Theme Consultation

Live themes (past or current)

- Software Citation – Jun-Aug 2018
- Decentralized Web – Sept-Oct 2018

Proposed themes

September / Oct. 2018

About:

Welcome to our #GenR theme survey.

Our next theme will start in early November 2018 and we would like to invite your feedback on our theme suggestions. You are also welcome to suggest new themes that you think are important to help researchers take on board Open Science practice.

Generation R https://genr.eu/ runs themed sets of blogposts and accompanying contributions to partners platforms, like Open Science MOOC. So far we had two themes: Software Citation and Decentralized Web

Feel free to get in contact with any questions and further comments DM @gen_r_ or email the editor Simon Worthington simon@genr.eu

These are current proposals. Please feel free to make **NEW** suggestions or add comments. Any questions please contact Simon Worthington, Editor: DM or tweet @gen_r_ or simon@genr.eu

1. **Metrics Remade** – Metrics and research assessment (analysis or intelligence Christian Hauschke) have been highlighted by two recent controversies: first the 'predatory publishing' scandal; and second the EU Commission tender of the European Open Science Monitor being awarded to consortium that included Elsevier as a partner. The consensus in the Open Science community is that the majority of metrics being used in research are 'not fit for purpose' and that a new set of metrics should be built in an scientific, open, accountable, humane, and robust fashion. Key among the accusations against the current metrics is their detrimental effects on the quality of research being carried out. These calls are backed by substantial scientomentric research (STI 2018) and social analysis (Franzen, Joy, and Long 2018).
    a. **Summary: Metrics Remade** – there are clear calls from many quarters for the need to scrap the current metrics being uses across academia and replace them with new measures that are humane and open.
2. **Preprint Culture** – arXiv was a thing even before the web itself, and in recent years the concept spread to even more fields. Platforms like Open Science Framework, new concepts like Open Peer Review, policies encouraging "green road" self-archiving, publishers integrating preprint-like services into their platforms — there's continuously a lot happening in this space, preprints seem to be one of the driving forces in changing publication culture. By the way, do we still need journals? 😉
    a. **Summary: Preprint Culture** – self archiving as the future of academic publishing. A growing bottom up culture that is speeding up the move to Open Access. Is this the end of the journal?
3. **Open Peer Review (OPR)** – a central plank to restoring trust, credibility, and hopefully effectiveness of research publishing. As part of the opening up of scholarly communication building on top of Open Access OPR is accompanied by the following other example areas: preprints, open annotations, open citation databases, and the DORA agreements for improved research assessment. There are a variety of platforms and ways to carry out OPR and its merits need exploring.
    a. **Summary: Open Peer Review: Restoring trust** – news Open Peer Review (OPR) platforms are coming online to help restore the trust in peer review, one of the key mechanisms of trust that underpin science, but which has been undermined by a lack of transparency and accountability.
4. **Diversity through Open Science** – what role can Open Science play in contributing towards equality and parity in the numbers, and types of roles, that groups who continue to be excluded from or experience prejudices in science, academia, and research. Also is there a role for Open Science in addressing the historic imbalances in research outputs, and access, from the Global South—especially with the quality of research, and new research relationships being formed between Europe and BRICS (primarily China) nations.
    a. **Summary: Diversity and equality through Open Science** – what role can Open Science play in addressing issues of bias and equality effecting those working in research, and of the global structural bias of academia against the Global South.
5. **Citizen Science** – a survey of Citizen Science practice and looking at where such 'outreach' is being picked up. An interesting set of question in Citizen Science are about how to go beyond a passive view of the public as either crowdsourcing providers, or being about 'the public understanding of science' (PUS). What other types of initiatives are out there, such as: research libraries being open to all; science search results in 'normal Google search'; a different voice for science in the media or as we see science creating its own media?; or are shadow libraries part of citizen science?
    a. **Summary: Citizen Science and building communities** – what can scientists learn from the 'museums, libraries, and archives' (MLA) sector about building communities of support and engagement from the wider public.
6. **FOSS and Open Science infrastructure development** – Open Source / FOSS procurement policies – 'the need for R&D dev cycles to be in public institutions and not in closed in the private sector' - Barcelona city government has a full Open Source commitment for procurement vs. EU Commision and the Open Science Cloud (neutral policy) e.g., current OA H2020 commission. The EU has made positive recommendations on FOSS but its not mandatory for procurement. EU FOSS strategy https://ec.europa.eu/info/departments/informatics/open-source-software-strategy_en. Francesca Bria CTO, director Barcelona Digital City (the elected city council) - Policy: https://ajuntament.barcelona.cat/digital/en/digital-transformation/technology-for-a-better-government/transformation-with-agile-methodology | Francesca Bria profile: https://cities-today.com/power-to-the-people/#SmartCities
    a. **Summary: Open Source infrastructures, made by researchers, for researchers** – how can more FOSS infrastructure building be done by researchers in public institution to keep the know-how in the public domain.
7. **New academic book technology and getting published** – look at new platforms and new ways to make academic books. A survey of current book platforms for making different types of book and how to make the book useful for the person / group carrying out the research, and for the

user / reader. Another important aspect of new book making is to make the content FAIR and as LOD compatible as necessary for type of publication. This can include the following book types: academic monograph; manuals; reference books; book sprints and collaborative books; image based books; and OER books.

   a. **Summary: The academic book of the future** – innovating the book to be part of the new Open Science data ecology and Open Access economy. An exploration of the challenges for a new life for academic books. In comparison journal articles have left the book behind and are already changing into—evolving, layers—data collect, see: PeerJ, or PLOS ONE article layouts.

8. **Open Science in higher education: Towards a cultural change?** – as notes in the Berlin Appeal https://de.wikiversity.org/wiki/Wikiversity:Fellow-Programm_Freies_Wissen/Berliner_Appell (Ina Blümel). Look at current practices in universities, e.g., Examples that allows students to be part of the scientific community and even actively engage in it, and if commitment to Open Science is already integrated into objectives the professorships, or teaching programme etc.
   a. **Summary: Open Science in higher education: Towards a cultural change?** – a survey of approaches to teaching Open Science to undergraduates and young researchers.
9. ~~**Open Science in energy systems** – electrical generation/distribution re: climate change, innovations, etc. See: #Energis13 https://twitter.com/hashtag/ENERGI3?src=hash This area is interesting as it is a positive way that engineers and other researchers can make a contribution to addressing climate change, and a number of open initiatives are being made. It is also an example of a specific field being changed by Open Science because of a need for a step-change acceleration in R&D.~~ (this has been removed due to being too sector specific)
10. **Open Government Data** –
   a. **Summary: Open Government Data** – a survey of Open Science research practice with Open Government Data. Firstly, how do researchers use the data being produced. Secondly, how are researchers shaping new fields and systems designs, and finding new roles to work with government.

End here

1. **Open Science and the history of science - renewing legitimacy of science** –
2. **PlanS** –
3. **Deal** –
4. **Processual research or open notebook science**
5. **Remix/reuse (for example in regards the current EU copyright directive).**

'23rd International Conference on Science and Technology Indicators'. STI 2018, 2018. http://sti2018.cwts.nl/.

Franzen, Martina, Eileen Joy, and Chris Long. 'Humane Metrics/Metrics Noir', 25 June 2018. https://hcommons.org/deposits/item/hc:19823/.