



On Reflections and Reflexiveness: Positioning the Self, Enframing the Other?

François Thoreau, Erik Fisher

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Introduction

- Wiebe Bijker: the STS kiss



Also called "STS Mirror"

"I think that in-depth SSK types of case studies, at a *micro level* if you wish, of science and technology remain necessary (...). Also, and this connects the institutional level to the individual level, doing case studies is a way for individual STS researchers to conduct *political interventions*. I sometimes think of this kind of intervention as “the **STS kiss**”: the STS researcher in the role of prince, kissing the sleeping beauty (i.e., the scientist, engineer, or other actor being studied) awake with a detailed study of the actor’s behavior. This metaphor stresses that an *STS study highlights qualities of the scientific and technological cultures* that the actors themselves may not have been aware of but that *they will start to employ consciously* once they have been alerted to them"

(Bijker, 2003, p. 446).

Standpoint

- "STS kissing" all around: "soft interventions" in research programmes (3TU) and policy mandates
- In line with CTA (Rip & Schot, 1997) and RTTA approaches (Guston & Sarewitz, 2002)
- Fits the agenda of the "anticipatory governance of nanotechnologies" (Barben & al. 2008)
- Case study: STIR (*Socio-Technical Integrated Research*) (Fisher & Guston, 2008)

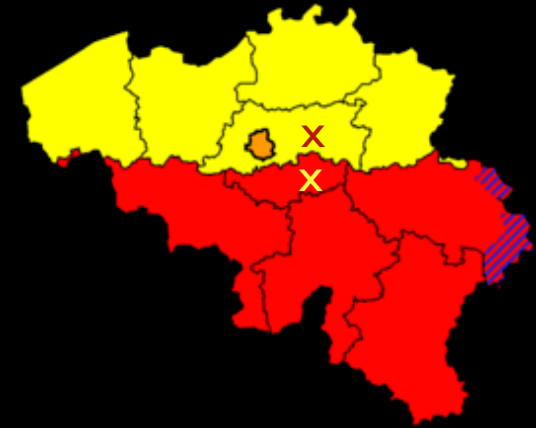


STIR



- Elements to keep in mind
- "Midstream modulation" (Fisher & al., 2006)
- Engaging practitioners in context at a micro-level: observe, reflect, document
- Rationale: enhancing reflexivity by reflecting upon practitioners, through the use of a decision protocol
- glossary: investigator, participant

Focus



- 2 comparative studies: Flanders, Wallonia
- Feeling of unease with the dynamics of engagement: how to position the self with respect to the "other" ?
- Understanding the ethos of engaging practitioners

Feed the reflection

- Mainly works of Vinciane Despret (ethnographer of ethologists)
cf. esp. "Thinking like a rat"



- Sustained discussions among fellow STIRers
(Workshop Vatnahalsen 2009; blog discussions; workshop Tokyo 2010)
- Diaries from engagement with the cellular
interfacing (brain-machines interactions)

team at  , a large R&D center

I. On interpretations of research *dispositifs*

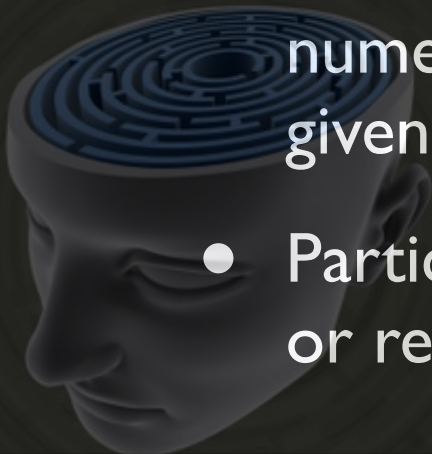
The Material Labyrinth

- Argument: the "subject" of any experimentation interprets the way it is expected to behave and acts according to this interpretation (Despret, 2009)
- Illustration: what could a labyrinth mean to a rat?
- Mediation of the experimental setup, the *dispositif*, which frames or even reduces the subject
- Subjectivity of the interpretation: the subject not only perceives but also constructs its vision of the surrounding environment, "makes world" out of it

dissociating "whatever the scientist observes" from what "constitutes an answer, a judgment, an opinion from the animal about what is suggested to it by the one who interrogates it" (p. 7) ⇨ understanding the experimental *dispositif*

Digging the Cognitive Labyrinth

- Two distinctive, yet valid features: from rats to scientists, from material to cognitive
- STIR: assessing potentialities for midstream modulation through improved reflexivity
- The decision protocol as a framing tool for investigator to make his way through the numerous, complex and iterative statements of a given participant
- Particular attention to clues of greater awareness or reflexivity: an investigator's "bias"



II. The productive potential of experimental "bias"

Do "bias" even exist?

- *A minima* interpretation: If there is such thing as a "bias", then there must be a "right" way to sort things out, and the experimenter failed at finding it
- Argument: it's all about variations, and it does not make sense at all to eliminate subjectivity in the way we understand these variations, as they actually provide opportunities for genuine learning
- Illustration: Rosenthal's fake experimentation (1966), when brilliant rats get actually better than stupid ones

STIR: mandate to unfold complexity

- Argument is especially true when engaging with S&T practitioners: “*not one person, but a composite*”
(Thorndike, A. M., 1967, quoted in Galison, 1997; see also von Schomberg, 2008)
Let alone manifold context-dependent variables
- Twofold interrelated condition to foster learning (prescriptions):
 - Treat bias as a research object on its own, as part of the research *dispositif* : disclose it and allow for it to be challenged and potentially destabilized (e.g. the protocol)
 - Take the "other" seriously: although it sounds obvious, participants need not to be considered as “empty entities*” but rather pay careful attention to whatever they express (even and mostly beyond the protocol)

* onto which one could project his goals, questions, *dispositif* and the like in an unilateral, unproblematic and straightforward way

III. Practical consequences

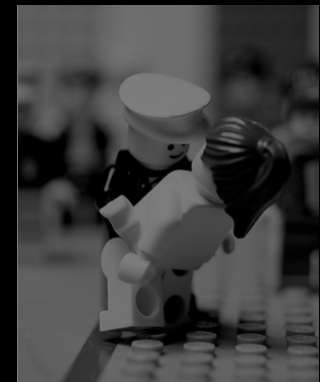
3 practical consequences (short)

- On intentionality: reach maximized disclosure of your actual research scope to avoid *complaisance phenomenon* (cf. Orne) - and subterfuge
- On complexity and variations: accept the "other's" premises (make yourself a technical expert ; allow for divergence and contestation of your setup ; endorse every opportunity to learn)



Conclusion

- Social scientists will eventually become scientific if they agree "to treat human as things" (Stengers, 1997)
- Reflexiveness has nothing mechanical nor technical
- The STS Kiss has to be duly announced, complex and textured enough, and it must also preferably be gentle and sweet



Thank you for your
attention!