Algorithmic accountability in scholarship: what we can learn from #DeleteAcademiaEdu

The controversy surrounding Academia.edu highlights the flaws and limitations of existing scholarly infrastructures. **Jean-Christophe Plantin** explores the intersection of algorithms, academic research and platforms for scholarly publications. He argues that there is a need to develop a values-centred approach in the development of article-sharing platforms, with suitably designed algorithms.



The networking and article-sharing platform academia.edu has been at the centre of a controversy in the academic community for the past few months. In 2015, the website invited several researchers to join the 'Editor Program', a group tasked with probing issues of unpaid labour on such platforms . Later that year, the Centre for Disruptive Media at Coventry University hosted a symposium, 'Why Are We Not Boycotting Academia.edu'. In early 2016, an employee of academia.edu contacted academics to enquire if they would be interested in paying for promotion of their content on the website (an article in the Chronicle summarises the event). The hashtag #DeleteAcademiaEdu relayed these debates on Twitter about the incompatibility between scholarly values and paying for visibility, and several researchers announced their decision to close their profile.

These debates around academia.edu are a great opportunity to reflect on algorithmic accountability. On the front end, the use of algorithms on such platforms results in positive outcomes for users, such as recommendations of articles based on similar interests, or analytics assessing the impact and reach of scholarship. On the back end, though, the lack of transparency in the circulation and brokerage of academics' data threatens to undermine the integrity of researchers.



Image credit: Pixabay (public domain), modified

Platformisation of scholarship?

If scholarship is driven by values of long-term accumulation of knowledge, startups (such as academia.edu, despite a confusing domain name) are driven by more pragmatic, short-term strategies. This is translated into fast-changing data access and evolving features of services. For example, after a change in its terms of service in 2011, Twitter requested that researchers remove the datasets of tweets they were publicly sharing online (for example, on the Stanford Network Analysis Project). Similarly, updates to the Twitter or Facebook APIs regularly change access to data, undermining possible reproducibility of research and making scholarship "unattainable" (following Bucy and Zelenkauskaite).

If academia.edu is at the moment still running on venture capitalist funds, supplemented by ads and job listings, the necessity of a sustainable business model could change both the features of the website and the control users can have over their data. Most of the debates on #DeleteAcademiaEdu concentrate on this point: at the moment, the company does not seem to allow access by third-party users, but that could easily change given a lack of transparency and control over the future use of data and metadata extracted from researchers' profiles and articles. Fears of mining of personal data and content might very well be justified: for the CEO of academia.edu Richard Price, mining all the articles deposited on the platform to extract real time insights on current trending research topics, later sold to R&D companies, is a serious possibility for the future of the company.

Not throwing the algorithms out with the platform

The controversy highlights the flaws and limitations of existing scholarly infrastructures. First, private intermediaries such as Sage are already common in scholarly publication, and their paywalls drastically restrain access to publications for researchers unaffiliated with institutions that have the appropriate subscriptions. Secondly, existing institutional repositories in universities that provide a similar service for sharing articles do not prioritise the visibility of research and are often siloed. The success ofacademia.edu (and other related commercial publishing platforms, such as Researchgate and Mendeley), shows a real need and desire from researchers to share their research outputs and to gain visibility beyond traditional peer-reviewed journals and scholarly infrastructures.

The lesson of #DeleteAcademiaEdu is thus how to design algorithmically-driven platforms with scholarly values in mind. Rather than debating whether reliance on algorithms in scholarly communication systems improves or undermines scholarship, we need to adopt a values-centred approach in the development of new networking and article-sharing platforms. Despite all their flaws and limitations, existing knowledge infrastructures still

Ethan Gruber Gruper Gewg118-Jan 29 #DeleteAcademiaEdu illustrates an immediate need for universities and nonprofits to come together to build an aggregated #OA infrastructure

promote long-term sustainability, reliability, public value, and accessibility. The open access movement, by advocating for free online access to scientific and scholarly research literature, aims to challenge the pay-per-use, premium offer, private interest logics of the platform economy. We should look to it as a source of collaboration and invention for the design or development of knowledge infrastructures.

This piece originally appeared on the LSE Media and Policy Project Blog and is reposted with permission.

Note: This article gives the views of the author, and not the position of the LSE Impact blog, nor of the London School of Economics. Please review our Comments Policy if you have any concerns on posting a comment below.

About the Author

Jean-Christophe Plantin is Assistant Professor in Media & Communications at the LSE. His research investigates the political and social implications of "data science."

• Copyright 2015 LSE Impact of Social Sciences - Unless otherwise stated, this work is licensed under a Creative Commons Attribution Unported 3.0 License.