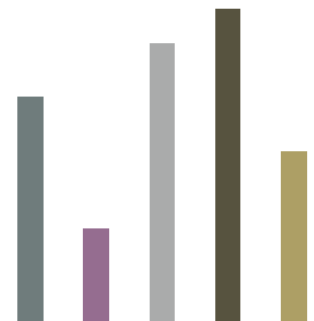


Publishing and Research Ethics as Wicked problems

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“Some problems are so complex that you have to be highly intelligent and well informed just to be undecided about them.”

– Laurence J. Peter

Dilemmas in a General Theory of Planning*

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ABSTRACT

The search for scientific bases for confronting problems of social policy is bound to fail, because of the nature of these problems. They are "wicked" problems, whereas science has developed to deal with "tame" problems. Policy problems cannot be definitively described. Moreover, in a pluralistic society there is nothing like the undisputable public good; there is no objective definition of equity; policies that respond to social problems cannot be meaningfully correct or false; and it makes no sense to talk about "optimal solutions" to social problems unless severe qualifications are imposed first. Even worse, there are no "solutions" in the sense of definitive and objective answers.

“The search for scientific bases for confronting problems of social policy is bound to fail ...”

Rittel and Webber 1973

<http://www.cc.gatech.edu/fac/ellendo/rittel/rittel-dilemma.pdf>

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What is a wicked problem?

“a problem that is difficult or impossible to solve because of incomplete, contradictory, and changing requirements that are often difficult to recognize. ”

https://en.wikipedia.org/wiki/Wicked_problem

The psychological dimension: from denial to acceptance

“The first step in coping with a wicked problem is to recognize its nature. There is a tendency to treat all problems as tame, perhaps because tame problems are easier to solve, reinforced by the lack of understanding about wicked problem dynamics and the tools and approach they require.”

Jeff Conklin <http://cognexus.org/wpf/wickedproblems.pdf>

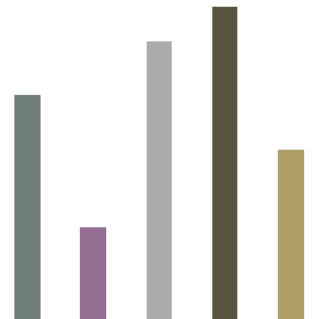
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How academia incubates wicked problems

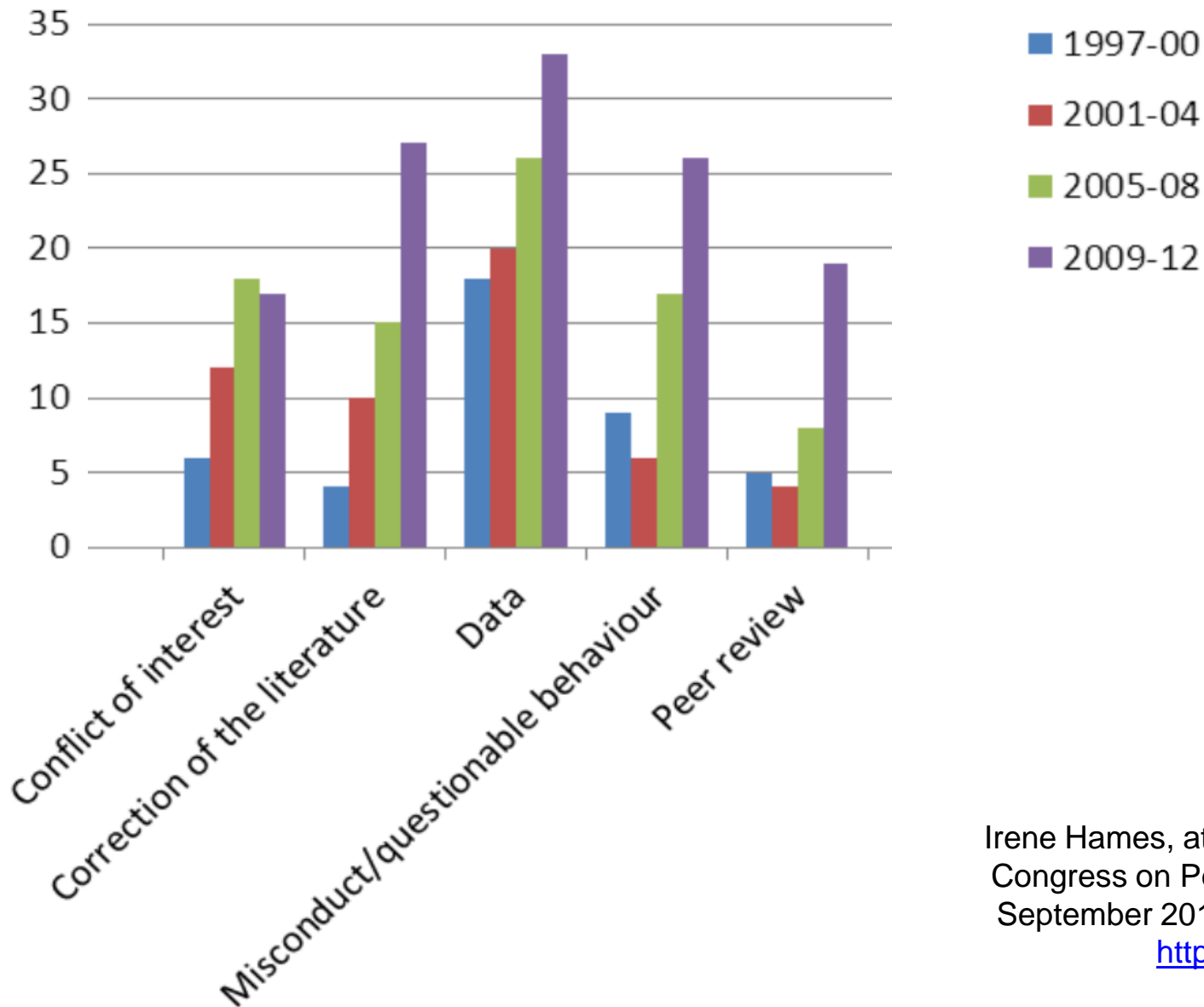
- Academia is now a regular job for many
 - yet basic training often neglects ethics
- Academia is global, yet managed locally
- Publishing, and research, is changing fast
- Easier ways to manipulate text and figures
 - with few accepted standards

The wicked problem threatening academic research

<http://bit.ly/2q9FH7Y>



COPE cases reflect increasing complexity



Irene Hames, at 7th International Congress on Peer Review, 8–10 September 2013, Chicago, USA
<http://bit.ly/2qAD5Be>

Tackling a wicked problem in isolation makes it worse

- Problem:
 - Poor uptake of education in prisoners
- Proposed solution:
 - Time off sentence for academic work
- Outcome
 - Plagiarism, ghost writing

Solving wicked problems: not a static activity

“not a clearly predetermined process since the ‘problem space’ becomes clearer as the work progresses and as knowledge contributions accumulate”

Franzoni, C., and Sauermann, H. (2013), “Crowd Science: The organization of scientific research in open collaborative projects

<http://dx.doi.org/10.1016/j.respol.2013.07.005>

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Solving wicked problems: not a solo activity

“require a degree of interdependency and thus cooperation between participants who address these sub-tasks.”

Franzoni, C., and Sauermann, H. (2013), “Crowd Science: The organization of scientific research in open collaborative projects

<http://dx.doi.org/10.1016/j.respol.2013.07.005>

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Some wicked problems in publishing and research ethics

- Lack of qualified reviewers
- Plagiarism
- Lack of data sharing
- Authorship issues

Wicked problems in publishing ethics

- Problem
 - Lack of qualified reviewers
- Proposed solution
 - Allow authors to suggest own reviewers
- Outcome
 - Fake reviewers

Wicked problems in publishing ethics

- Problem
 - Plagiarism
- Proposed solution
 - Provision of software to detect plagiarism
- Outcome
 - More sophisticated plagiarism
 - Thesaurus hacking etc

Wicked problems in publishing ethics

- Problem
 - Lack of data to support articles
- Proposed solution
 - Require journals to manage data sharing
- Outcome
 - Explosion of poorly quality supplementary info

Wicked problems in publishing ethics

- Problem
 - Authorship issues
- Proposed solution
 - Strict author guidelines
- Outcome
 - Falsification of authorship statements

Essential to look at the whole system: what underlies a problem

- Peer review fraud
 - Lack of incentives for good reviewers
- Plagiarism
 - Pressure to publish
- Lack of data sharing
 - Little infrastructure for data curation
- Authorship
 - Poorly defined cultural norms

Today's panellists

Panel Chair, Chris Graf, Wiley and COPE

- Innovative approaches
 - Bianca Kramer & Jeroen Bosman
Utrecht University Library
- New incentives
 - Phil Hurst, Royal Society
- Institutional approach
 - Jane Jacobs, QUT