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

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Introduction

• Wiebe Bijker: the STS kiss

"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 imec, 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)

N. Wakeford Talk, 4S Conference, Tokyo, 2010
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!