Research questions and methodologies: why science is always political

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Presented at the Digital Society Initiative – Health Community meeting.

Can ‘health’ be imposed to someone without their consent?

“autonomy [...] promotes better mental and physical health.”

Ng, Ntoumanis, Thøgersen-Ntoumani, Deci, Ryan, Duda, Williams 2012

Today’s challenges in society

“Autocratization turns viral”

“The level of democracy enjoyed by the average global citizen in 2020 is down to levels last found around 1990. […] Ruling governments […] polarize societies by disrespecting opponents.”

V-Dem Institute 2021

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The Economist Intelligence Unit 2021

“The pandemic exacerbates pre-existing tensions and vulnerabilities”

“The general population is showing signs of fatigue; the ‘passive hold-out mode’ of the crisis has taken its toll. […] Child psychiatry experts also observe a clear increase in treatment needs for suicidal thoughts and attempts.”

Swiss Federal Office of Public Health 2021

Is today’s medical research empowering people?

“Method, then, unavoidably produces not only truths and non-truths, […] but also arrangements with political implications.”

John Law 2004

Different perspectives embedded in medical research

Self-management

- Patient follows a self-management plan
- Medical professional is a trainer
- Success: **compliance** to treatment

Adapted from Trish Greenhalgh 2009

Self-management

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Coping with illness

- Patient builds a coherent self
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Whole system approach

– Patient achieves holistic care, supported by community
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Critical public health

- Patient challenges structural barriers to health
- Medical professional as potential oppressor or radical ally
- Success: **change in social and political structures**

Adapted from Trish Greenhalgh 2009

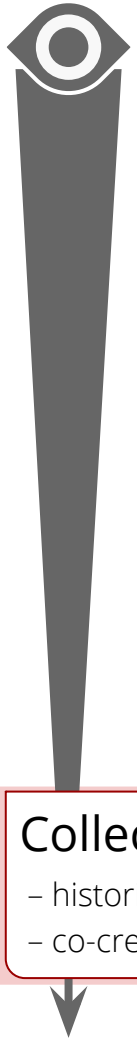
Does the scientific culture help us ask (sound) questions?

“In modern research, false findings may be the majority
or even the vast majority of published research claims.”

John Ioannidis 2005

Some perspectives embedded in research questions

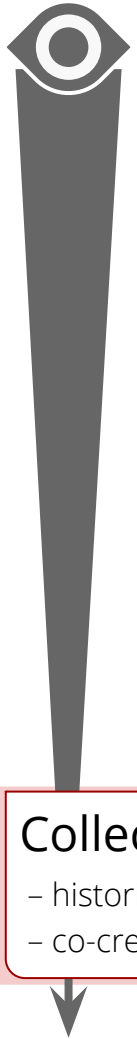
Adapted from Capra, Mattei 2015; Creswell, Plano Clark 2017



Collection method

– historical data on diseases (quanti)
– co-creation + surveys (quali, quanti)

Adapted from Capra, Mattei 2015; Creswell, Plano Clark 2017



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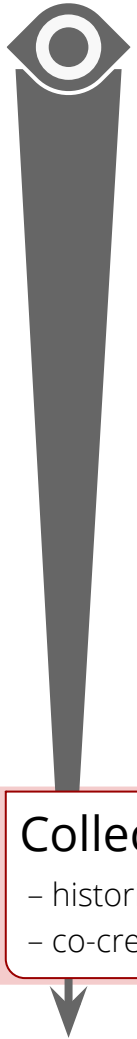

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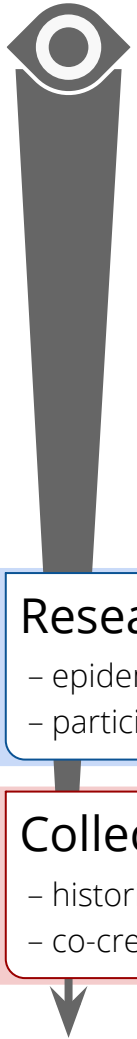

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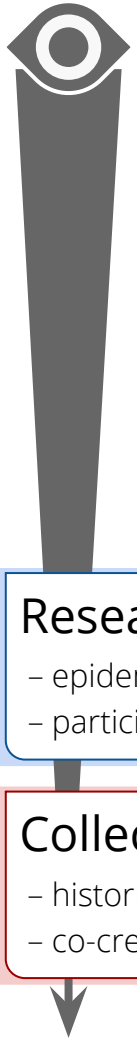

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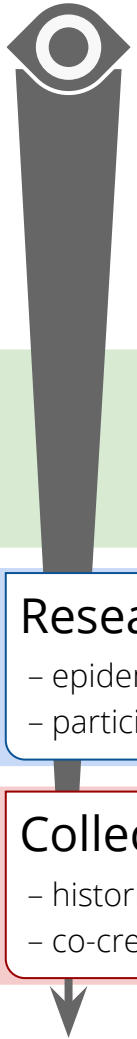

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– self-management (mainstream)
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– universal, single truth (positivism, mechanism)
– contextual, subjective realities (socio-constructivist)

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– Civil code → excluding property, academic competition
– local customs → shared use rights, knowledge commons

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Social contract

– universal rules by experts (Westphalian constitutions)
– collectively lived, local customs (Indigenous oral tradition)

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An exercise

Imagine you want to know your stress level by checking your heart rate. You:

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close your eyes
and observe
your **sensations**

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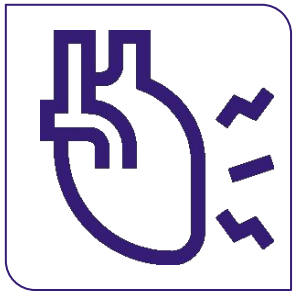

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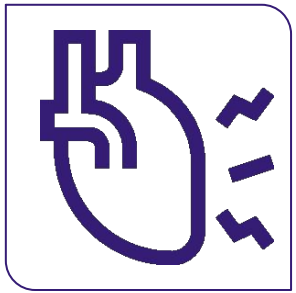

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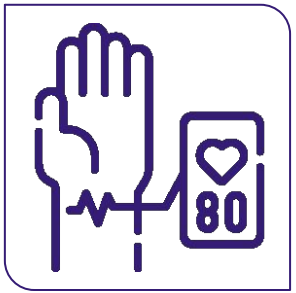

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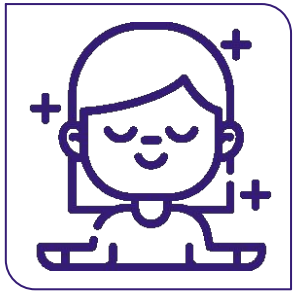

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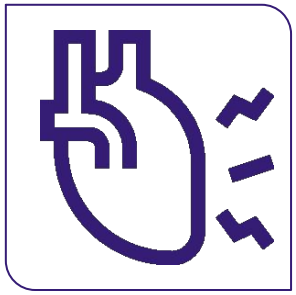

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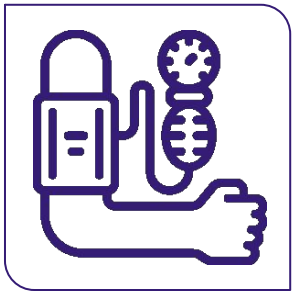

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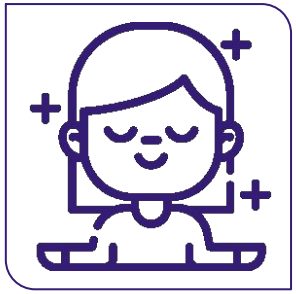

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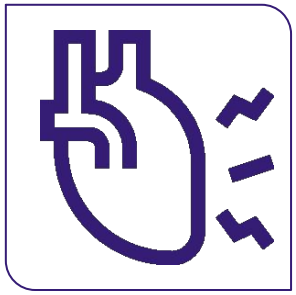

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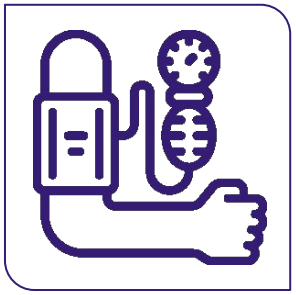

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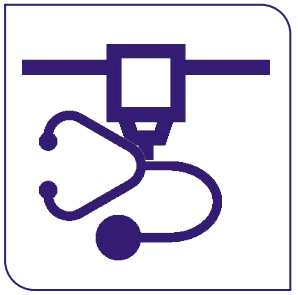

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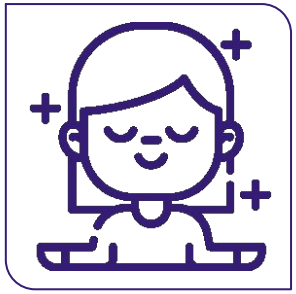

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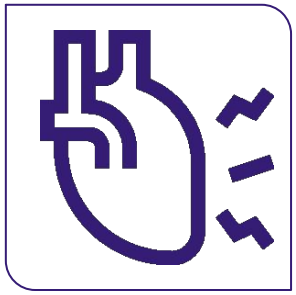

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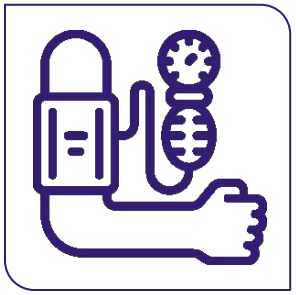

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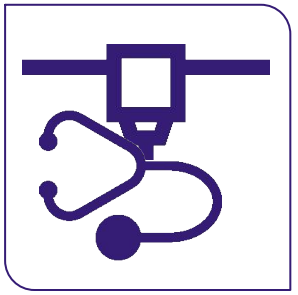

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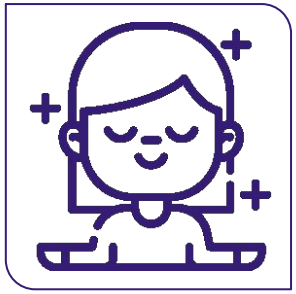

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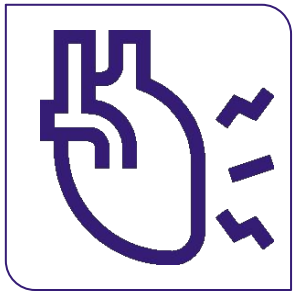

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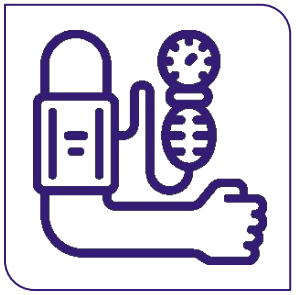

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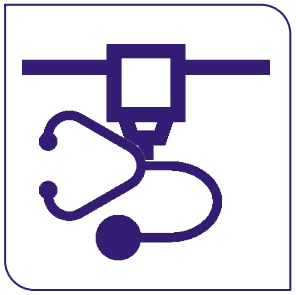

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→ which options provides you with the *minimal* required information?
→ which option enables you to *significantly* develop your skills?

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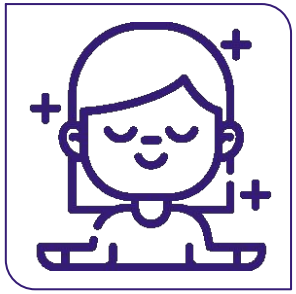

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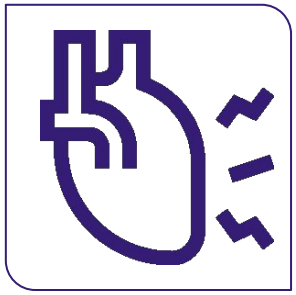

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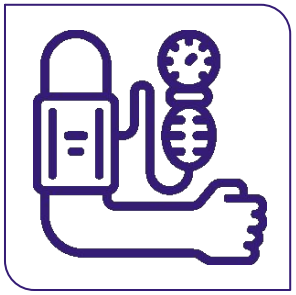

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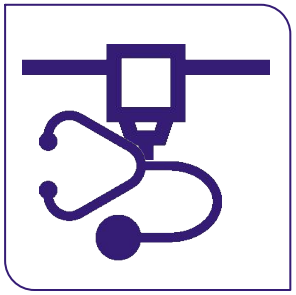

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→ which option enables you to *significantly* develop your skills?
→ what are the *implicit beliefs* embedded in each option?

Next steps?

What about taking time to improve how we cooperate?

“public policy should [...] facilitate the development of institutions that bring out the best in humans.”

Elinor Ostrom 2009

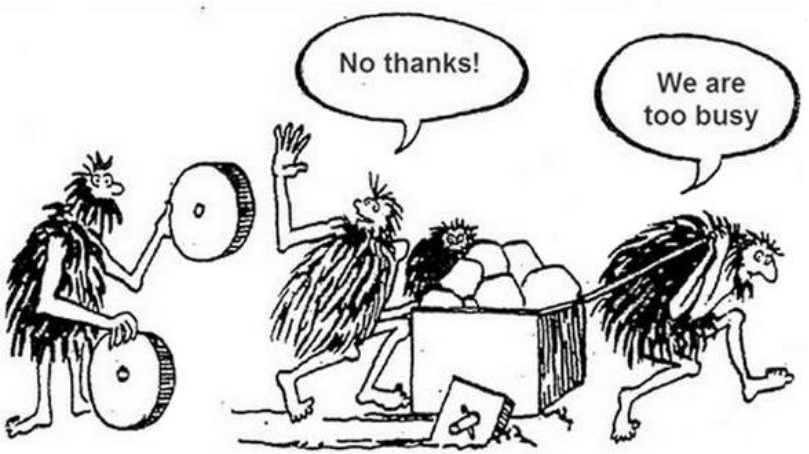

Image from forgefitnesswichita.com

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Additional resources

- Aubin D, Nahrath S. **De la plura dominia à la propriété privative : l'émergence de la conception occidentale de la propriété et ses conséquences pour la régulation des rapports sociaux à l'égard de l'environnement et du foncier**. Pacific credo 2015. http://books.openedition.org/pacific/309
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Thank you