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Les indicateurs sont morts – vive les indicateurs !

***Towards a political economy of S&T indicators :
a view of the past 40 years***

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Introduction

- **A story of S&T indicators production and use over the last 40 years.**
- **Articulate the societal, the scientific and the S&T indicators sub-systems**
- **Sketchy; possibly provocative, possibly pessimistic**
- **hopefully allowing for reflexivity and for discussing perspectives for the S&T indicators movement**
- **Compatible with the one of Ismael Raffols yesterday morning.**

1. S&T indicators as agnotology vs knowledge devices (1)

1 ► **Agnotology**: social construction of ignorance

2 ► **The double translation model** of research activities

- all translations are treasons
- the double translation may conflict with the need of contextualisation.

1. S&T indicators as agnotology vs knowledge devices (2)

3 ► The design of an indicator embodies a vision and an intention

- An indicator is a value laden device, saturated with representations and norms.

4 ► Indicators as devices of agnotology – the social construction of ignorance

- De facto acceptance of the vision and intention embodied in the indicator.
- Indicator considered undisputable, a ‘fact’ of nature.
- Indicators can be daunting - formidable instruments of agnotology.

1. S&T indicators as agnotology vs knowledge devices (3)

5 ► Indicators as robust knowledge devices

- By contrast, indicators can be robust knowledge devices
- questioning the vision and intention which they embed - co-production of knowledge.
- Indicators as powerful devices for robust knowledge production.

2. A brief story of S&T indicators in their societal and scientific context (1)

PERIOD A - 70's to 90's

■ society

- science : science as progress and rationality; emergence of science and innovation policies a major public policies ; creation of FPs.
- S&T indicators : emergence of a whole new field, start of an S&T indicators scientific community at EU level .

2. A brief story of S&T indicators in their societal and scientific context (2)

PERIOD B - 90's to 10'

■ society

■ science : science system is fully absorbed in the neo-liberal paradigm - New Public Management.

■ S&T indicators

- **ubiquitous, universally and instantaneously accessible, available at all scales**
- **Have become the infrastructure for generalised competition in science and its linkage to the financial markets.**

2. A brief story of S&T indicators in their societal and scientific context (3)

THE PRESENT : where do we stand now ?

■ society : consciousness of humanity having entered the Anthropocene and the 'Trumocene'

■ science : New practices, racing as a standard, signs of disruption in the science system

- Instrumentalisation of science
- Ever larger gap between what is expected from science and what is delivered

3. The S&T indicators community is confronted to its collective responsibility (1)

Hypothesis 1:

in period B, S&T indicators are largely used as agnotology devices

- **The story above reveals a massive contradiction**
- **the programme of the indicators set up in period A, is a total failure**
- **at the same time, the S&T indicators movement is an incredible success story**
- **How to explain this paradox ?**
- **S&T indicators have fundamentally become agnotology devices.**

3. The S&T indicators community is confronted to its collective responsibility (2)

Hypothesis 2:

dominant forces have driven the period B design and use of indicators

- **period B indicators supported and shaped by the dominant forces – found their interest in it.**
- **Indicators have played a central function: agnotology resulting in (false) certainties and focus on means rather than ends**
- **Hence their ‘success’**

3. The S&T indicators community is confronted to its collective responsibility (3)

Hypothesis 3:

- the S&T indicators community has been conscious of the drift for some time but kept discreet, yet scientifically active**
- growing distance between the S&T indicators community and the mostly commercial producers and providers of indicators**

3. The S&T indicators community is confronted to its collective responsibility (4)

Perspective:

- **collective responsibility of the S&T indicators community to call for ending with the agnotology paradigm and pave the way for new designs and uses**
- **possible consensus with the dominant forces on the necessity to build robust knowledge for science policy**
- **All the more much has been and is being done in that perspective (think of the RISIS platform in particular)**
- **Here come the programmatic orientations outlined by Ismael yesterday.**
- **The time is ripe to go from the agnotology paradigm to the robust knowledge production paradigm**

Conclusion : les indicateurs sont morts – vive les indicateurs !

- **Indicators of period B are dead – at least, many people can agree they should be so.**
- **We cannot afford agnotology indicators any more. There is no time to waste.**
- **So: vive les indicateurs - long life to the indicators, in their new paradigm.**
- **There is urgency and we are prepared for it !**