

Epistemic Injustice as an Unintended Consequence of Open Science

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June 20th, 2022

Context: Inequality in Academia

- Researchers from the global north dominate authorship and collaborative research networks (Cash-Gibson et al. 2018; Monroe-White and Woodson 2016).
- Women are underrepresented in senior positions, achieve them at a later age, receive less grant funding and have fewer 'high-impact' publications relative to men (Brown et al. 2020; Cech and Blair-Loy 2010; Penner 2015; Poczatková and Křibíková 2017; Higher Education Statistics Agency 2020; National Center for Education Statistics 2019; Healy, Ozbilgin, and Aliefendioglu 2005).
- Women and people of colour are grossly underrepresented as academic faculty in STEM fields (Li and Koedel 2017).
- White people are over-represented among postsecondary faculty, especially among senior career ranks (Davis and Fry 2019).

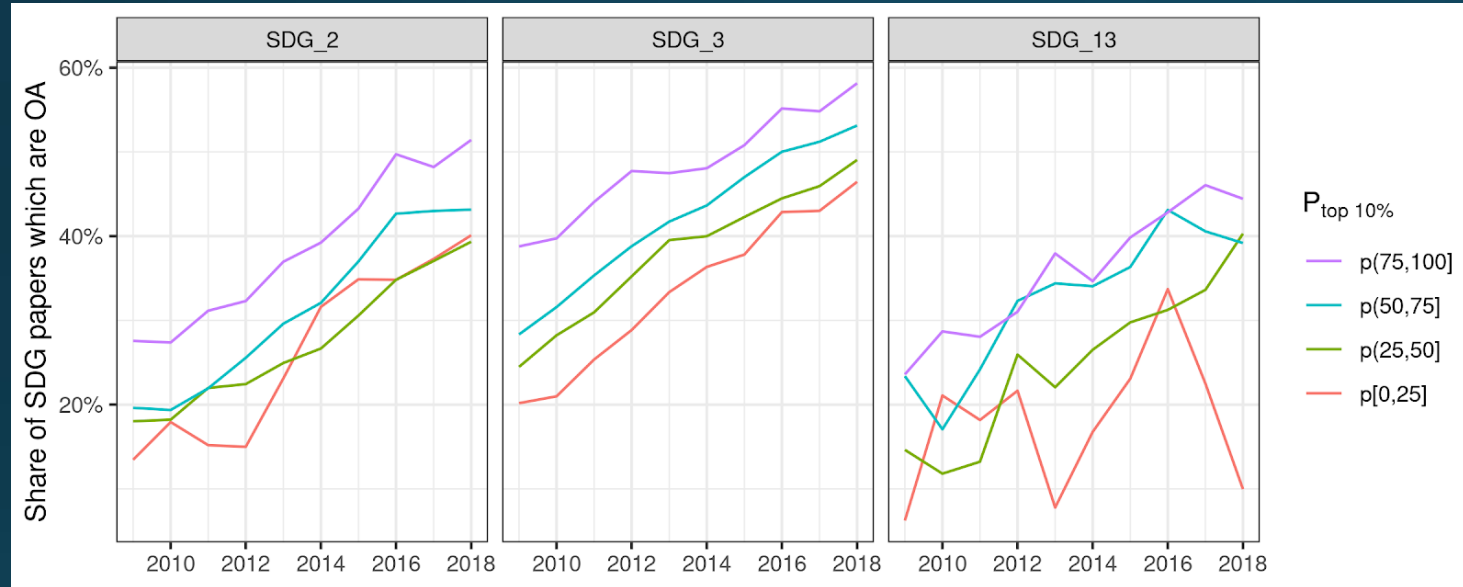


- Horizon 2020 project: October 2019 - March 2022
- Methods: Sociological, bibliometric and computational approaches

Objectives

- Ensure that Open Science & RRI interventions contribute to a more equitable scientific system
- Distribution of rewards based on merit rather than privilege

APCs and the Stratification of Open Access Publishing



- Higher ranked institutes both produce and consume more OA
- Well-resourced actors more likely to publish in journals with high APCs (the most prestigious) (Pride et al. 2021).

Science and Society: Access Isn't Enough

- Policy-making
 - No impact of OA on uptake of science by policy-makers
 - Scientific uptake by policy-makers requires translation work, personal relationships and upstream engagement (Cole et al. 2021)
- Societal inclusion
 - Understandability is more important than physical access (Cole et al. 2021)
 - Limits of Citizen Science – most marginalized remain excluded (Ross-Hellauer et al. 2022)

Epistemic Injustice

Some Open Science practices unintentionally fosters epistemic injustice: “**Testimonial injustice** occurs when prejudice causes a hearer to give a deflated level of credibility to a speaker’s word; **hermeneutical injustice** occurs at a prior stage, when a gap in collective interpretive resources puts someone at an unfair disadvantage when it comes to making sense of their social experiences” (Fricker 2007).

- OA publishing —————> Testimonial Injustice
- OA absent understandability —————> Hermeneutical Injustice
- Non-participatory Citizen Science —————> Epistemic Injustice

Recommendations

- Support consortial funding models that remove (or significantly reduce) author-facing fees for OA publication
- Provide funding and support for creating understandable research outputs and working at the science-policy interface
- Reform reward and recognition practices to support collaborative and participatory research design and methods

Learn more by [watching our video](#) and reading [our recommendations briefing](#).



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