

# On the Ethics of Integrative Research in Biodiversity Conservation

Claire Lajaunie, Inserm  
DICE-Ceric

Séminaire annuel Labex DRIIHM



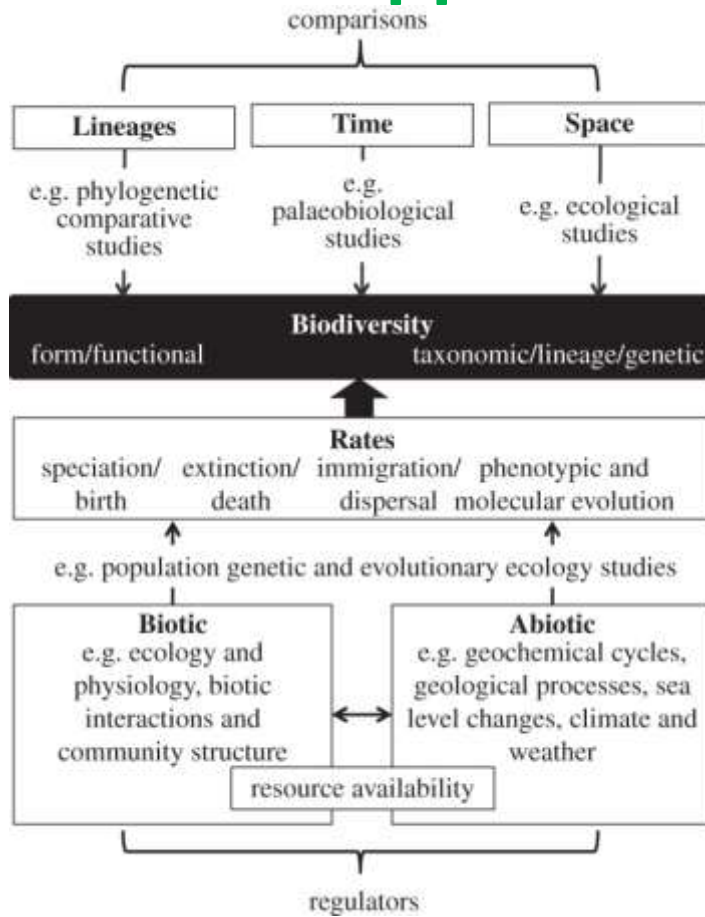
# Outline

- Integrative research on biodiversity conservation:  
What kind of research? why an integrative research?
- Biodiversity conservation principles calling for an integrative research
- General ethical principles: go beyond
- Why ethical considerations ?
- Distinction between:  
ethical issues on biodiversity conservation/on the knowledge production and use
- ABR special issue on the ethics of biodiversity conservation: main conclusions
- Perspectives

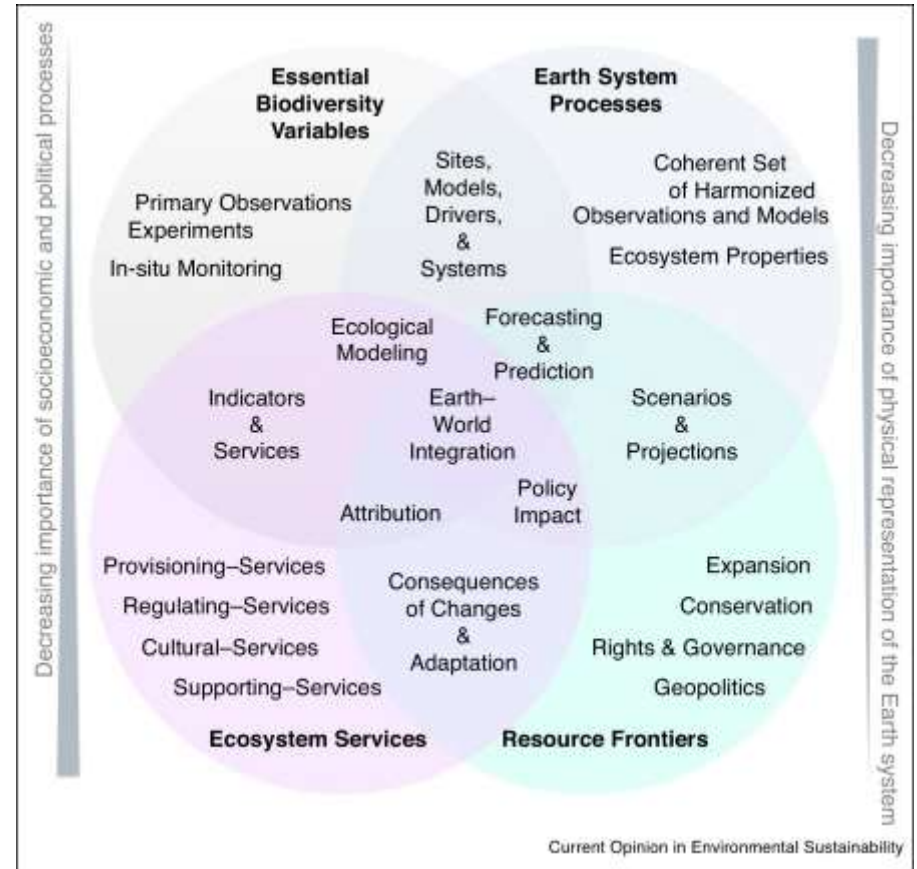
# What is “Integrative Research” ?

## *in Biodiversity Conservation*

- **Various approaches**



Integrative Biodiversity Research.  
 In S. A. Price and L. Schmitz, 2016 *Philos Trans R Soc Lond B Biol Sci.* 2016 Apr 5; 371(1691)



Science disciplines involved in multidisciplinary research such as integrating the key drivers of global change and biodiversity research.  
 In Abiven et al., 2017, *Current opinion in Environmental Sustainability*

# Why “Integrative Research” ?

- Strategic Plan for Biodiversity 2011-2020 (§25) emphasises the importance of scientific knowledge for policy and decision-making
- CBD Subsidiary Body on Scientific, Technical and Technological Advice, CBD/SBSTTA/22/5, 2018:
  - promote research related to biodiversity
  - general lack of information related to the socioeconomic issues affecting biodiversity and how they can be addressed (Target 19)
  - making greater use of the social sciences
  - developing data sets which can be disaggregated for different ecosystems and at different geographic scales
  - promoting research on cultural issues



**Call for integrative and interdisciplinary research on biodiversity conservation**

# Based on biodiversity conservation principles

- **Ecological Integrity**

Protect and restore the integrity of Earth's ecological systems, with special concern for biological diversity and the natural processes that sustain life.

- **Ecosystem approach**

- strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way (CBD Decision V/6, 2000)
- Knowledge derived from research and information from other sources has to be **integrated and packaged** into information products that allow and provide for interpretation (...) (CBD Guidelines, 2004).

# Some Ethical Principles

## Ethical Behaviour in research

- Truth, honesty and trustworthiness
- Avoidance of conflicts of interest
- Fair treatment of subordinates and colleagues
- Privacy protection
- Fair use of public funds
- Fairness and openness
- Competence and accountability
- Integrity and honesty in the reporting of research results
- Respect for human life and welfare
- Sustainability
- ...

## Ethics in Knowledge Building and Use

- Collective responsible and accountable behaviour
- Promote a pluralistic approach
- Implement fairness and openness
- Strengthen the transparency and legitimacy of knowledge
- Integrate values of equity and justice
- Strengthen the independence of end users and promote benefit-sharing
- Adhere to the transparency of modelling and scenario uses
- Build public trust and inclusivity

# Why Ethical Considerations ?

## *in Biodiversity Conservation*

- **Earth Charter 2000** : shared vision of basic values to provide an ethical foundation for the emerging world community (Preamble)

Scientific integrity towards society: a network of responsibilities in which every stakeholder involved has to jointly meet the ethical challenges posed to research

- Ethics linked to biodiversity conservation
- Ethics related to research: behaviours of researchers, research integrity
- Ethics in interdisciplinary and pluri-cultural settings: the pluralism of ethics, various deontological standards

# What kind of general ethical Issues?

## On biodiversity conservation research itself

- Links between biodiversity conservation and its effect or consequences on societies
- Distinctions between laboratory research (*ex situ*) and field work (*in situ*)
- Scientific methods should minimise disturbance and stress to biodiversity, and any impacts should be explicitly justified
- Virtues necessary for an interdisciplinary ethical practice can be summarised as “epistemological humility” (Balsamo and Mitcham, 2010)
- Need for a scientific pluralism: pluralism of ethics and responsibilities



# What kind of general ethical Issues?

## On knowledge production and use

- Knowledge result from a collective process of production: how to define responsibilities related to their content? To their uses?
- How to produce knowledge in a **transparent** manner?
  - **Disclosure**: providing accurate information about the benefits and harms that is reasonably expected from the action under consideration
  - **Comprehension**: individual's accurate interpretation of what is being disclosed (Friedman et al. 2008)
- What should be the importance of scientific knowledge into the decision-making process?
- Is it possible or desirable to design ethical rules for scientific knowledge building and use?
- How to identify values – **particularly ethical values** – participating to knowledge creation?
- How to integrate uncertainty and underdetermination of integrative research for a ethical social use of knowledge produced?



Asian  
Bioethics  
Review



December 2018

## Topics

- ❖ **Environmental law/sociology** Marine protected areas in the case of Brazilian coastal fishing communities- Formal conservation/exclusion
- ❖ **Anthropology** Ethics of Asian Elephants Conservation: tensions between conservationists points of view
- ❖ **Ecology** Technoscience and Biodiversity Conservation: conflicting views on gene editing (invasive species, de-extinction...)
- ❖ **Modelling:** On the ethics of Biodiversity Models, Forecasts and Scenarios
- ❖ **Environmental law** From a variety of ethics to the integrity of research on biodiversity conservation
- ❖ **Ecology/environmental law** Linking biodiversity with health and wellbeing: consequences of scientific pluralism for ethics, values and responsibilities
- ❖ **Environmental law** Ethics of biodiversity conservation : lessons learnt from researchers, messages to the CBD

# Main conclusions from the special issue

Involvement of all stakeholders into a reflection about ethics of biodiversity conservation research

Development of ethical thinking about integrative research and its use for biodiversity conservation

Ethical reflection grounded in practical issues

Specificity of each research context

It should be distinguished from ethical guidelines for research or professional codes of conduct (without excluding them)

# Perspectives

Dialogue on a pluralism of scientific approaches and pluralism of ethics (in relation to ethical principles from specific disciplines) : convergence and congruence

Analyse how some ethical issues might change scientific approaches and more generally the way to consider conservation issues and challenges

open working group for the identification of general issues related to integrative research to be debated together?

# Few References

- CBD. (2011) Tkarihwaí:ri code of ethical conduct to ensure respect for the cultural and intellectual heritage of indigenous and local communities relevant to the conservation and sustainable use of biological diversity. Secr. of the CBD
- Friedman B., Kahn P. and A. Borning (2008) Value sensitive design and information systems. In K. E. Himma and H. T. Tavani (eds) *The Handbook of Information and Computer Ethics*, Wiley, Hoboken, New Jersey, 69-101
- IUCN, Biosphere Ethics Project Interim Coordinating Group. 2008. *The Biosphere Ethics Project: Implementing the Bangkok World Conservation Congress resolution to draft and promote a code of ethics for biodiversity conservation*. IUCN, Gland, Switzerland.
- Soranno, Patricia A., Kendra S. Cheruvelil, Kevin C. Elliott and Georgina M. Montgomery. 2015. It's good to share: why environmental scientists' ethics are out of date. *BioScience* 65(1):69 -73
- Tuana N. (2010) Leading with ethics, aiming for policy: new opportunities for philosophy of science. *Synthese* 177(3):471–492. doi:10.1007/s11229-010-9793-4
- Wynne, Brian. 1992. Uncertainty and environmental learning. *Reconceiving science and policy in the preventive paradigm*. *Global Environmental Change* 2(2):111-127.

**Thank you for your Attention**