Book review

Altmetrics for Librarians: Three Books Review
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It seemed opportune to review three recently published volumes in this fascicule of
Performance Measurement and Metrics, which is dedicated to better understanding the
delicate relationship between altmetrics and digital (and blended) libraries:

- Tattersall, A. (Ed.) (2016), *Altmetrics: A Practical Guide for Librarians, Researchers and Academics*, ISBN 978-1-78330-010-5, Facet Publishing, London.

- Konkiel, S., Madjarevic, N. and Rees, A. (2016), *Altmetrics for Librarians: 100+ tips, Tricks, and Examples*, Altmetric.com, available at: www.altmetric.com/libraries-ebook/

- Roemer, R.C. and Borchardt, R. (2015), *Meaningful Metrics: A 21st Century Librarian's Guide to Bibliometrics, Altmetrics, and Research Impact*, ISBN 978-0-8389-8756-8, ACRL, available at: www.ala.org/acrl/sites/ala.org.acrl/files/content/publications/booksanddigitalresources/digital/9780838987568_metrics_OA.pdf

Scientific communication has problems of visibility and impact! Universities are increasingly careful to measure the results of research carried out by their faculty, who are increasingly stimulated to publish in journals with impact factor. Even the academic libraries are careful to demonstrate the quality and impact of their collections and services, using both quantitative and qualitative systems. Up until now universities and university libraries separated the measuring of results of research and of the impact of the libraries. Now instead a context has been created which favors an integrated approach to measuring which could be very advantageous to university libraries and especially university institutions.

The elements of this new context are the new types of research result (like online publication, open access, institutional repositories, academic social media, etc.) together with the continuing changes in the research cycle which is now more open and based on sharing and interdisciplinary co-operation even in the earliest stages. The new metrics, called "altmetrics," have been created to answer the need of this complex digital context, with an immediate advantage in wait time for the dissemination of research results which now are much quicker even in the initial phases of the research cycle. There is no lack of criticism of the new metrics "altmetrics," as the risk of manipulation is high even though the traditional evaluation systems based on citations were not free of defects. Altmetrics are very new with more promises than realities and their realization will have to depend on all the stakeholders involved, starting with the librarians, some of whom like the three authors of the books reviewed here, have been involved from the very beginning of altmetrics[1].

Why do libraries have a fundamental role in altmetrics? University digital and blended libraries today find themselves increasingly embedded into scholars' research cycle and workflow. This leads to a change in service: it is no longer sufficient to have an up-to-date collection and give personalized support on the impact factor. Yet, the academic librarians show some indecision and also lack of competence in altmetrics, as is shown by the investigation carried out by Konkiel and Boemer in some university libraries[2].

Scope and aims of the volumes

The three volumes are all library-oriented and may be considered manuals for the basics of altmetrics for libraries. Konkiel and Boemer's books are in open access. Tattersall's is integrated by an online video[3] that gives an overview of the principal instruments. The three books have the same scope: stimulate the application of alternative metrics (or altmetrics) in university libraries to measure (or predict) both the impact of instructors' completed research and to show the impact of digital library services.

The aims of the three volumes are different and complementary.

Robin Chin Roemer and Rachel Borchardt's practical aim is to render librarians able to use all the metrics for impact: "The aim of this book (as referenced in its title) is to help librarians not only gain a basic understanding of the variety of metrics at play across academic institutions in the 21st century, but also to encourage librarians to apply this knowledge to their interactions with constituents at their institution, all the time, at every level."

Stacy Konkiel and her collaborators concentrate on altmetrics with the aim of describing the available resources and tools and what they offer.

Notwithstanding, the subtitle claiming to be a "practical guide," Tattersall's scope is more ambitiously to put theory and practice together, with a historical approach to metrics in libraries.

Structure of the volumes

Robin Chin Roemer and Rachel Borchardt volume shows clearly the problem for scientific research, which is impact and the measuring of it. The book is divided into three parts: understand the impact, understand the bibliometrics, understand altmetrics, understand the impact in all three different disciplines, and concludes by clarifying the (future!) librarians' role.

Stacy Konkiel and collaborators' book is divided into three parts: a general introduction (general overview), which concentrates on altmetrics resources (specific and generic) available for registering impact and visibility of faculty, with a special section (special issues in librarianship and altmetrics) that treats altmetric resources that could be used internally by the library, and concludes with the prospects (future!) for university libraries.

Tattersall has edited a collection of ten articles by different authors. The chapters cover diverse aspects: Tattersall introduces and closes the volume, describes the modalities for stimulating the scholars to apply the technologies and altmetrics in their institutions, the available resources, and opportunities for open peer review. The theory of altmetrics is interpreted as the history of metrics in libraries from the inception up to the new perspectives of mobile devices. Two chapters in particular deal with the history of altmetrics, written by two protagonists of this young history: Euan Adie, founder of Altmetric.com and William Gunn Head of Academic outreach at Mendeley. Ben Showers, formerly Collaborator at the JISC, concentrates on the history of metrics in the library. Claire Beecroft describes the impact of the application of mobile devices to metrics; Andrew Booth describes the "metrics of the trade."

Value of the volumes

All three books carry a very strong message: librarians must decisively undertake the transformation of their role from simple researchers of bibliographical instruments and "altmetric" resources for scholars to themselves becoming the first users of these alternative metrics for the library. This transformation has already taken place in some pioneering efforts, but the emphasis on the future of the possible opportunities of this transformation present in all three of these books points out that in reality this transformation does not exist, at least at the level of institutional strategy. I think further investigation is in order to understand the restraints and obstacles that continue to hobble the transformation of the service from a simple extension of reference service into a greater integration of university libraries into the research cycle of scholars and administrative infrastructures that support university research.

The start of "Scholarly communication librarianship" as Robin Boemer terms this new approach to digital library services is still experimental and lacking in theoretical bases. The three books all have a thoughtful approach to "best practices" and "case studies," but lack a theoretical reference image that could help orient institutional strategies in a "blended" era in which one must adapt different practices. What is the impact of altmetrics on the "librarianship discipline"? New models of service are needed, points of reference such as, for example, the "partecipative approach" discussed in the professional literature (Lankes, 2011) in order to realize the social role of digital libraries.

Very useful and present in all three volumes is the detailed description of the various instruments available to those who wish to begin to use altmetrics. Among the resources there are the aggregators such as PlumX, Altmetrics, Impactstory, Google Scholar. Furthermore, I thought that the resources that facilitate open peer review and post peer review, like faculty of 1,000, pubpeer, publons, peerage of sites were very interesting. These tools have the potential to innovate the traditional procedures of evaluation of research output, with evident advantages to transparency and extended participation.

Criticalities

Criticalities remain for altmetric measurement and metrics and are only given a nod in these three books, but need more treatment. For example, the ethics of research could have been described (as shown in DORA and the Leiden Manifesto), the ease of manipulation (gaming) and how that risk has been dealt with, and a clearer idea of the differences in behavior of scholars in different disciplines and from different generations.

I believe that librarians should have a reference theory, possibly adapted from other disciplines, to be able to frame the transformation to be undertaken.

It would also be important to investigate the perception and expectations of the librarians together with an analysis of all possible obstacles and barriers that restrain the libraries and slow the transformation of their role to active agent of altmetrics in the university.

Discussion

With interest in online venues for scholarly communication on the rise, and the number of tools available for tracking online influence growing steadily, librarians are in a key position to take the lead in bolstering researchers' knowledge of current trends – and concerns – in the new art and science impact measurement. In spite of this, we must still speak to the future: what role will libraries have?

The authors of the three volumes indicate that librarians can provide this support in three main ways: informing emerging conversations with the latest research, supporting experimentation with emerging altmetrics tools, and engaging in early altmetrics education and outreach. When will libraries be able to carry this out for altmetrics? The answer is: now! We have entered into a phase in which librarians are not limiting themselves to an interest in altmetrics but are instead trying to apply it first of all to library workflow.

As Boemer warns, the research question needs to be changed: no longer "How can I publish in a journal with a high impact factor?" but rather about the question "How can I demonstrate the impact of this work as it appears in these contexts?"

The three books have the value of helping digital (and blended) libraries to carry out this transformation proactively instead of passively. This could also be to the advantage of improving altmetric's measurements, which could profit from librarians' competence as experts and mediators of the users' needs as well as being experts of metrics.

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Notes

1. Stacy Konkiel has dealt with altmetrics since she began as eScience librarian at Indiana University and now collaborates with Altmetrics.com as Outreach and Engagement Manager. Robin Chin Roemer is now Instructional Design and Outreach Services Librarian at the University of Washington Libraries Seattle WA and is collaborating together with Rachel Borchardt who is the Science Librarian at American University in Washington, DC. Andy Tattersall is secretary of CILIP and works as Information Specialist a ScHARR (School of Health and Related Research), Sheffield. Since 2009 he has been Advisor to Mendeley.

2. Two inquiries were made in academic libraries to understand the impact of altmetrics in support services to scholars. Boemer and Borchardt report of a short online survey done in the US academic libraries in their book. Stacy Konkiel and Sara Sutton have investigated the use libraries may make of altmetrics for internal management and reported the findings during the second Altmetrics conference in Amsterdam in 2015: http://altmetricsconference.com/2am-altmetrics-in-the-library

3. Andy Tattersall has also made available a video: www.youtube.com/watch?v=6R6WdoQxvUE

Reference

Lankes, R.D. (2011), *The Atlas of New Librarianship*, MIT Press, Cambridge, MA.