1st OPEN SCIENCE FAIR Report Athens, September 2017

Bringing together a wide international audience, Open Science Fair inaugural edition, an initiative of OpenAIRE, OpenUp, FOSTER and OMTD EU projects and locally curated by the National Kapodestrian University of Athens and Athena Research and Innovation Center under the co-sponsorship of the National Library of Greece, managed effectively and time-efficiently addressing major critical questions associated with Open Science ecosystem requirements, risks, challenges and perspectives, showcasing



at the same time a great variety of innovative solutions, tools and methods and bringing to the fore the Open peer review and OS metrics case.

Organizers have resourcefully combined disperse information on OA / OS specific research initiatives, we only had so far been able to sneak peek during webinars and half-day conferences, enabling the research community and librarians among other

stakeholders to enjoy a comprehensive 360° view of current international field dynamics deployed around three major axes- OS policies and processes, OS impact and FAIR data and Services- and a thorough initiation to short and long-term visions of what is coming next and what, according to OS

"Open Science is about democratization of research processes and outputs"

Jon Tennant, Communications Director, ScienceOpen

leading experts the next top priorities should be in order to speed up the transition to OS from all different stakeholder perspectives.

While opening and keynote presentations were the pacemakers of the event highlighting challenges and benefits associated with the scholarly communication and research dissemination paradigm shift stressing the importance of continuous methodological education and all stakeholders' interests alignment

"... the interests of all these people who want to publish, who want to get funding, who want to translate and who want to make profit and which necessarily is not very easy [to align]" Pr. JPA loannidis, Stanford University

as the way to resolving the current scenario ambivalence, parallel sessions and workshops offered an OS emerging framework outline and additionally a hands-on approach to

- Evaluating OS drivers importance from researchers standpoint
- Testing the Knowledge maps interface and potential
- Becoming familiar with the OpenUp Hub innovative dissemination toolbox properties
- Critically analyzing the FAIR principles web-based assessment tool's effectiveness and adequacy

More specifically, presenters stressed **the importance of** communication and coordinated efforts (Tsimpoglou, Tennant), transparency in terms of OA funding and costs along with **the need to** get out of the box to see how OA relates to the community (Manola), train data scientists, establish adequate reward systems (Tavernarakis), move away from present indicators, flawed metrics of JIF and related measures (Matthias, Markie), promote the engineering spirit (Sachs), support advocacy and exchange

opportunities and establish a transparent social network over repositories (Knoth) in order to overcome legal, political, economic, organizational, technical, sociocultural, informational related OS barriers that lead to inertia (Tennant), challenges associated with publication and research data sharing culture diversity, discipline specific infrastructural availability, the degree of publishers' support of self-archiving policies and publishers' compliance with funders' OA requirements (Tavernarakis), bonds and interrelations between society and publishing status quo that have to be tackled in order to move forward [Markie], the difficulty to inspiring the community and to redirect some of the library funds to support OA (Shearer), and science falsification, reproducibility (Gavrouglou, JPA loannidis) and copyright considerations (Georgopoulou) in their fight against skepticism surrounding OA publications and scientists' fear of the possibility that their work could be under-evaluated or compromised.

During plenaries and selected parallel sessions, we had the opportunity to attend OS experts **addressing** a set of critical questions around

- Inefficiencies of existing publishing system [Shearer, Fecher]
- Reasons for launching OS institutional platforms [Fecher]
- Open reviewer quality and conflicts of interests issues potentially involved in the open peer review process [Fenter]
- Ways to balance open Access with incentives
- The confusion surrounding Europe's existing growth model [Sachs]
- Building momentum around incentivizing community to adopt the new standards [Shearer]
- Policies and mandates adequacy to really helping overcome OS barriers [Tennant]
- People's fear OS could compromise their career
- Ways Altmetrics could feed back into science [Gauch]
- Media impact on the value system of science [Gauch]
- New Generation Repository (NGR) characteristics [Knoth]

making the case for Open Peer Review and Open Publishing Platforms, proposing practical solutions such as

- The Communalist approach to the infrastructural issue where public infrastructures are highlighted as the solution to the realization of the Journal Flipping Model that will serve the public while managed by academics.[Fecher]
- OA views and downloads mapping to feed the conversation as to where the most vibrant open access hubs and supporters are located
- Continuous methodological Education (CME) for catching up with methods and tools as a solution to OS blockers [JPA loannidis]
- Nanopublications in LOD [Penev]
- The Journal Flipping Model managed by academics through a public infrastructure [Fecher]
- Going beyond metadata in a combination of activity and descriptive data that enables bulk data transfer, navigation and notifications

along with offering a quick overview of OS community long-term visions of repositioning the institution and the library at the center of scholarly communications, making libraries operate as open trusted durable interdisciplinary, interoperable content platforms (Shearer), bringing repositories back to the central of the research community and closer to the researcher (Rodrigues), adopting extended functionalities within repositories (Shearer), making researchers embrace the new paradigm and finally

creating an Open Research Central platform where platforms will be merging across space and disciplines (Markie).

To that direction, national and international institutions and organizations in their effort to improve the virtual research environment to support collaboration and knowledge sharing (Bossy) have been engaged over the past few years in prioritizing and promoting the OA/OS case by **forming** interdisciplinary OA working groups (ERC), **organizing** surveys and workshops aiming to raising awareness of the importance of research dissemination to non-academic audiences, **developing** Innovative Dissemination Tool boxes (OpenUp Hub), semantic text data mining (LitPath Explorer) and topic modelling services (OpenAIRE), Taxonomies, OS license matrices and research data assessment tools (DANS FAIR), global scientific output search optimization platforms (Linknovate), expertise directories, Open textbook networks and finally **instituting** Open Science Award Scheme to promote OA/OS practices among researchers (University of California, Berkeley)

Closing Thoughts

Celebrated at SNFCC National Library of Greece facilities, this highly inspirational and well organized conference attracted the attention of a vast audience from around the globe with participants' specializations ranging from LIS and publishing to educational and IT fields engaged in vivid conversations where the question is not anymore whether or not adopting OA/OS principles but when and how to add extra dimensions to NGRs; a conference that judging from the variety of topics addressed, it has already set the standard and future directions of discussions to come.

In the era of the 4th Science paradigm where collaboration is synonymous to participation, where open content, crowdsourcing, collaborative research and interactive participatory science dissemination are evolving from buzzwords to norms and dissemination has become just as important as publishing (Penev), librarians are put to the spotlight as torchbearers of the OA /OS movement especially in the data management and open data licensing cases as there is a growing demand for repositioning the institution and libraries at the fore front of providing access to research through a community managed infrastructure where they will be the foundational nodes in a global scholarly communication system (Kathleen Shearer).

"The mantra of publish or perish is dead"
Jon Tennant

In times where bold new visions for the modern research library are been articulated across the globe in terms of knowledge creation, dissemination and

preservation, experts and community input on how Academic librarians can be leaders in supporting interactive, contextualized, participatory, comprehensive access to knowledge and to the products of the full cycle of research (MIT Future of Libraries Report 2017) becomes even more crucial. As creation and access to knowledge turn dynamically networked, and "OA wins all of the arguments all of the time" (Ogunlaja, Open Access Nigeria) librarians have to be prepared to effectively address a set of related issues and transform their libraries to open platforms for global research and learning that encourage open dissemination. To that end,

"... we need a broad coalition that buy in to the vision we are proposing"

Kathleen Shearer, COAR Executive Director

OSFair presented a unique opportunity to extend baseline knowledge of OA /OS emerging platforms and tools use cases acquired during LIBER Summer 2017 Conference and NDC topic specific presentations

and webinars last spring to a more insightful perspective of current and future challenges and benefits that librarians and researchers should and are already beginning to grow an appreciation for as they come to more deeply comprehend how and why OA is essential to the scientist—society contract in terms of reproducibility, accountability, innovation and science democratization (loannidis).

A series of recurring themes emerging from workshops and presentations in relation to research community OS shared visions and mutually identified challenges provided us with an initial conceptual framework that every academic librarian should definitely become aware of in order to effectively support the institution and researchers achieve their full potential within this emerging ecosystem.

Overall, it has been an extremely advantageous opportunity for both my identities, that of information professional and doctoral student

"The Era of Big Data begs for collaboration"

Jeffrey D. Sachs

involved in data—intensive research, to holistically consider through concrete evidence the OA /OS paradigm -from strengths and infrastructural/ attitudinal challenges to visions and future priorities- that helped rotate my standpoint and shape a strong positive GO OpenScience- oriented mindset.

"We had to get out-of-the-box to see how OA relates to the community" Natalia Manola, Athena Research and Innovation Center

Key Takeaways

- There is already a lot of consolidation around these issues [Shearer]
- There is an avant-garde of researchers using innovative dissemination channels with great success marking a European predominance [Kraker]
- There is a shift of focus or emphasis towards OS evaluation models, namely open peer review, OS impact metrics
- As OS /OA gain momentum and OS platforms flourish, we are urged to respond to a new set of questions critical to researchers and OS supporters' engagement and participation.
- Bridging knowledge with open source semantic text mining infrastructure is important to overcome silos and information fragmentation
- Open and sustainable TDM platforms can facilitate the leap from OA to OS
- Interoperability is a growing demand [Knoth]
- Changing practices for science methods, results and inferences reproducibility are underway.

RAPPORTEUR:

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