

Open-Access Mega-Journals: Research in Progress

Stephen Pinfield and Simon Wakeling

University of Sheffield, UK

Claire Creaser, Jenny Fry, Valérie Spezi (Loughborough University)
Peter Willett (University of Sheffield)



The Mega-Journals Controversy

Positive views:

- Joseph Esposito (2010) argued, “I think PLoS One **points to the future of academic publishing**”
- Richard Wellen (2013) identifies OA mega-journals as having (some of) the characteristics of “**disruptive innovation**” with the potential to contribute to major change
- Jean Claude Guédon (2015) in commenting on the future of scholarly communication, stated, “**Subsidized mega-journals would be the best system...**”

Negative views:

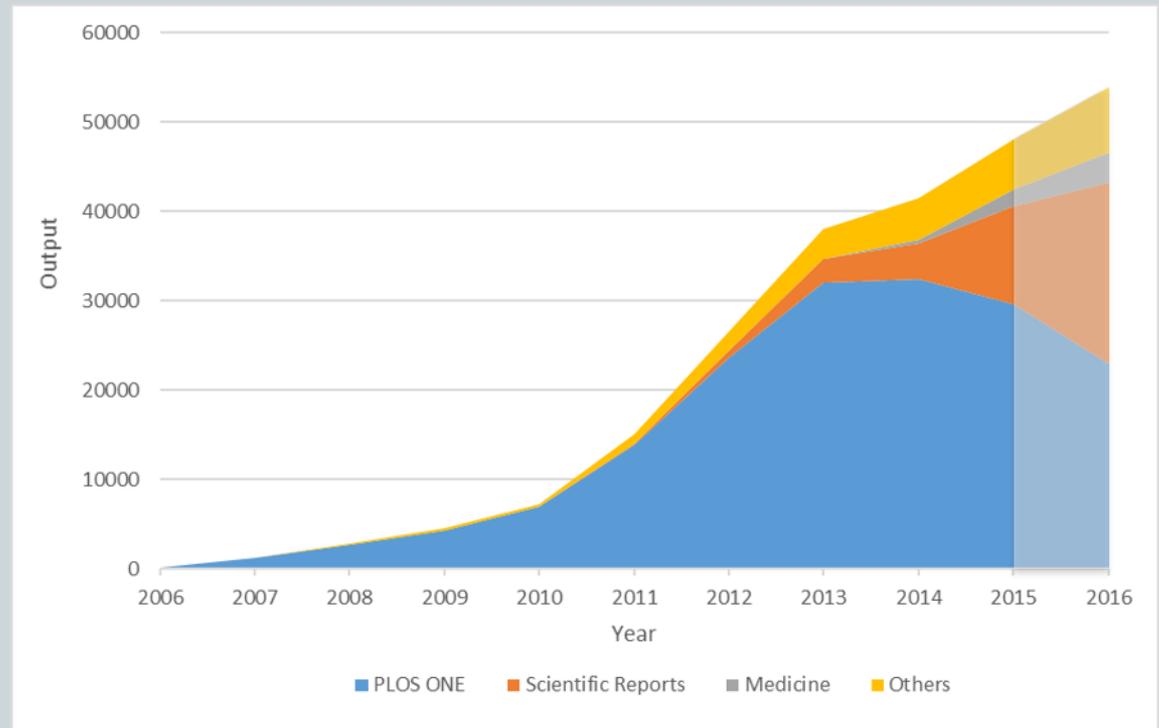
- John Hawley (quoted in Butler, 2008) voiced the fear that *PLOS ONE* would be a “**dumping ground**” for “**sub-standard**” content – a criticism levelled at all mega-journals
- Declan Butler (2008) labelled *PLOS ONE* a “**cash cow**” sustained through “**bulk publishing**”
- Kent Anderson (2010) criticised them for **dispensing with the valuable filtering** of conventional journals

Defining ‘Mega-Journals’

- Fully-open access
 - Often with an APC-based business model
- Large scale
 - e.g. *PLOS ONE* (launched in 2006) – now the largest journal in the world, 31,404 articles in 2013 (in Scopus)
 - but many mega-journals are newer and are not large scale (yet)
- Wide scope
 - e.g. *PLOS ONE* and *Scientific Reports* cover all science, technology and medicine (STM) disciplines, *SAGE Open* covers all humanities and social sciences (HSS)
 - *AIP Advances* covers all of Physics
- Particular approach to quality control
 - Pre-publication peer review based on scientific ‘soundness’ rather than ‘subjective’ assessments of ‘novelty’, ‘importance’, or ‘interest’
 - Post-publication metrics – the scientific community ‘decides’ novelty and importance by use, citation, etc

Mega-Journal Growth

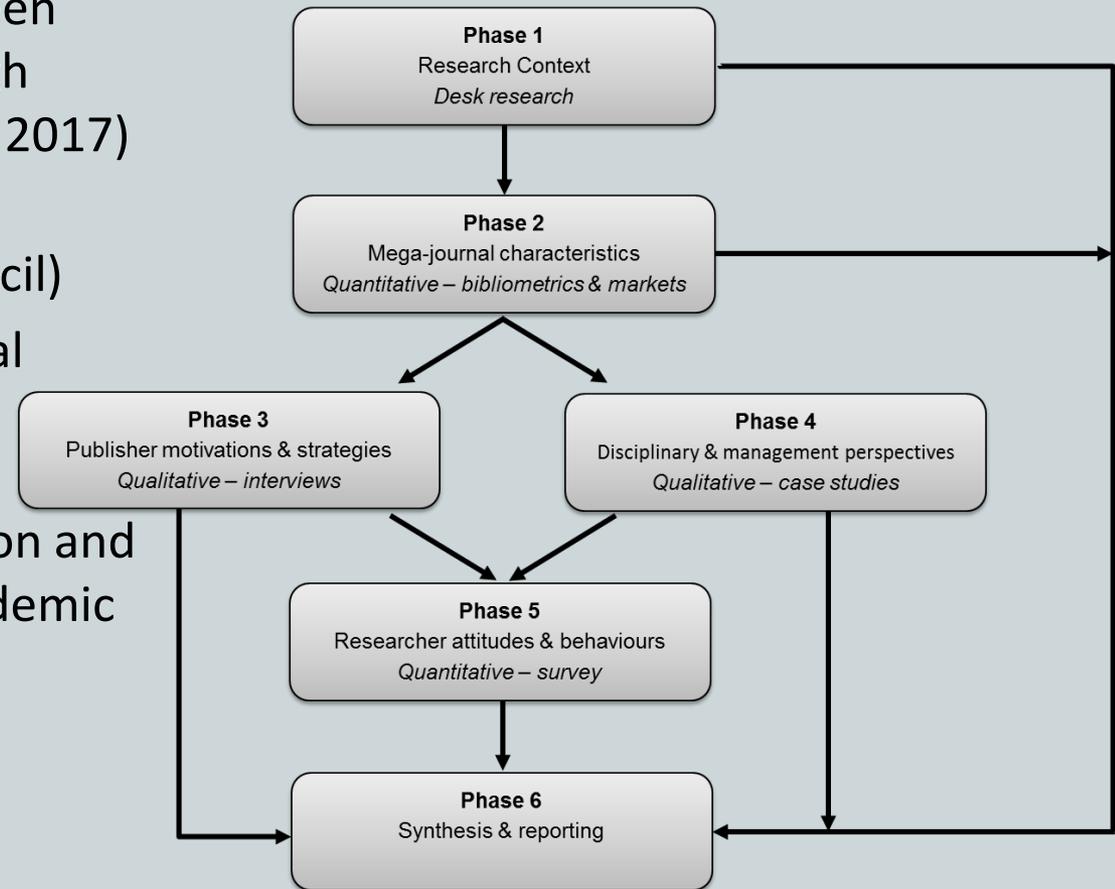
- *PLOS ONE* launched in 2006
- Other titles launched mostly from 2011
- Output dominated by *PLOS ONE* but *PLOS ONE* showing a decline 2013-15
- *Nature's Scientific Reports* increasing over the same period; on course to overtake *PLOS ONE* monthly outputs soon
- Other titles growing (if at all) more slowly



Total number of articles published in 11 mega-journals (*PLOS ONE*, *Scientific Reports*, *BMC Research Notes*, *BMJ Open*, *AIP Advances*, *Medicine*, *SpringerPlus*, *PeerJ*, *SAGE Open*, *F1000 Research* and *FEBS Open Bio*) – those indexed in *Scopus* since at least 2013 – includes projected figures for 2016 (doubling outputs to June)

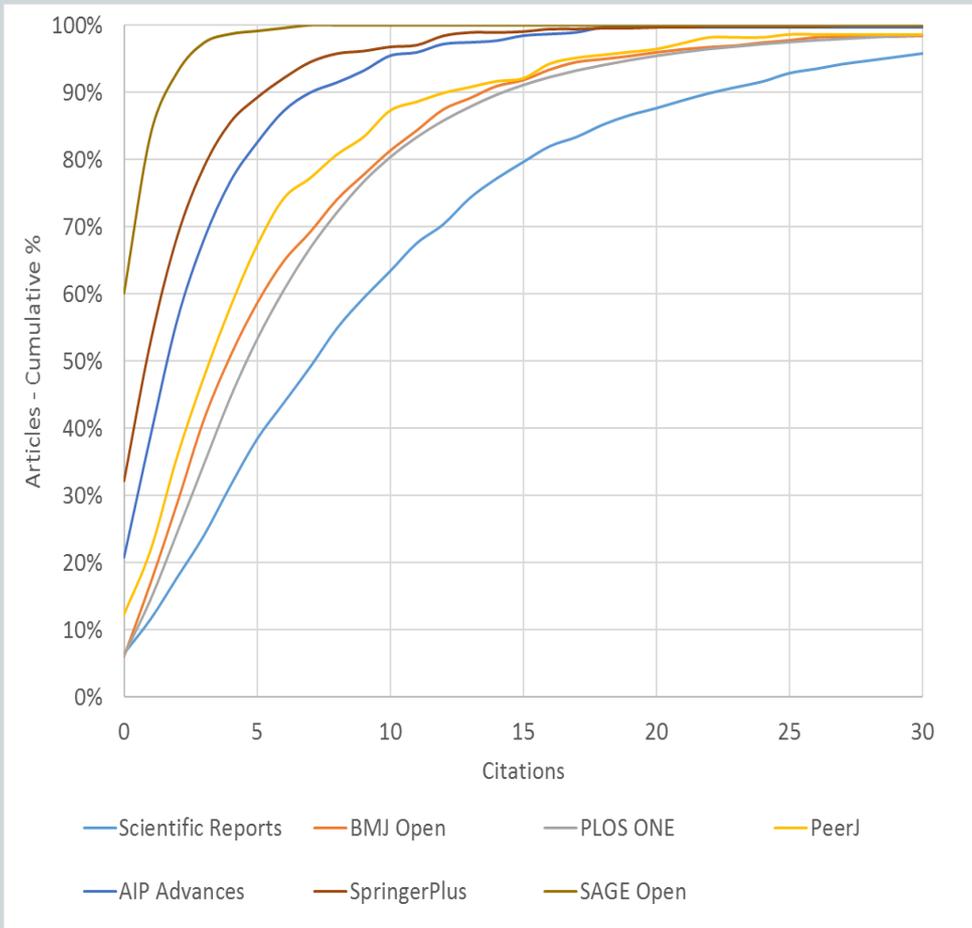
Open-Access Mega-Journals Project

- 2-year collaboration between Sheffield and Loughborough universities (Nov 2015-Oct 2017)
- Funded by AHRC (Arts and Humanities Research Council)
- Investigating: “The principal characteristics of the emergent open-access ‘mega-journal’ phenomenon and its significance for the academic research community and beyond”
- Using quantitative and qualitative methods



<http://oamj.org/>

What Does This Tell Us About Mega-Journals?



Cumulative citation distributions for 7 OAMJs (articles published in 2013)

Among mega-journals publishing 2013, *Scientific Reports* has the lowest proportion of infrequently cited articles

Question: Why do all these journals which operate soundness-only peer review policies have such different citation distributions (and JIFs)?

- Subject variations?
- *De facto* differences in peer review practices?
- The result of cascade from other journals from the same publishers?
- Publisher and journal reputation?

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