

What responsibilities of geosciences in the turmoil of the Anthropocene? Example of a political ecology perspective

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State of the climate and biodiversity crises

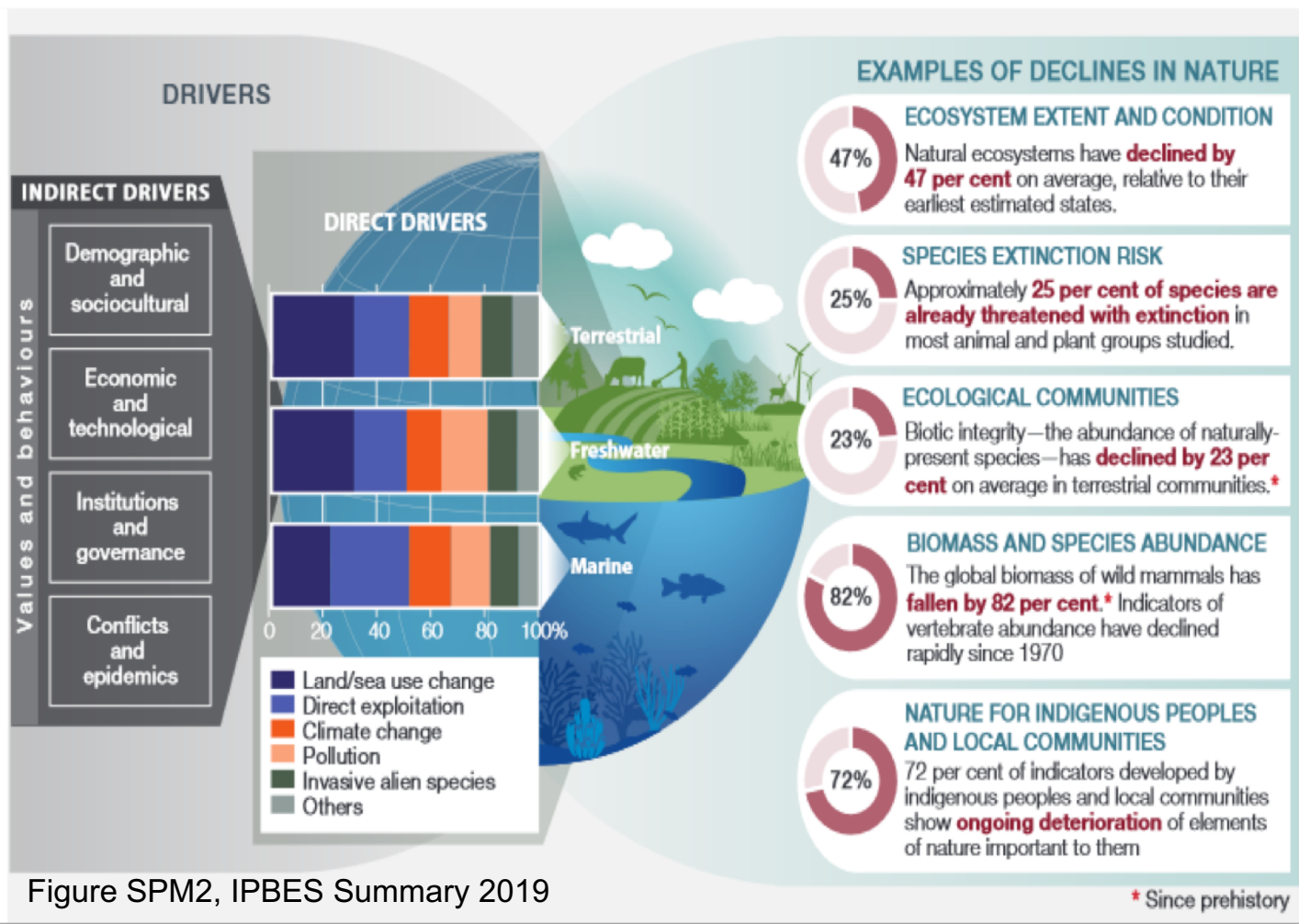
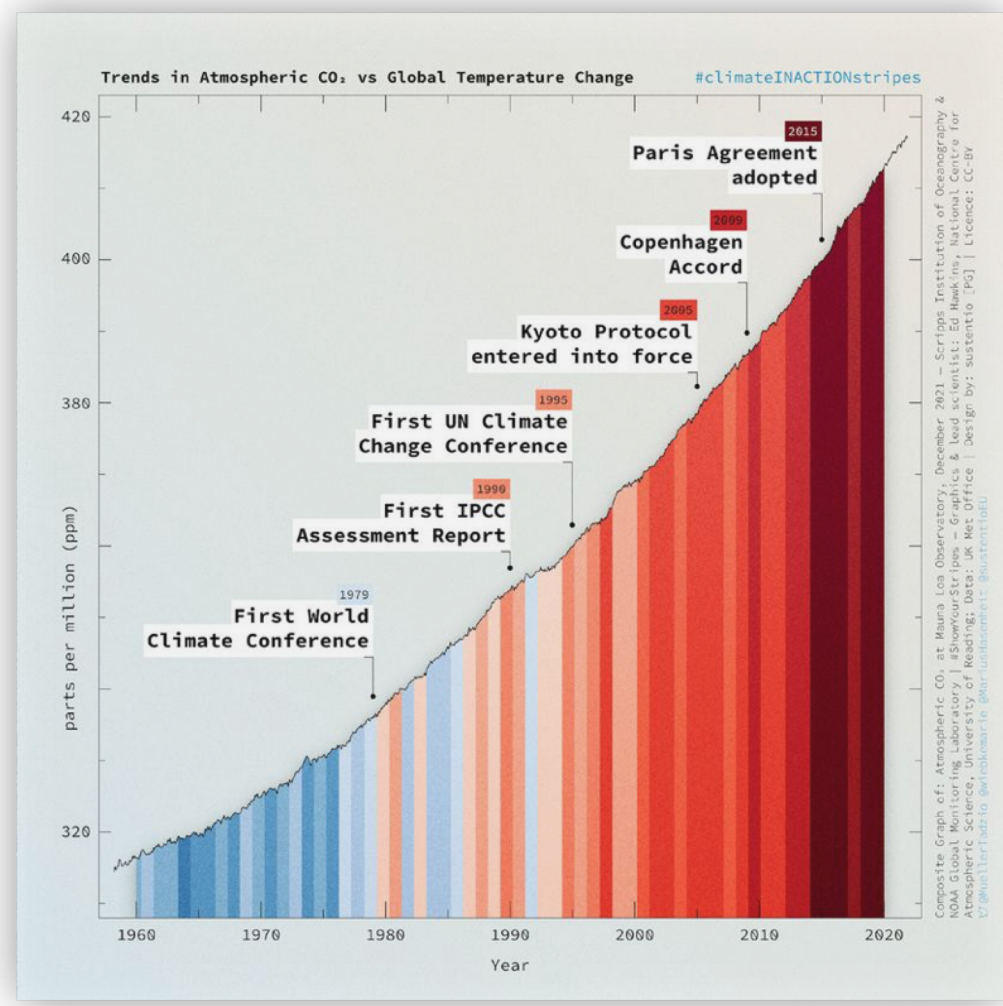


Figure SPM2, IPBES Summary 2019



State of the climate and biodiversity crises

Why are we unable to make a massive break with these destructive relationships with the natural environment?

To what extent is scientific research responsible for this apathy?

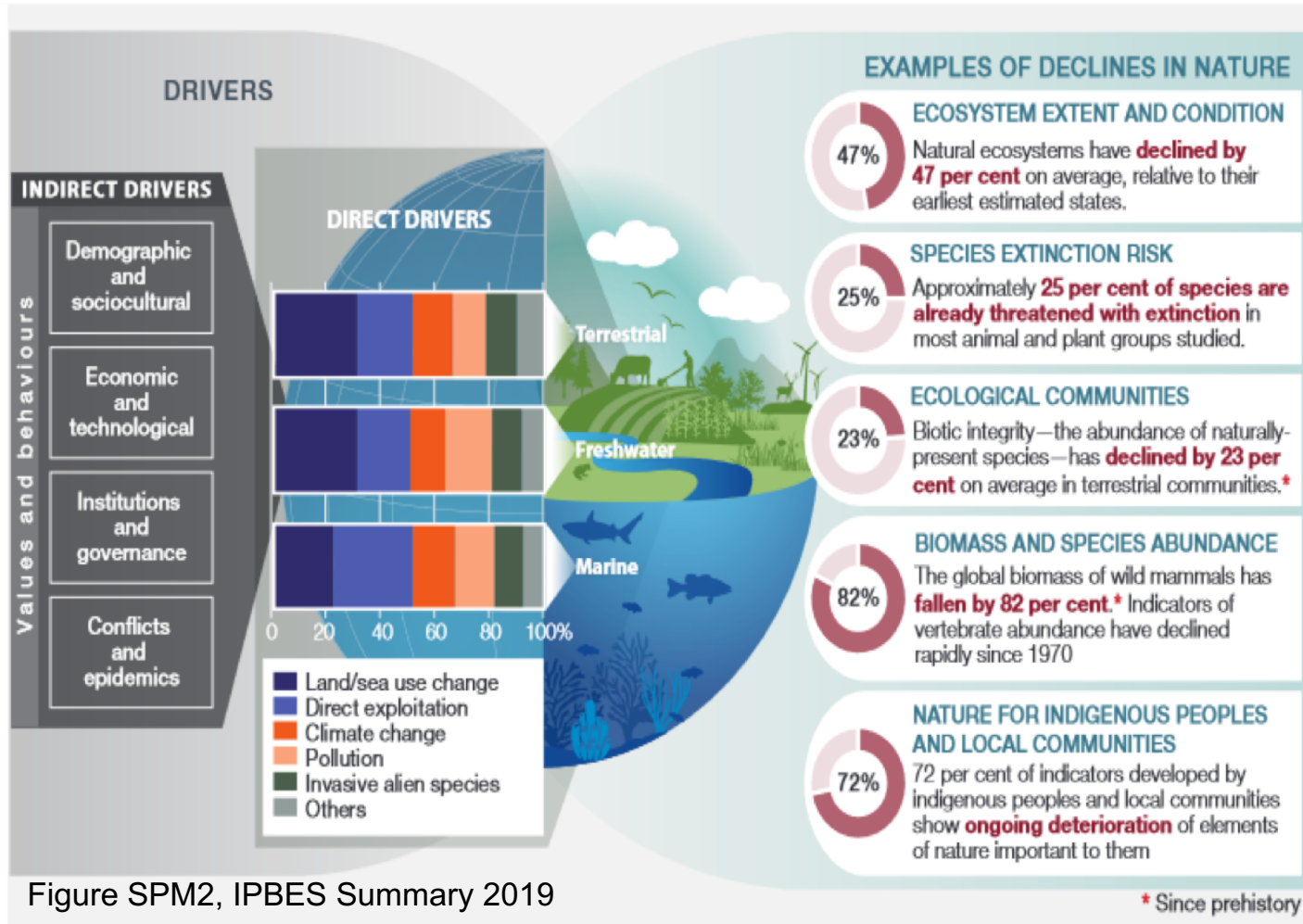
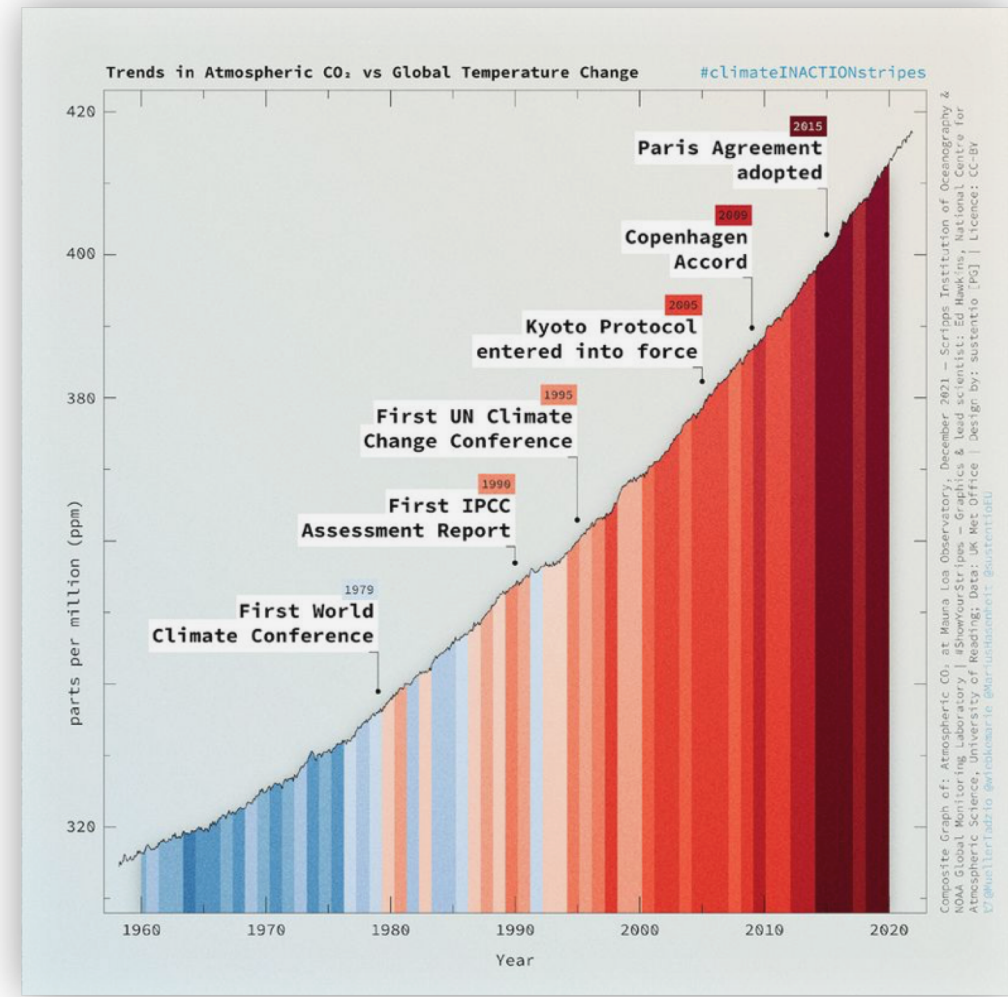


Figure SPM2, IPBES Summary 2019



Research is embedded in a productivist system

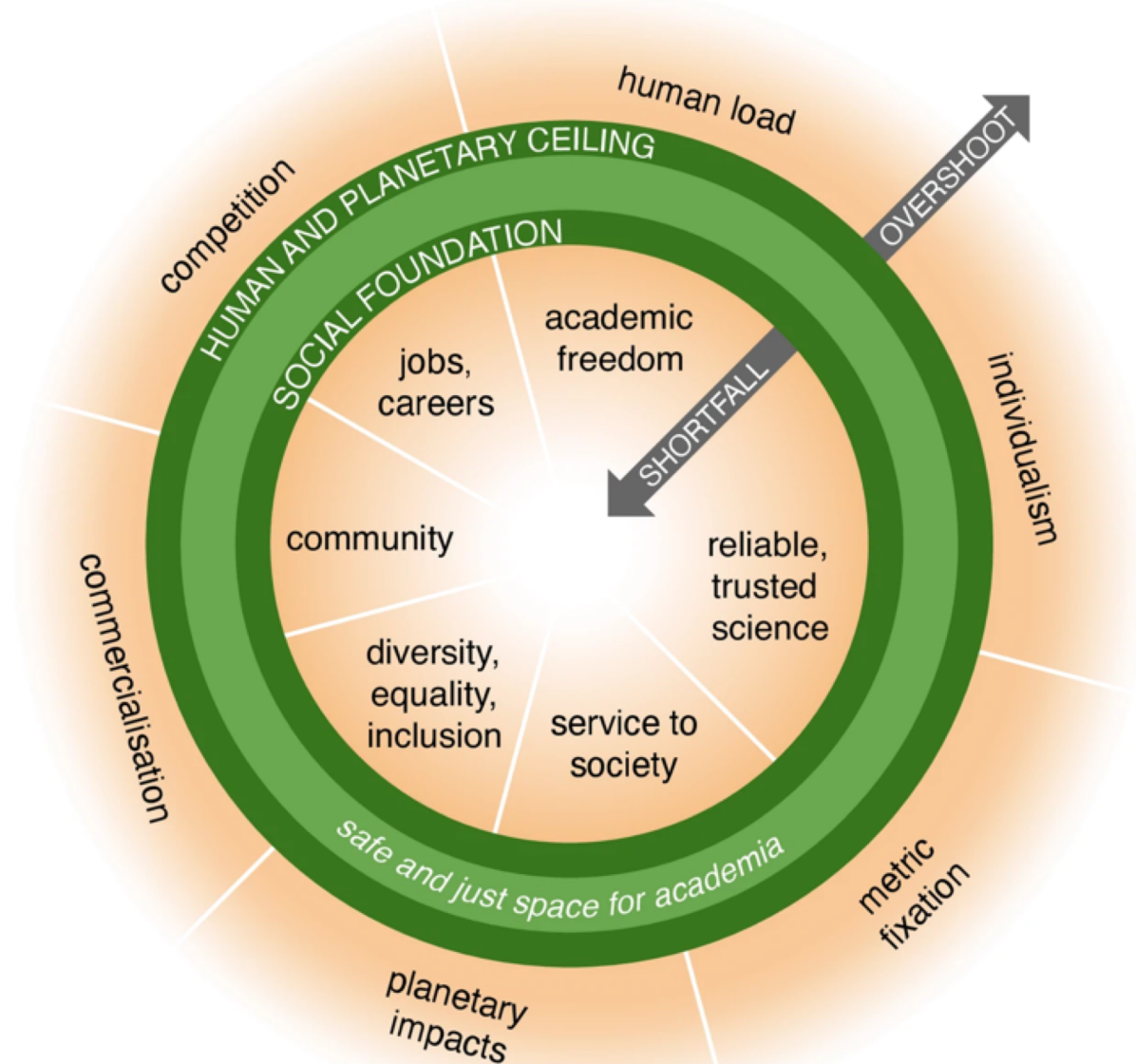
"Publish or perish": competition + individualism

=> No time to collectively:

- reflect upon the social and environmental impacts of research
- redefine our role within a changing society

=> Over-specialisation in one discipline:

- lack of fundamentals in humanities
- Impossibility to address systemic problems



Moving from the *scientific neutrality* principle to a *situated knowledges* standpoint

Scientific neutrality

widespread belief that geoscientists following the scientific method are neutral.

=> "view from above, from nowhere"

But all forms of knowledge are social constructions

VS

Relativism: all opinions equal



Situated knowledges as a base for objectivity

(Donna Haraway)

Recognize an embodied construction of knowledge:

=> allows scientists to question their position, how they see, what/who could limit their sight?

The Atécopol collectives: a political ecology approach

Paradox: Scientists help understanding our world BUT work in a framework contributing to worsen the ecological crisis.

=> Refining the accuracy of projections is **not enough**

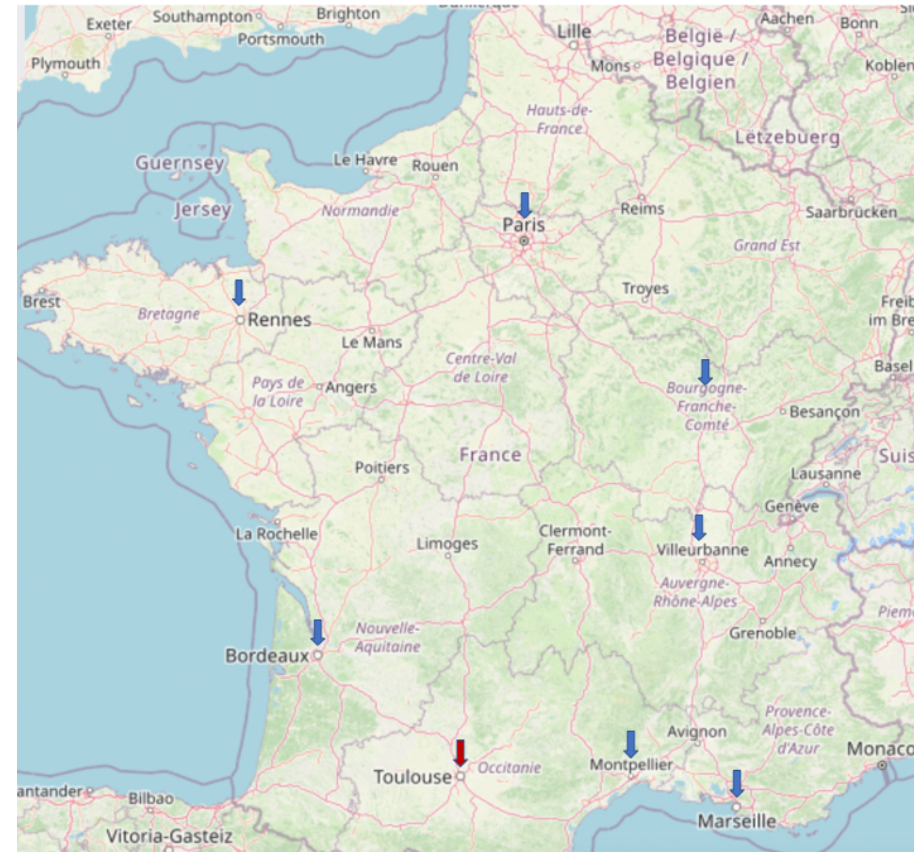
=> We need to **take a reflexive stance** on our political role as scientists

Responsibility

The complex and systemic nature of environmental threats requires a **dialogue** at local scale between scientific knowledge and social and political debates on the future to be built

Atécopol collectives:

- Since 2018: Emergence of scientific communities committed to political ecology
- 8 collectives, ~700 academics from all fields (~250 in Toulouse)
- Institutional affiliation to the CNRS



The Atécopol collectives: a transdisciplinary approach

Questions

What are the social and environmental impacts of research?
What social and political role it should/could have in society?

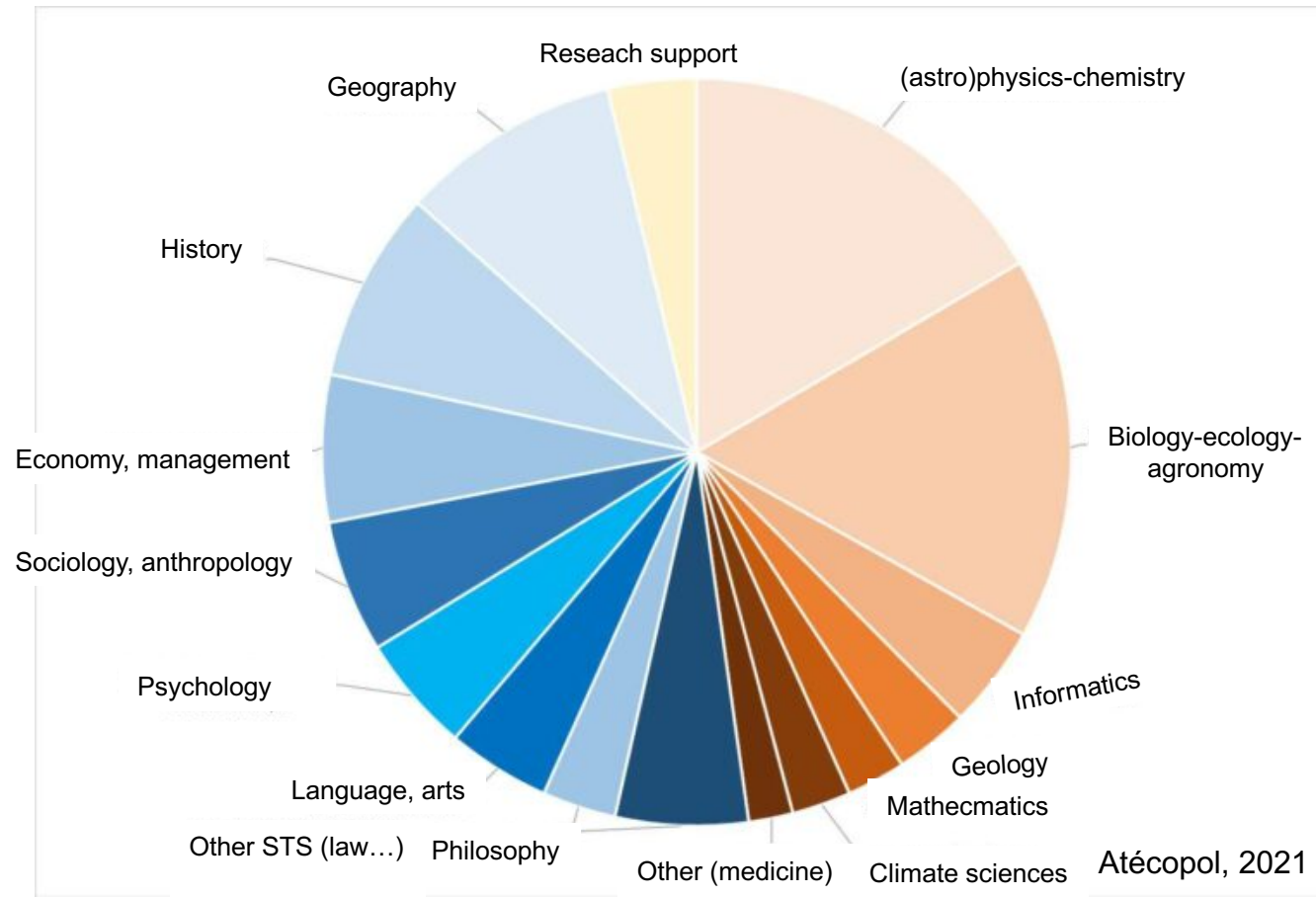
Assumptions

- 1) The problem goes **beyond disciplinary expertise**
- 2) Scientist should not dictate what to do but **build and share** knowledge with society



- **Transdisciplinarity** (Natural sciences, Human sciences...)
- **Common knowledge** on political ecology is built collectively

Rozeaux and Gabail 2023



How we work?

Values we share

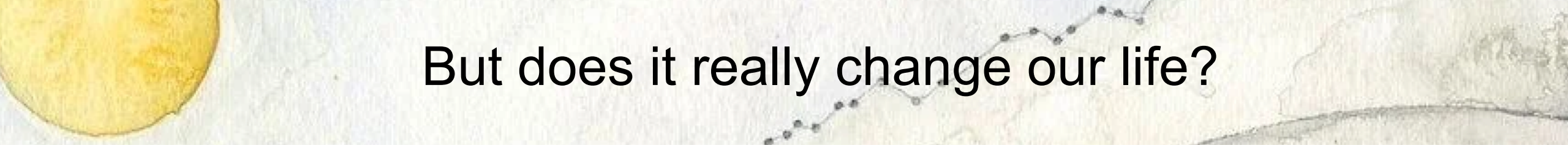
- inclusivity & horizontality
- free and personal involvement
- Do-ocracy
- Intense group discussions (face-to-face & remote)

Various forms of engagement

- Monthly research seminar on Political Ecology
- Conferences and workshops in all places (markets, schools, universities, during social protests)
- Open letters to local politicians
- Reflections on higher education and research (books)

A69 : un collectif de 200 scientifiques toulousains demande l'arrêt immédiat des travaux





But does it really change our life?

- **Survey** across all Atécopol collectives (March 2024): population size = 71 (incl. 15 geos')
- **Goal:** What has changed personally and professionally since you joined a collective?

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91% found a stimulating **community**

69% found help to **overcome despair?**

Why is this relevant for geoscientists?

Result: similar and even **stronger changes** for geoscientists in these collectives

=> Political ecology and transdisciplinarity open up perspectives for geoscientists

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Conclusion and perspectives

- Restructuring research with a political ecology approach works!
 - More **meaningful** for society and for researchers
 - Helps to **move away** from oppressive forms of research
 - Can be supported by traditional research institutions
 - Allows to **build collective & transdisciplinary knowledge**
- How about you?
 - Do you participate in any other collective?
 - Interested in us helping you to set up a similar initiative?

Thank you for your attention!

