Altmetrics 101:
A hands-on introduction

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AGENDA

1 **Introduction to altmetrics**

2 **Show & tell:
PlumX & Altmetric for Institutions**

3 **Hands-on exercises**

4 **VIVO case studies**

5 **Wrap-up**
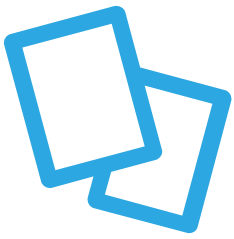
Introduction to altmetrics

an altmetrics *company*

Altmetric ≠ "altmetrics"

a type of metric, usually sourced from the social web, that points to attention, influence, or impact

Scholarship is changing...

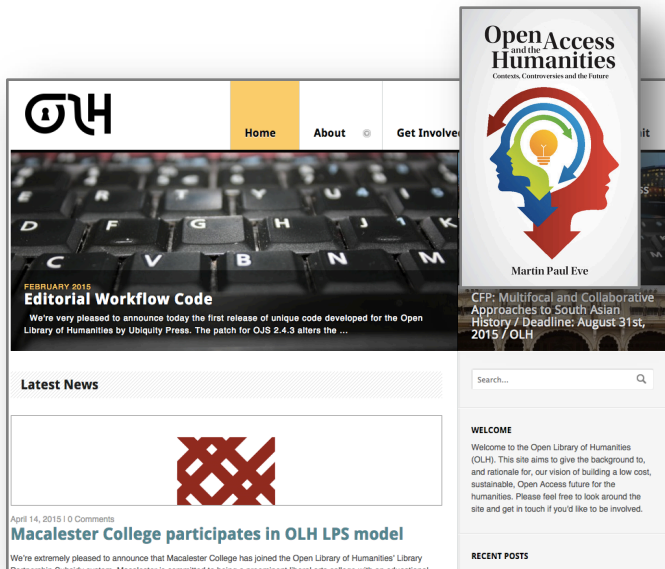for the better

More openness ▶

More transparency ▶

More engagement ▶

More openness

http://www.slideshare.net/WileyScienceNewsroom/
wileys-2013-open-access-author-survey

More transparency

http://carlboettiger.info

More engagement

Ritu Gairola Khanduri At another level, my book is about the significance of ephemeral forms and how they incite politics.
Like · Reply · 👍 1 · March 19 at 8:09am

Sezoni Whitfield Ritu Gairola Khanduri Why do you think students of Indian political culture will find your book of interest?
Like · 👍 1 · March 19 at 8:16am · Edited

Ritu Gairola Khanduri Students will find a longer history of the significance of an every day visual form--the newspaper cartoon. Nowadays when we are awash with social media and all sorts of digital platforms, it is also a gentle reminder that the older media forms, newspapers cartoons, remain significant in our political communication.

PubPeer Blog Recent Featured Journals About FAQ MyPubPeer Topics Login   🔍 Search publications, DOI's, authors...

Permalink

1

Jonathan D G Jones: (June 29th, 2014 9:36am UTC)

Dear PubPeer readers

Many thanks to some of you for pointing mistakes in Caillaud et al (2013), and to those of you who made constructive criticisms.

I am pleased to be able to tell you that the corrections to Caillaud et al (2013) have now been published online.
10.1371/journal.pbio.1001909

Research evaluation is changing...
for the better

Traditional metrics for evaluation

- Journal impact factors
- Rejection rates
- Journal prestige
- Book publisher prestige
- Raw citation counts

Traditional metrics for evaluation

- Journal impact factors
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Datasets

White Papers

Software code

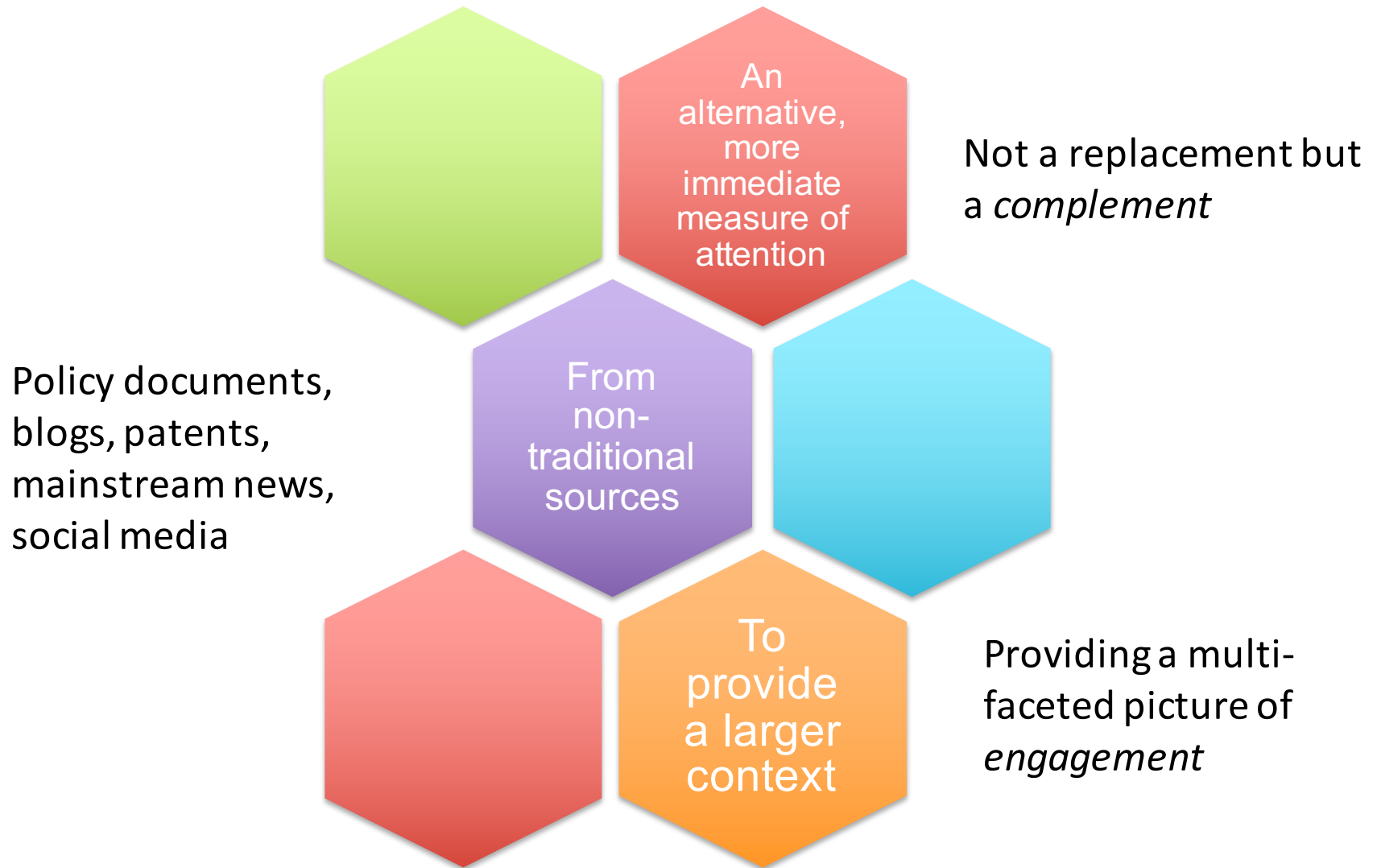Position Statements

Conferences/Presentations

Blogs

How?

What are altmetrics?

An alternative, more immediate measure of attention

Not a replacement but a *complement*

From non-traditional sources

Policy documents, blogs, patents, mainstream news, social media

To provide a larger context

Providing a multi-faceted picture of *engagement*
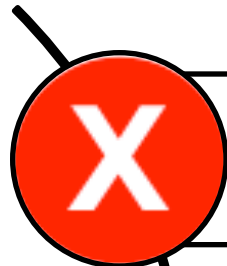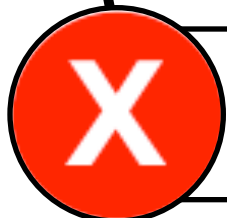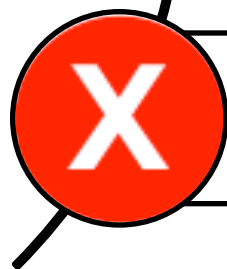
What can the data tell you?

✓ What type of attention is this research receiving?

✓ Where has this article received the most traction?

✓ Which countries are engaging most with the content?

✓ Has this article influenced policy, spurred new research, or engaged a new audience?

✓ Are reactions to this article positive or negative?

What the data *doesn't* tell you

The quality of the paper

The quality of the researchers

The whole story

The Leiden Manifesto
for research metrics

Use these ten principles to guide research evaluation, urge **Diana Hicks**,
Paul Wouters and colleagues.

Where altmetrics come from

- It's possible to source altmetrics from independent web APIS…
- But in many ways it's easier to use an aggregator

Show & tell: PlumX

Show & tell:
Altmetric for Institutions

Who are we?

Altmetric is a **data science company** that **tracks attention** to research outputs, delivering **article level metrics** via visually engaging, intuitive interfaces.

In other words, we help give *credit where credit is due*.

Altmetric tracks mentions of <u>all</u> scholarship across the Web

(More than 4 million articles tracked to date!)

Each day, scholarly articles receive **~40,000** new mentions across news, policy docs, and social media.

That's
1 mention every
2 seconds!

Each week, **50,000+** unique articles are shared.

Mentions range in complexity, from quick shares to comprehensive reviews.

Altmetric internal data, 2015

Altmetric data sources

- News outlets
- Policy documents
- Peer reviews
- Reference managers
- Research and popular blogs
- Social media
- Forums and Q&A sites

Altmetric can track <u>anything</u> with a URI

Who uses Altmetric data?

40+ publishers and 5,000+ journals including…

Who uses Altmetric data?

First *Cambridge University* and now **funders & institutions** including…

Who uses Altmetric data?

Other metrics providers, including…

Who uses Altmetric data?

Institutional repositories and library discovery systems

Altmetric products

Altmetric Explorer
 (free API)

Altmetric for Institutions
 (API)

Altmetric bookmarklet

Altmetric for Institutions: Summary

Altmetric for Institutions: Sources

Altmetric for Institutions: Data
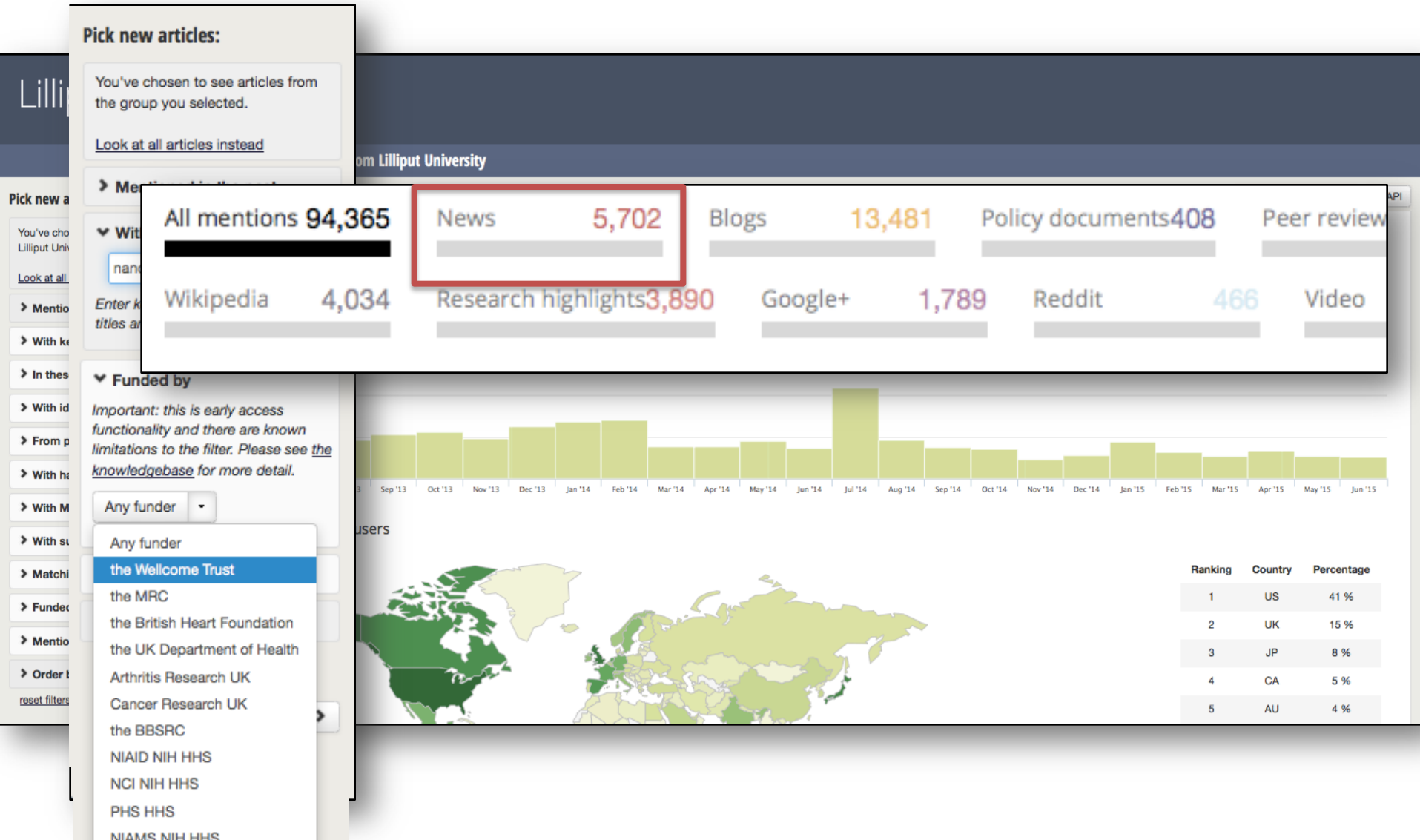
AFI: Benchmarking

AFI: Benchmarking

Lilli

...ast once in the past 1m

> With Medline subjects

> With subjects

> Matching PubMed query

> Funded by

> Mentioned at any time on

> Order by
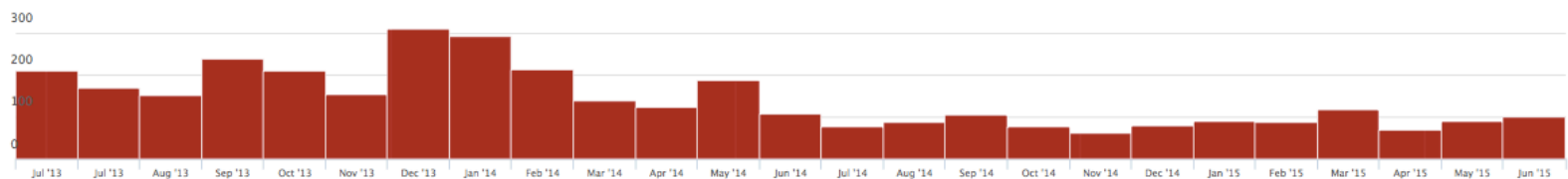
reset filters and search terms

Show matching articles >

Location of Twitter users

Ranking	Country	Percentage
1	US	35 %
2	UK	21 %
3	CA	6 %
4	ES	5 %
5	AU	4 %
6	FR	3 %
7	JP	2 %
7	DE	2 %
7	CH	2 %
-	Other	20 %

Top articles by mentions in all sources

	Rank	Mentions	Score in past 1m	Title	Journal
	1st	6,379	1,319	Anti-drug Antibodies in Psoriasis: A Systematic Review.	British Journal Of Dermatology
	2nd	2,060	1,413	Why we are teaching science wrong, and how to make it right	Nature
	3rd	1,977	1,283	Four-legged fossil snake is a world first	Nature
	4th	1,707	1,164	US vaccine researcher sentenced to prison for fraud	Nature
	5th	1,678	1,107	Greek scientists lose access to digital journals	Nature
	6th	1,390	1,008	NASA spies Earth-sized exoplanet orbiting Sun-like star	Nature

NIAID NIH HHS

NCI NIH HHS

PHS HHS

NIAMS NIH HHS

Altmetric for Institutions: Details

The score: a means of filtering

Volume	Sources	Authors
The score for an article rises as more people mention it.	Each source category contributes a different base amount to the final score.	Assess the author of each mention in terms of their reach, promiscuity and bias.

Tweeted by **293**
Blogged by **4**
On **200** Facebook pages
Mentioned in **6** Google+ posts
Picked up by **1** news outlets
Mentioned in **1** LinkedIn forums
Reddited by **2**
On **1** videos

166 readers on Mendeley
1 reader on Connotea
3 readers on CiteULike

Break

Hands-on exercises

Exercise 1: Getting comfortable with Altmetric

Role

- You are a researcher, Michael Kane (Director of Social Policy)

Scenario

- You are new to the idea of altmetrics and you'd like to know what attention your work is receiving online.

- If you find anything especially "impactful," you plan to highlight that in your annual review and on your VIVO profile.

Instructions

- Navigate to Michael Kane's list of research articles
- In your group, determine amongst yourselves which three articles are "more impactful." What criteria did you use? How did you come to your decision?
- Are there any articles that showcase new or unexpected types of impact?

10 mins working in your groups

Exercise 2: Getting comfortable with PlumX

Role	• You are Stephen Scherer
Scenario	• You are applying for a new grant for Autism Speaks. • What would you use to showcase the impact of the work that you have done.
Instructions	• Go to http://plu.mx/autismspeaks • Find your profile • What evidence you use?

10 mins working in your groups

Exercise 3: Altmetric for Institutions

Role

- You are a liaison librarian to a translational research group.

Scenario

- The research group's PI has asked you to compare her group's publications' impacts to those of her colleagues (and competitors) at other institutions.

- She wants to know:

  - What could she highlight as evidence of "broader impacts" and "engagement"?

  - How does her research compare to the highest-attention HIV research overall?

  - How could she improve her reach & engagement?

Instructions

- Navigate to the Groups to find lists of your PI and her colleague's articles, then explore the data
- Next, search "HIV" and related terms in the Explorer view to find comparable publications

10 mins working in your groups

Exercise 4: PlumX and the Humanities

Role	• You are a faculty member (Susan Rowland) who has books as your main research output.
Scenario	• You are trying to get promoted, and want to showcase your research, but your seminal work is represented through books, not journal articles. • How can you highlight the work that you have performed?
Instructions	• Go to Pacifica Graduate Institute's PlumX site: http://plu.mx/pacifica • Find Susan Rowland's profile • What of her work would you highlight? • What evidence would you use? • Was there anything surprising?

10 mins working in your groups

VIVO case studies

Altmetric:
Stony Brook University Medical School

Altmetric:
Stony Brook University Medical School

- Uses the Altmetric API

- Synced with AFI
  - Mirrored group hierarchy
  - Filters for only relevant content (department, people, etc)

- Can limit by type of mention

- Can create "Top 10" lists on homepages

Wrap-up