A tale of two scholarly blog platforms: comparing and conceptualizing online research communities.

blogs.lse.ac.uk/impactofsocialsciences/2015/03/11/a-tale-of-two-scholarly-blog-platforms-hastac_hypotheses/

3/11/2015

Cornelius Puschmann and Marco Bastos expand on the computational methods employed to understand the contributions and online networks of two prominent scholarly blog platforms, HASTAC and Hypotheses. Their analysis suggests one community is driven more by an emphasis on the new media movement and cross-disciplinary aspiration, compared to the other's more traditional disciplinary approach with a focus on the new publishing environment. The toolbox for analyzing blog platforms is still evolving and any results need to be treated with care. But it is clear that these computational methods can shed a new light on ongoing developments in science and scholarship.



The idea of using social media tools in scholarly research has generated a lot of excitement in the past few years. This enthusiasm for digital technology in teaching and research among some scholarly circles has grown against the backdrop of considerable initial skepticism towards its role among senior academics. Successful examples such as the LSE Impact blog, often referenced to us as a model for successful scholarly blogging, draw considerable attention and highlight the benefits that exist not just for scientific communities, but also for the relationship between science and the public more broadly. A recent survey by Nature Publishing Group suggests that new instruments for sharing and communicating research are gradually being viewed with more seriousness than was previously the case, though national and disciplinary differences persist.

Marco began to study the use of social media in scholarship as the NSF EAGER postdoctoral fellow at Duke University, and Cornelius started a similar project during his postdoc at Humboldt University of Berlin's School of Library and Information Science. We decided to jointly study HASTAC and Hypotheses, the two scholarly blogging platforms that we surveyed for our paper in PLoS ONE. HASTAC and Hypotheses are fitting examples of a growing science policy interest in social media, and a growing interest of scholars in the tools offered to them. Cornelius was already looking at Hypotheses when the platform became popular in France and Germany, and when Marco gained access to similar data for HASTAC, it became clear to us that a comparison would yield more interesting results than two separate case studies. Both platforms also attract comparable scholarly communities from the humanities and social sciences, thus standing as exemplars for distinct research traditions in the U.S. and Europe.

Unsurprisingly to anyone familiar with what Karin Knorr-Cetina (1999) calls "epistemic cultures," the differences between these scholarly communities are considerable and strongly reflected in the two platforms, both internally and in comparison to one another. In many respects, HASTAC is about a renewal of the humanities, perhaps even a transformation into an updated version, while Hypotheses is more of a vehicle for writings that otherwise would have been published elsewhere, or not published at all. While the former platform tries very much to be the vehicle of a more or less coherent movement, the latter is a platform for a great diversity of otherwise unrelated research initiatives, graduate programs, scholarly archives, and individual academics from different European countries written in more than a dozen languages.

These differences became abundantly clear when developing the methodology of our study, which relied on two computational approaches to the blog entries: co-word frequency analysis and topic modeling. While the first approach is relatively straightforward (the comparison of two linguistic variants of a concept, in our case something like *history* and *digital history*), the second is computationally resource-intensive. We conducted our analysis using R, the increasingly popular open source statistics framework, and found it, not for the first time, to be an invaluable tool. Anyone interested in scholarly communication should familiarize themselves with R and the outstanding

HASTAC Hypotheses Sociogram

Source: Puschmann and Bastos (2015). How Digital Are the Digital Humanities? An Analysis of Two Scholarly Blogging Platforms. *PLOS ONE.*

So how are HASTAC and Hypotheses different? As noted above, HASTAC is driven by newness and what you might call a revolutionary, cross-disciplinary aspiration, compared to the disciplinary focus of Hypotheses. New media, new forms of teaching, learning, and collaboration, are discussed more often in HASTAC, while Hypotheses includes more content dedicated to the transferal of traditional humanities and social science research into a new environment. This difference can be seen in the sociogram of topical clusters based on the log-odds co-occurrence ratios between humanities and DH terms (see above). While HASTAC posts are spread over groups of humanities and digital humanities disciplines, Hypotheses posts are mostly concentrated on a single group with digital humanities labels subsumed within the large cluster. These differences are likely tied to the organizations running the platforms and how they framed their aims (building a network of scholars interested in new media vs. providing a publishing platform). There also seems to be a greater enthusiasm for prefixing subdomains of humanities research with the word *digital* in the U.S. than in Europe, perhaps a symptom of this aspiration to newness, or an interdisciplinary vs. intradisciplinary vision of what the digital humanities comprise.

But these differences should be taken with a grain of salt. For one, the use of labels (or terms such as *digital history*) should not be mistaken for an indicator of the prevalence of this material (how much people are undertaking digital history). It may be that the term is particularly recurrent on one the platform while other labels are preferred on the other, or that what is digital in the one platform is simply history in the other. One important thing we learned through our analysis is that the toolbox for analyzing blog platforms is still evolving and that the results need to be treated with care. Variation between blogs and even within the same blog is considerable, so generalizations are difficult to apply across the data. On the other hand, we have also been able to identify areas where both platforms overlap to a notable extent. It remains to be seen which labels will establish themselves across the increasingly digital area of humanities research.

If anything, we see the positive responses to our paper as a clear indicator that computational methods can shed a new light on ongoing developments in science and scholarship.

For more on this research, you can find the full PLOS ONE journal article here: How Digital Are the Digital Humanities? An Analysis of Two Scholarly Blogging Platforms.

Top left image credit: WordPress CMS (pixelcreatures Public Domain)

Note: This article gives the views of the author, and not the position of the Impact of Social Science 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 Authors

Cornelius Puschmann is currently acting professor of communication science at Zeppelin University

Friedrichshafen, and research associate at the Alexander von Humboldt Institute for Internet and Society in Berlin.

His research focuses on digital communication and the Internet's impact on society, especially on science and scholarship. Email: cornelius.puschmann@hiig.de

Marco T. Bastos is a postdoctoral researcher at the University of California at Davis. He holds a PhD in

Communication Sciences from the University of São Paulo and was previously the NSF EAGER postdoc at Duke University. Email: bastos@ucdavis.edu

• Copyright © The Author (or The Authors) - Unless otherwise stated, this work is licensed under a Creative Commons Attribution Unported 3.0 License.