Culture of quality

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Questions

- Should we go beyond peer review studies to studies of quality cultures in science and scholarship?

- Can we ground the pragmatic solution of “informed peer review” in a serious theory of quality?
The Leiden Manifesto

- Quantitative evaluation should support expert assessment.
- Measure performance in accordance with the research mission.
- Protect excellence in locally relevant research.
- Keep data collection and analytical processes open, transparent and simple.
- Allow for data verification.
- Account for variation by field in publication and citation practices.
- Data should be interpreted taking into account the difficulty of credit assignment in the case of multi-authored publications.
- Base assessment of individual researchers on qualitative judgment.
- False precision should be avoided (e.g., the JIF).
- Systemic effects of the assessment and the indicators should be taken into account and indicators should be updated regularly.

Diana Hicks (Georgia Tech), Paul Wouters (CWTS), Ismael Rafols (SPRU/Ingenio), Sarah de Rijcke and Ludo Waltman (CWTS) (2015) Nature 520: 429–31. doi:10.1038/520429a
Responsible metrics can be understood in terms of:

- **Robustness**: basing metrics on the best possible data in terms of accuracy and scope;

- **Humility**: recognizing that quantitative evaluation should support – but not supplant – qualitative, expert assessment;

- **Transparency**: keeping data collection and analytical processes open and transparent, so that those being evaluated can test and verify the results;

- **Diversity**: accounting for variation by field, using a variety of indicators to reflect and support a plurality of research & researcher career paths;

- **Reflexivity**: recognizing the potential & systemic effects of indicators and updating them in response.
Informed peer review

• Increasingly popular, *but*

• Naive idea about what method is

• Untenable conception of what quality is
We're just starting to plan our evaluation. Which methods should we consider?

All of them.
The great divide

• quantitative versus qualitative still dominant in many ways in academia
• different styles in research design
• different notions of what counts as a good argument
• statistically significance versus thick description
• generalizing versus contextualizing
• different skills and training
• and different software packages and black boxes
The divide is a historical product

• Timans (2015): method in social science and elite research

• Early US sociology [WW I – 1930s] (Chicago School):
  – different methods (ethnography plus statistics plus historical research)
  – focused on “social problems” in Chicago

• Method became objectified – the rule of the quantitative as most scientific:
  – PCA in differential psychology
  – ANOVA in experimental psychology
  – econometrics in economics
  – sociology at Columbia University (Giddings):
    • measuring variables
    • hypothesizing about their correlation

• De-contextualization common theme
Google Ngram viewer search for quantitative data and qualitative data relative to social research (100%)

The qualitative strikes back

- epistemological critique of quantitative research
- quantifying equated with “positivism”
- revolt against the strict separation of the researcher and her object of study
- social constructivism: reality does not exist independent of the researcher
- social reality is not determined by fixed universal laws
- most recent trend: “mixed methods”!
Mixed methods as a new new thing

Institutionalization of “mixed methods”

- a Handbook and series of textbooks
- the Journal of Mixed Methods Research
- MMIRA: the Mixed Methods International Research Association
- MMR as separate discourse with its own identity, topics and history of ideas
- Most MMR pioneers developed out of quantitative research: “post-positivists”, mainly in psychology and sociology
- Origins outside of US and UK elite in social science
- A third way between positivism and constructivism: pragmatism
- Strongly focused on data analysis
How is method done?

procedures to be able to reduce complexity in social reality

• First version
  – a window on reality
  – reality rules
  – a unified world

• Second version
  – a selection of realities
  – the paradigm rules
  – incommensurability
research is performative methods do not only measure reality they also construct reality
There is no general world and there are no general rules.

Instead there are only specific and enacted overlaps between provisionally congealed realities that have to be crafted in a way that responds to and produces particular versions of the good that can only ever travel so far. The general, then, disappears, along with the universal. The idea of the universal transportability of universal knowledge was always a chimera.

But if the universal disappears then so too does the local - for the local is a subset of the general.

Instead we are left with situated enactments and sets of particle connections, and it is to those that we owe our heterogeneous responsibilities.
Method assemblage (Law)

• method is not only the formalized protocol
• method is performative
• and includes its “hinterland” and hidden support

• formally, method assemblage is continuous crafting and enacting boundaries between presence, manifest absence, and hidden Otherness
• method assemblage is resonance: detecting and creating periodicities in the world
• method assemblages are part of the life world of researchers
Notes on quality
Some observations on “quality”

- Quality is the multidimensional integration of qualities
- Quality is a historical category
- Quality judgement, *not measurement*, is key
- Qualitative and quantitative methods are increasingly intertwined in all fields
- Disciplines differ strongly in their quality cultures
- Quality is determined by context as well as content
- Quality judgement is performative
- Quality does not exist outside of quality management/control systems
Quality

- Substantive (expert based)
- Formalized (procedural – meta method?)
- Ethnographic (actor defined)
- Sociological (power or interest based)
- Semiotic (translation)

Proposal:

quality is not an intrinsic property at the level of the individual but an effect of translation work
Knowledge as infrastructure

- Infrastructures are not constructed but evolve
- Transparent structures taken for granted
- Supported by invisible work
- They embody technical and social standards

(Edwards, A Vast Machine, 2010)
Quality – alternative definition

• Quality is the level of “fit” between a particular work and the infrastructure to which it aspires
• Quality is multi-dimensional: more than 1 infrastructure at the same time
• Quality is distinct from the interests of the author
• New infrastructures can emerge from a lack of fit
• Innovativeness can be an aspect of quality
• Some qualities of quality can be measured
Taking the measure of quality
Conclusion

- quality assessment / measurement / judgement
- is setting up a particular resonance
- between multiple different, overlapping infrastructures:
- knowledge / evaluation / practices / citation
- in localized ways, creating:
- new objects in reality
- and presence, manifest absence, and hidden Otherness
Thank you for your attention