

What new challenges lie ahead for research integrity officers?

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RI as preserving the scientific ethos

- Communism
- Universalism
- Disinterestedness
- Organized skepticism



Robert K. Merton (1910-2003)

"Incipient and actual attacks upon the integrity of science have led scientists to recognize their dependence on particular types of social structure. [...] An institution under attack must re-examine its foundations, restate its objectives, seek out its rationale." The Normative Structure of Science [Science and Technology in a Democratic Order], 1942

In this talk

- Through the lenses of Mertonian norms, in Merton's own words
- Articulate new challenges to research integrity
 - New technologies (ICT) and new ideas that potentially
 - Empower science
 - Hinder science
 - Overlapping with but different from Mertonian norms, leading to possible conflicts
 - Challenges that could/will involve the RI community and RIOs especially
 - As investigating officers
 - As policymakers
 - As educators
 - As academics
- A distinctive RI perspective to contribute to ongoing discussions and initiatives?
 - Not proposing answers, or saying what is right or wrong
 - Overview areas where dialogue is or will soon be necessary.

Communism

("Common ownership of goods")

- "The scientist's claim to "his" intellectual "property" is limited to that of **recognition and esteem** which, if the institution functions with a modicum of efficiency, is roughly **commensurate** with the significance of the increments brought to the common fund of knowledge".
- "Secrecy is the antithesis [...] full and open communication its enactment."
- "The **pressure for diffusion** of results is re-enforced by the **institutional goal** of advancing the boundaries of knowledge and by the incentive of recognition which is, of course, contingent upon publication."

Communism ≠ Open Science

- Communism is empowered
 - Virtually unbounded capacity to share data, methods, results
 - Diffuse them within and outside peer-reviewed journals
- New Challenges
 - Open Science initiatives might hinder Mertonian communism and science
 - Dis-incentives to data collection
 - Unnecessary costs, especially in fields where data is not re-used
 - Increased noise in the literature, increasing search costs
 - Cost-benefits differ by discipline, field, research question, and country, context...
 - Open Access ≠ Open Science
 - Some OA strategies may hinder Disinterestedness and Universalism
- RI has a specific contribution to make to the dialogue
 - Maintain a dialectic between RI and "Open Science" and "Open access"

What's the <u>real</u> problem with "pressures for diffusion"?

- Rather than "Salami Slicing", are scientists "Spreading themselves thin"? (Fanelli 2020 MITpress, 2021 OUP)
- New challenges
 - Are old narratives blinding us to new issues/phenomena? e.g.
 - Are conflicts over priority increasing?
 - Within collaborations?
 - Because of exploitation?
 - Between competing groups?
 - Because of more "parallel discoveries"?
 - Are we breeding ever greater scientific monocultures?
 - Is the pressure to have social media impact detrimental to scientific progress?



(Fanelli & Larivière 2016, PloS ONE)

Disinterestedness

- "Disinterestedness is not to be equated with altruism nor interested action with egoism. Such equivalences confuse institutional and motivational levels of analysis."
- "For once the institution enjoins disinterested activity, it is to the interest of scientists to conform on pain of sanctions and [...] of psychological conflict."

Disinterestedness > COIs

- Empowered
 - Broader dialogue and policies on managing individual Conflicts Of Interest
- New Challenges
 - Interests beyond financial or personal e.g.
 - scientific allegiance
 - ideological/political affiliation
 - involvement in NGOs
 - advocacy, societal engagement...



In February, 2020, 27 public health experts co-authored a Correspondence in *The Lancet* ("Statement in support of the scientists, public health professionals, and medical professionals of China combatting COVID-19"),¹ supporting health professionals and physicians in China during the early stages of the COVID-19 pandemic. In this letter, the authors declared no competing interests. Some readers have questioned the validity of this disclosure, particularly as it relates to one of the authors, Peter Daszak. In line with guidance from the International Committee of

Disinterestedness = institutional norm

- "Allowing funders/sponsors to jeopardise independence in the research process or reporting of results so as to introduce or promulgate bias."
 - (e.g. ALLEA 2017)
 - Are we victim blaming a bit?
 - And why just sponsors (i.e. financial COI)?
 - Other sources of bias (previous slide), and others from research institutions
 - · Institutions increasingly reward public and policy engagement
 - Compete on the students market
 - Concerns for branding or image, linked to particular research
 - ...
- Don't/shouldn't institutions prevent and protect against such pressures?
- Can/should/do RI community represent a technical "Mertonian voice" to policy making within their institutions?

Universalism

- "The acceptance or rejection of claims entering the lists of science is **not to depend** on the personal or social attributes of their protagonist; his race, nationality, religion, class, and personal qualities are as such **irrelevant**".
- "Universalism finds further expression in the demand that careers be open to talents. The rationale is provided by the institutional goal. To restrict scientific careers on grounds other than lack of competence is to prejudice the furtherance of knowledge".

Universalism \neq JEDI

- Empowered
 - Greater access to opportunities, more and diverse voices can be heard
- New Challenges
 - Universalism overlaps but is not synonymous with Equality (Diversity, Inclusion)
 - Potential tensions with RI, and a balance to be struck



'Fostering Research Integrity in an Unequal World'

Cape Town Statement on diversity, equity and fairness in research contexts

Universalism \neq Equality

- Scientific evidence and arguments are not all equally valid, valuable
- Researchers do not all have equal expertise, experience, talent
- New challenges
 - Resist tempting narratives of unconditioned equality, e.g.
 - The junior idealistic researcher vs. corrupt senior lab leader
 - The young reproducibility fighters against the oppressive "ancient regime"
 - Reproducibility/open science movement as a generational revolution (Spellman 2015, Persp. Psych. Science).
 - Innovative, not necessarily always wise.
 - The voices of the powerless have every right to be heard, but are not always, necessarily, completely right.

Universalism ≠ Diversity

- New challenges
 - When defined at all, diverse conceptions of "diversity" and means to achieve it
 - Race, gender, sexual orientation...
 - Cultural, national, ethnic, religious, socio-economic...
 - Political, academic, scientific....?
 - Individual diversity
 - Diversity of experience
 - Diversity of expertise, knowledge or opinion
 - All, in different ways, sources of viewpoint diversity https://heterodoxacademy.org/
 - Viewpoint diversity, whatever its source, can be valuable to science
 - Promoting/increasing it per se may sometimes run against Universalism
 - e.g. any equalizing policy or 'quota system', albeit valuable for other ethical or social objectives
 - Wide differences between disciplines, fields, research questions, countries, historical contexts
 - An RI dialogue about JEDI will embody RI values
 - Articulating a distinctive RI viewpoint
 - Acknowledging and examining potential conflicts
 - Evaluating all evidence and arguments, where relevant
 - Transparently laying out guiding values and principles, whether Mertonian or not

www.covidconsensus.org



(https://blogs.lse.ac.uk/covid19/2020/12/18/probing-academic-consensus-on-covid-19-mitigation-are-lockdown-policies-favoured-mainly-in-high-income-countries/)

Organized Skepticism

- "...variously interrelated with the other elements of the scientific ethos."
- "It is both a methodological and an **institutional** mandate."
- "Science which asks questions of fact, including potentialities, **concerning every aspect of nature and society** may come into conflict with other attitudes toward these same data which have been crystallized and often ritualized by other institutions."
- "...resistance on the part of organized religion has become less significant as compared with that of **economic and political groups**."
- "In modern totalitarian society, **anti-rationalism and the centralization of institutional control** both serve to limit the scope provided for scientific activity."

Organized skepticism \neq misinformation

• Empowered by

- Pub-peer, Retraction Watch, Blogs...
- Rapid, diversified forms of retraction, correction, expression of concern
- Large scale replication initiatives

• New challenges

- Tension between rapid dissemination of concerns and risk of unfair reputational damage
 - e.g. from Science article *A sea of doubts*: "In my experience, whistleblowers, myself as well as others, are shamed for talking to the media before an investigation has concluded misconduct," says [...] "But why is that? If an investigation even takes place, it can drag on for a very long time. If you know that data have been fabricated, why is it considered the right thing to do to stay silent about it for months and even years?"
- Growing scope for defamation suits, litigation
 - Stifling science (e.g. Are legal concerns stifling scientific debate? *Times Higher Ed* 2019: 2433)
- Capturing of knowledge by ideology
 - Misinformation, disinformation, abuse, noise...
 - A genuine problem, but so is it's supposed solution
 - Censorship by social media, and self-censorship induced by 'Cancel culture'

Organized skepticism vs. censorship

Printed from THE TIMES OF INDIA

Facebook reverses course, won't ban Covid lab leak

AFFI May 27, 2021, 00.56 PM IST

WASHINGTON: Facebook has reversed its policy banning posts suggesting Covid-19 was man-made, on the heels of renewed debate over the origins of the virus which first emerged in China.

The latest move by Facebook, announced late Wednesday on its website, highlights the challenge of policing misinformation and disinformation on the world's largest social network.

Cancel culture: a personal experience

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'Cancel Culture' Comes to Science

A scholar with an agenda targets as 'dangerous' our conference on filtering out faulty research.



PHOTO: DAVID KLEIN

ву Peter W. Wood Jan. 12, 2020 5:22 pm ET

PRINT AA TEXT





Fixing Science

Practical Solutions for the Irreproducibility Crisis

- A scholar active in reproducibility started a campaign on social media to boycott the conference, due to the politics of the organizers
 - Surely he felt this was the RI thing to do. But why?
 - Conference had an agenda, like many others
 - But we were engaging in a dialogue
 - e.g. I was invited because I criticized the "crisis narrative"
- · Some speakers, esp junior, withdrew
 - for political disagreement
 - or fear of guilt by association



Number of scholars targeted for the following reasons:

Investigation and termination are the most common sanctions.

Number of scholars targeted for expression about the following topics:



Top 3 Sources of Targeting Incidents From the Left and Right



(Foundation for Individual Rights in Education 2021), thefire.org

Journal of Controversial Ideas

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(ISSN: 2694-5991) Open Access Journal

Welcome to the website of the lournal of Controversial Ideas, the first open access, peer-reviewe interdisciplinary journal specifically created to promote free inquiry on controversial topics.

July 15, 2021

Jon Marcus

accountable moral agent'

The Journal of Controversial Ideas offers a forum for careful, rigorous, unpolemical discussion of issues tha Should academics be allowed to publish are widely considered controversial, in the sense that certain views about them might be regarded by man **anonymously?** people as morally, socially, or ideologically objectionable or offensive. The journal offers authors the option Editors of *Journal of Controversial Ideas* hope to puncture 'cancel to publish their articles under a pseudonym, in order to protect themselves from threats to their careers o culture', but other scholars warn researchers 'can't stop being an physical safety. We hope that this will also encourage readers to attend to the arguments and evidence

New challenges for RI in:

Investigations: Instrumental abuse of RM allegations, retractions other RI tools

- e.g. could "removal" retractions be the new book burning?
 - (Reducing the inadvertent spread of retracted science: taxonomy considerations, COPE seminar, Wednesday 29th, 15:00 UK time)
- **Education**: extend RI training to tolerance, dialogue and cultivating viewpoint diversity?
- **Policymaking:** RI community as a voice in defence of Organized Skepticism and other norms?