

On interdisciplinary work

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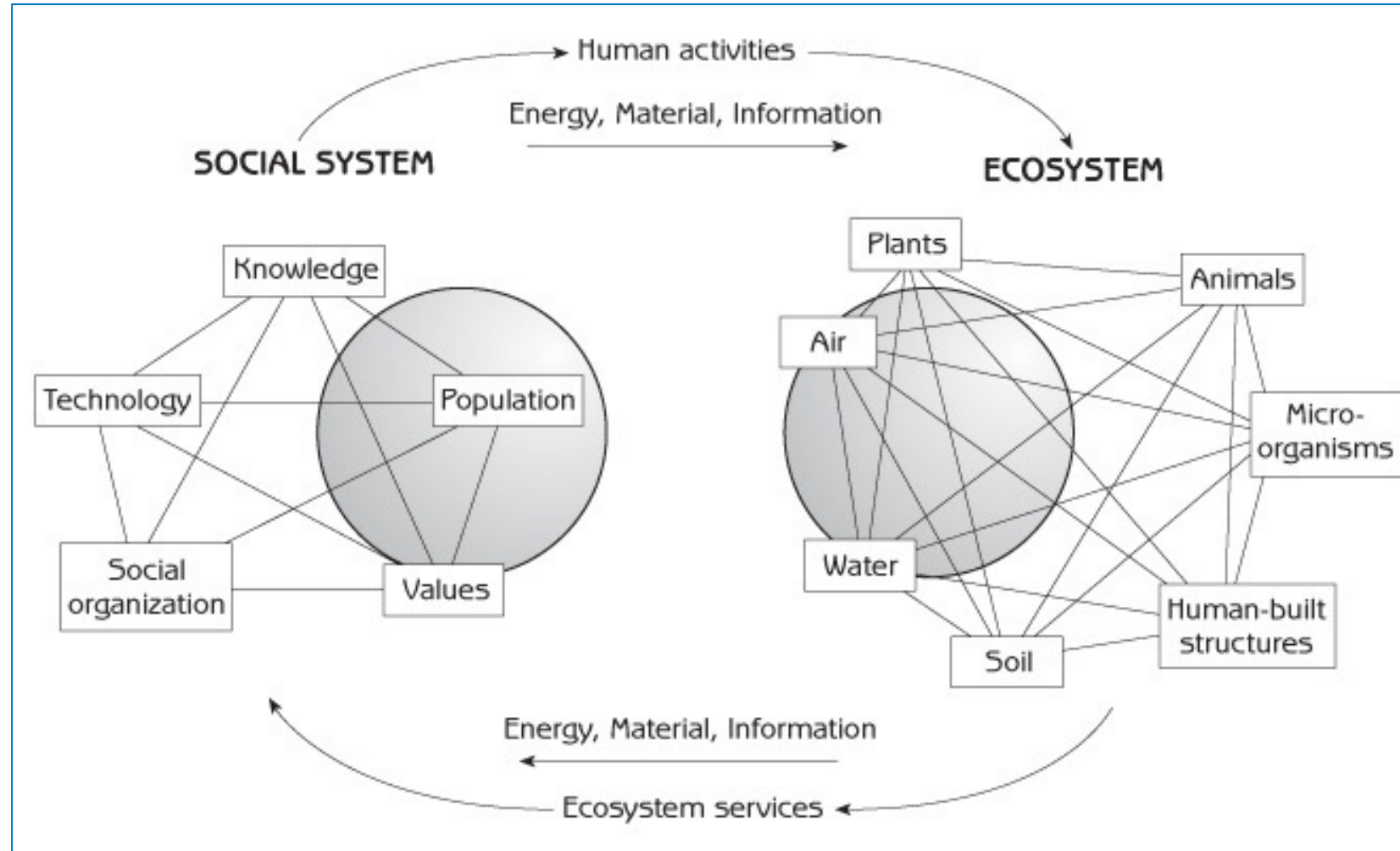
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*Human influence on the Earth and its processes increases **but** most of our intellectual weapons in the environmental area have maintained a separation of humans and nature*

Lesley Head



Natural science attitudes to social science/humanities in biodiversity research that concerns humans and the human society

Ignorant that the issue concerns humans

Ignorant that there is SSH research addressing the issue

Recognizing the need for SSH research and carrying out SSH studies, without engaging SSH competence

inviting SSH to pre-defined roles and having a definite approach

Involving SSH, but keeping an implicit hierarchy of perspectives and power

Jointly address societal challenges with mutual respect

Interdisciplinarity!

Five core aspects

- **Personality**
- **People**
- **Problem**
- **Concepts and frameworks**
- **Process**

Personality

- Interest in real world problems and making an impact
- Willingness to learn and to be challenged
- Openness to new approaches, not seeing differences as a problem
- Curiosity
- Listening skills
- Desire to understand the reasons, motivations and hidden meanings behind what people say or how and why they conduct research the way they do
- Patience, including developing insights in what might need to be explained to collaborators about one's own field

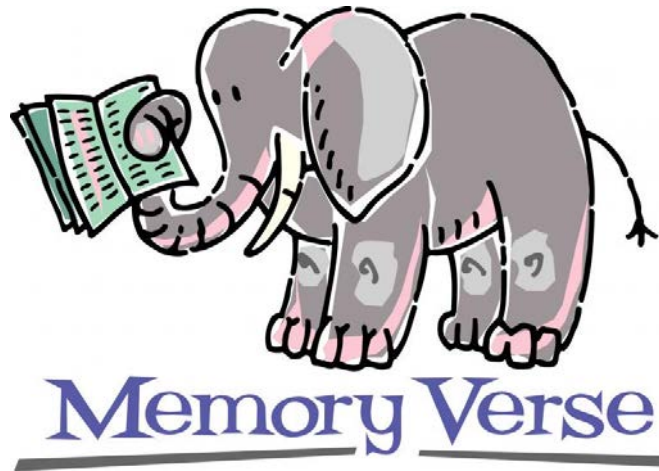


People

- Chemistry
- Well rooted in their own disciplines
- Some with previous experiences of interdisciplinary work



Problem



**Do not assume that everyone are
agreed on the problem**

List of core indicators selected for use in IPBES

Aichi Target	Specific Indicator	DPSIR
4	Ecological Footprint	P
4	Water Footprint (Human appropriation of fresh water)	P
4	Percentage of Category 1 nations in CITES	R
5	Biodiversity Habitat Index	S
5, 12	Species Habitat Index	P,S
5	Forest area as a percentage of total land area	S
5	Trends in forest extent (tree cover)	S
5, 7, 14	Total wood removals	S,I
6	Trends in fisheries certified by the Marine Stewardship Council	R
6	Estimated fisheries catch and fishing effort	P
6	Proportion of fish stocks within biologically sustainable levels	S
6,14	Inland fishery production	S, I
6	Marine Trophic Index	S
7	Proportion of area of forest production under FSC and PEFC certification	R
7	Nitrogen Use Efficiency	P
7	Nitrogen + Phosphate Fertilizers (N+P205 total nutrients)	P
8	Trends in pesticide use	P
8	Trends in nitrogen deposition	P

A core challenge: the quant/qual divide



- *What's the answer to this question?*
- *Why is that the question you are asking?*

(after Campbell 2005)

Concepts and frameworks

- Find out where you can meet intellectually on equal terms
- Promising concepts: Future, scale, time/temporality, practice, landscape,
- Risky concepts: drivers, modelling, system
- Do not get stuck – aim for **Boundary concepts**

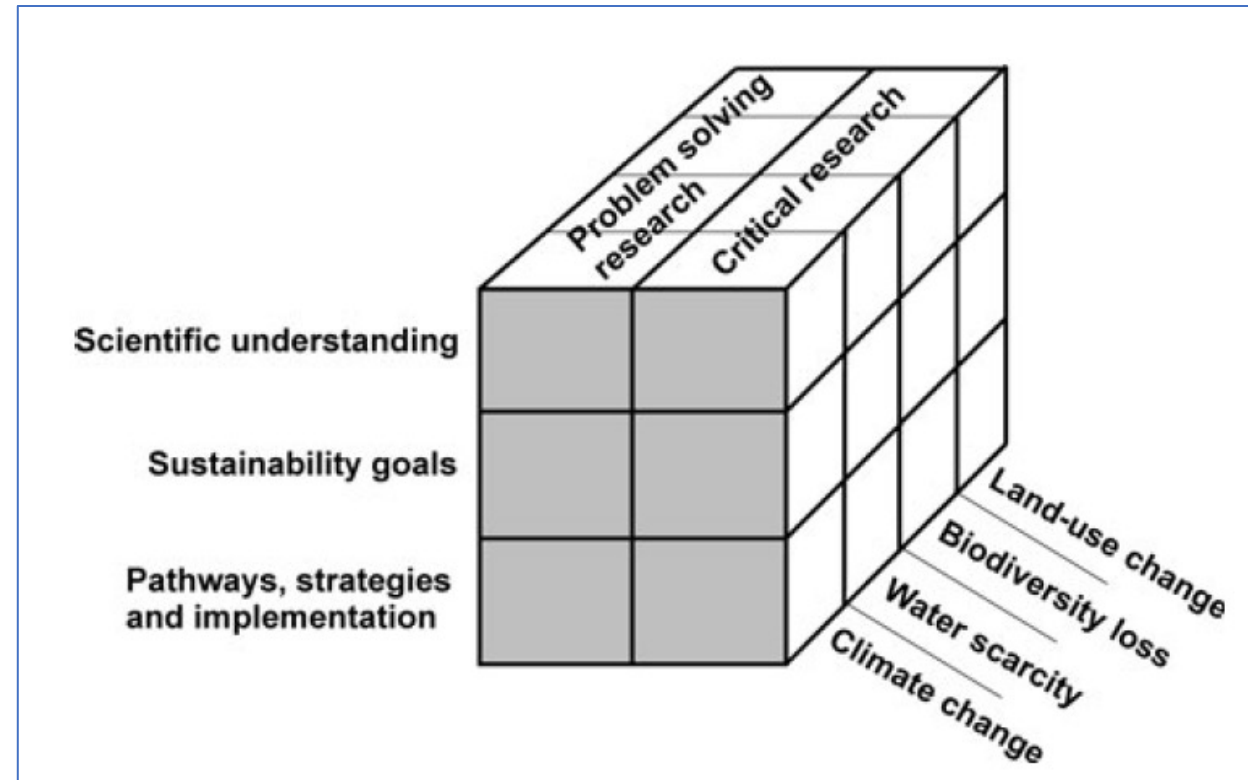
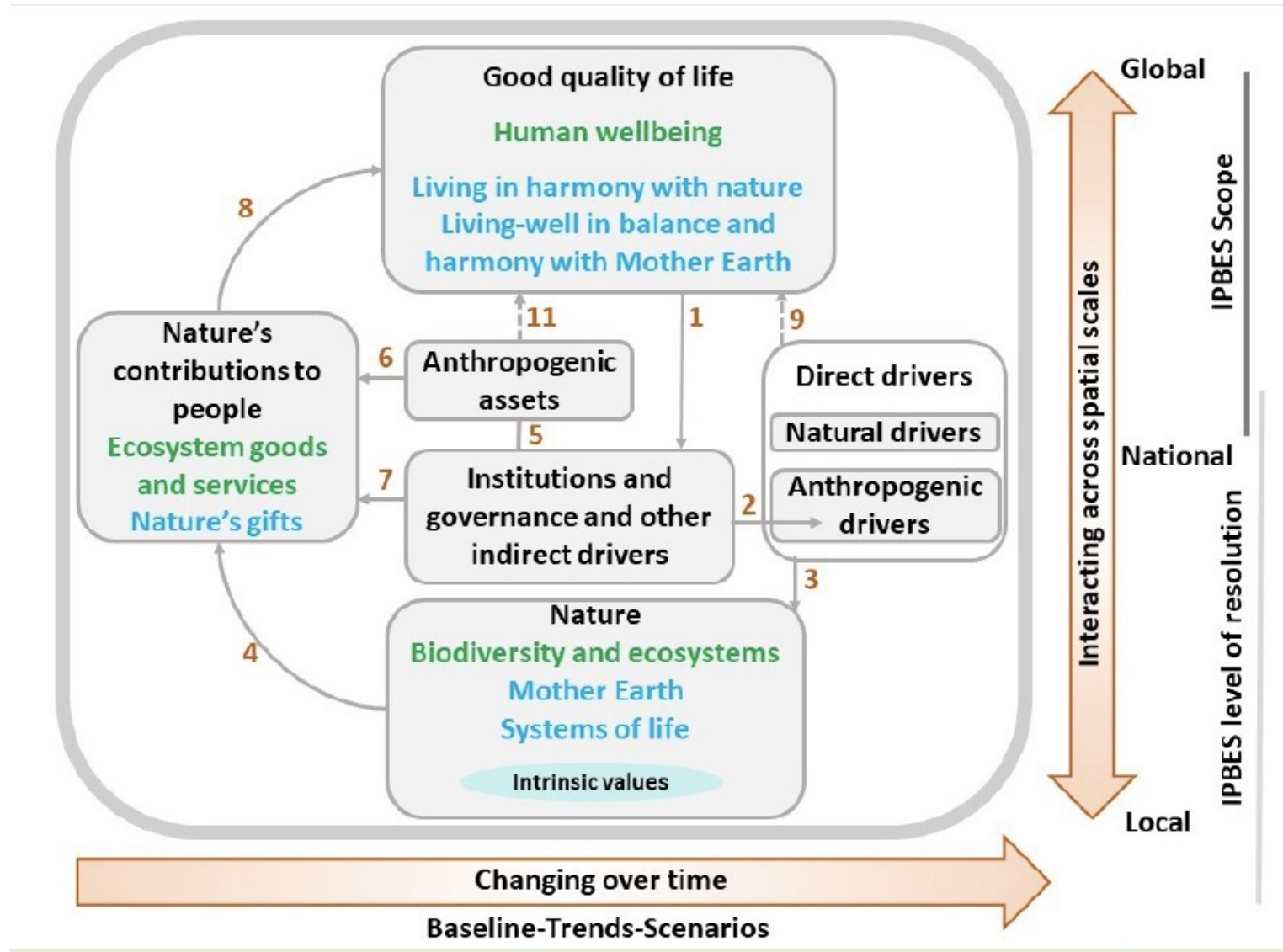


Figure from
LUCSUS

IPBES conceptual framework



- 🍲 What are the diverse uses of wild species?
- 🧠 What does sustainable use of wild species entail?
- 📄 What are the tools and methods for assessing, measuring & managing sustainable use?

Stay tuned for the [@IPBES #SustainableUse](#) Assessment launching at [#IPBES9](#) in July 2022.

[Översätt tweeten](#)



What is 'wild'?

What is 'use'?

What is 'sustainable use'?

Process

- Organisation & Communication – allow enough time early on for understanding differences
- Mutual respect/critical tolerance of each others' perspectives, and how these perspectives evolve
- Build on previous experiences
- Recognize interdisciplinarity as a specific competence

Examples



ZORRO - Interdisciplinary research about management and restoration of eelgrass in Sweden

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research about management and
restoration of eelgrass in Sweden**



**Woody or treeless pastures? Linking subsidy
systems, farmers decisions and management for
understanding biodiversity patterns. (PI Regina Lindborg)**

Examples ctd.

Framework (Kosterhavet)

GÖTEBORGS
UNIVERSITET
Offen im Denken

Land2Sea

Probability of „desirable“ conditions

Supporting information

“Narrative flow chart”

Supporting information

LAND2SEA (in progress)

Attractions of interdisciplinary research

- Intellectually stimulating in a broad sense
- Producing applicable knowledge with a potential to make change
- Contributes to a broader network inside and outside academia
- Enhances interesting career options

