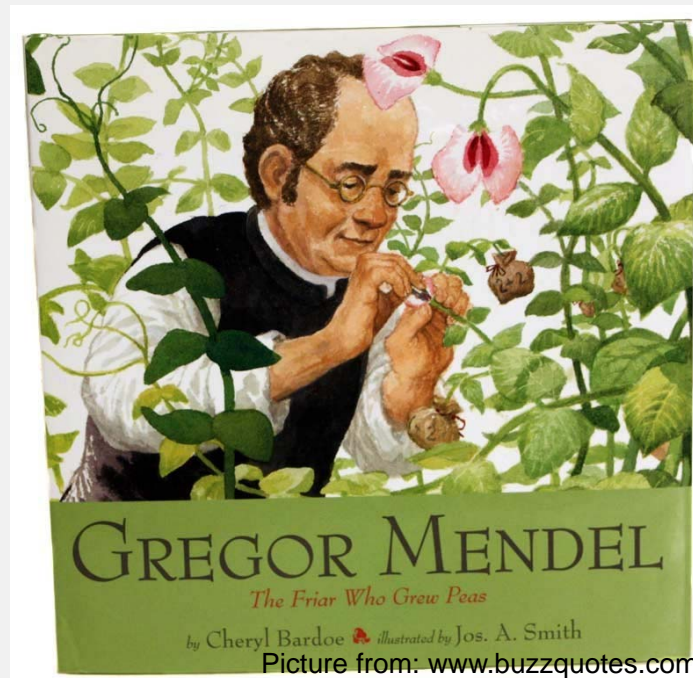


'Fraud and deceit in the halls of science'

Title taken from: *Betrayers of the Truth* by William Broad and Nicholas Wade
Simon & Schuster 1982

The reading is from: 'Anonymus' in Hort Science, 7, 5, 1972



'PEAS ON EARTH'

→ 'Data manipulation to some extent is an essential skill'

R.A. Horne, Physiological Chemistry and Physics in Medical NMR, 15 (1983) p 365 - 367

"It is a capital mistake to theorize before one has data.
Insensibly, one begins to twist the facts to suit the theories, instead of
the theories to suit the facts."

Sherlock Holmes

"A Scandal in Bohemia"

<https://www.deluxe.com/blog/using-facebook-insights-small-business/>

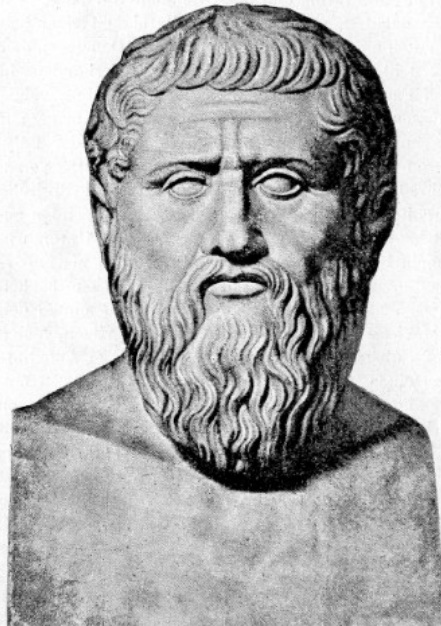


But Why?

Because we desire so much to get that result confirmed, this paper published, that thesis written... and more ... and more...

"A capital vice is that which has an exceedingly desirable end so that in his desire for it, a man goes on to the commission of many sins, all of which are said to originate in that vice as their chief source"

(Summa Theologiae, II-II, 153, 4. Thomas Aquinas 1225 - 1274 Philosopher)



The Scientific Method

‘Science is nothing but perception and the sorting of *facts* in order to obtain a coherent explanation of reality’ (**Plato**)

‘The real purpose of the scientific method is to discover that Nature hasn’t misled you into thinking you know something you don’t actually know.’

Robert M. Pirsig 1974

Zen and the Art of Motorcycle Maintenance

‘[...] individual deceptions occur in the greater context of the myth of the ‘scientific method’ and of the increasing corruption of science by pressure of professionalism [...]’

‘[...] the lack of responsibility of senior researchers over their subordinates’

R.A. Horne, *Physiological Chemistry and Physics in Medical NMR*, **15** (1983) p 365 - 367

VSNU: Code of Conduct for Science Practice

2004, revision 2012: Association of Universities in the Netherlands

- Scrupulousness
- Reliability
- Verifiability
- Impartiality
- Independence

Selective excerpts:

[1] Scrupulousness

Principle: Scientific activities are performed scrupulously, unaffected by mounting pressure to achieve

Best Practice: 1.3: Accurate source references serve to ensure that credit is awarded where credit is deserved. This also applies to information gathered via the Internet.

[2] Reliability

Principle: Science's reputation of reliability is confirmed and enhanced through the conduct of every scientific practitioner. A scientific practitioner is reliable in the performance of his research and in the reporting, and equally in the transfer of knowledge through teaching and publication.

Best Practice: 2.1: The selective omission of research results is reported and justified. The data has indeed been collected. The statistical methods employed are pertinent to the acquired data.

[3] Verifiability

Principle: Presented information is verifiable. Whenever research results are publicized, it is made clear what the data and the conclusions are based on, where they were derived from and how they can be verified.

Best Practice: 3.2: The quality of data collection, data input, data storage and data processing is guarded closely. All steps taken must be properly reported and their execution must be properly monitored (lab journals, progress reports, documentation of arrangements and decisions, etc.).

[4] Impartiality

Principle: In his scientific activities, the scientific practitioner heeds no other interest than the scientific interest. In this respect, he is always prepared to account for his actions.

Best Practice: 4.1: Scientific practitioners give others room to take their own intellectual stance. This applies particularly in case of a hierarchical relation, like the relation between a teacher and a student or a tutor and a PhD student.

[5] Independence

Principle: In his scientific activities, the scientific practitioner heeds no other interest than the scientific interest. In this respect, he is always prepared to account for his actions.

Best Practice: 5.2: Commissioned assignments demonstrably contribute to scientific teaching or research.

Mechanisms put in place at UvA

From: UvA Doctorate Regulations 2014

Article 16:5

If the thesis manuscript includes articles that have been written by several authors, it is the duty of the supervisor to evaluate whether the doctoral candidate has made an *independent contribution* to the articles that is sufficient to warrant the conferral of the doctorate. If necessary, *the supervisor will inform the Doctorate Committee of the manner in which the articles were written and what the contribution of the doctoral candidate was.* As defined in Article 15, clause 5, the candidate is required to include a list of references in the thesis manuscript



17.1 The implementation of changes in the thesis manuscript after it has been approved by the supervisor is only allowed with the express permission of the supervisor and co-supervisor (where applicable), and *only if the manuscript has not yet been submitted for assessment* by the Doctorate Committee.

17.4 Once the final manuscript has been approved by the supervisor and co-supervisor, but *before it is submitted to the Doctorate Committee*, and no later than fourteen weeks before the date of the defence ceremony, the supervisor shall provide the Dean with the electronic version of the manuscript.

17.5 The Dean is responsible for carrying out checks on *plagiarism*.

23:2 The chairperson shall convene a meeting of the Committee within fourteen days after the end of the six-week period referred to in Article 22, clause 2 *if a member has delivered a negative assessment* of the thesis manuscript, or if a Committee member requests such a meeting. At this meeting, after the assessments have been discussed, a written vote shall be held [...]

23:3 The members of the Doctorate Committee shall *not make any recommendations* to the doctoral candidate for changes or additions to the doctoral thesis. Furthermore, the Doctorate Committee shall not attach any conditions to its decision on admission to the thesis defence. defence.

CSL approach

- All applications (PhD/PD and support) *must* have the complete and *unanimous* support of Sloot, Hoekstra, Kaandorp, Kandhai and Lees
- 18 months evaluation is serious. Candidates may fail
- Peter Sloot has the end responsibility for all the science that happens in CSL, the quality of the research and the scientific conduct
- Peter Sloot is always available (mail/skype/coffee/beer...) to help with issues on scientific conduct, supervision, science at large

Less is more...

I do what many dream of all their lives,
—Dream? strive to do, and agonize to do,
And fail in doing. I could count twenty such
On twice your fingers, and not leave this town,

Who strive—you don't know how the others strive
To paint a little thing like that you smeared
Carelessly passing with your robes afloat,—
Yet do much less, so much less, Someone says,

(I know his name, no matter)—so much less!
Well, **less is more**, Lucrezia: I am judged.

"Less is more", a phrase from the Robert Browning poem "Andrea del Sarto, also called 'The Faultless Painter'" published in 1855