tools  
for local solutions

• ~~social-ecological~~

• social-ecological = economic institutions

• shift from capitalistic focus to communities & environment as focus.

• shift from ownership

Kim Olson



We have to get back  
this world to our  
children and their children  
but we have to do that  
in the best condition possible

Ricardo Torres



Page 1  
Biology Worksheet

### Chapter: Communication and Ecosystems

Science Foundation and Place Name

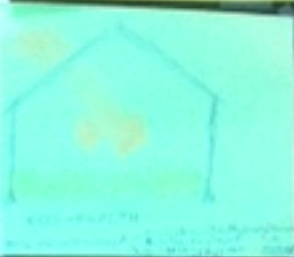
Students in their science and biology classes are learning about the importance of communication in ecosystems. This worksheet is designed to help them understand the role of communication in the environment.



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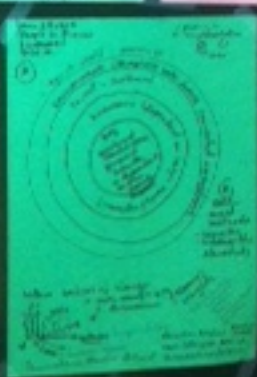
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**ECO HEALTH**  
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I was 19 years  
old when I was  
first in my  
Grandfather's house.  
I am surprised.



We have to get back  
this world to our  
children and their children  
but we have to do that  
in the best condition possible  
Ricardo Jones

