



# **Scholarly Communications: The Digital Transition, Open Access, Social Media and Trustworthiness**

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# Something big here for you all

- The digital is the real and blowing up boundaries and it is blowing things up in your patch
- Scholarly communications is one of the major Internet battlefields where the new is challenging long established procedures and practices
- The results of which will impact upon society, scholarship, universities and libraries (the last man standing?)
- So whether you are a scholar, librarian or a digital consumer there is something in this for you all
- Bits are already beginning to fall off. Are you/we in control anymore?



# Something big here for you all

- Going to range all over the latest CIBER Research to show you what is going on
- Point out what the drivers are, where things are likely to 'blow' and where there could be opportunities
- This is fresh and, hopefully, new
- The whole purpose of the 'workshop' is to get your grey cells working so you can reflect and act – and INTERACT!



# The context and challenges: scholarly communications where to now?

- In today's crowded, dynamic, diverse and **dis-intermediated** digital scholarly environment ever more difficult to establish trustworthiness
- Rapidly expanding - many new players and 'actors' joining. We are all scholars now connected to the big fat information pipe
- More sources, channels, platforms, players muddying the water. **Difficult to know whose information it is anymore**
- Challenging behaviour from **Google Generation** (right), the born digital, arriving at universities/workplaces. **Skitter, ease of access**



# The context and challenges: scholarly communications where to now (2) ?

- Trust, authority & quality matters everywhere, but the very watchwords of scholarly communication. Built on **quality assurance**
- The 'Perfect Storm'. No better place to look for change and new information seeking shoots, especially in the light of challenges from **social media**, new (OA) publishing models and Open (sharing) Science 2.0.
- Is it the end of culture as we know it? Or will the traditional hold out?





# The key research questions

1. How do scholars assign and calibrate authority and trustworthiness to scholarly sources and channels they use, cite and disseminated in; **scholars as consumers and producers**
2. Whether **Google, social media, open access, sharing etc.** are having an impact on conventional practices of establishing authority and trustworthiness?
3. What are the differences by age, especially the young (the new wave)?
4. What are the implications for scholarly reputation?
5. What are the implications for scholars
6. What are the implications for information intermediaries?



## Main sources of data

1. Emerging reputational mechanisms. Funded by the EC, 2014 -
2. Beyond downloads: sharing in the digital environment. Funded by Elsevier, 2014 -
3. Trust and authority in scholarly communications in the light of the digital transition. Funded by Sloan Foundation, 2012-2013

Full details at: <http://ciber-research.eu/>



# Personas

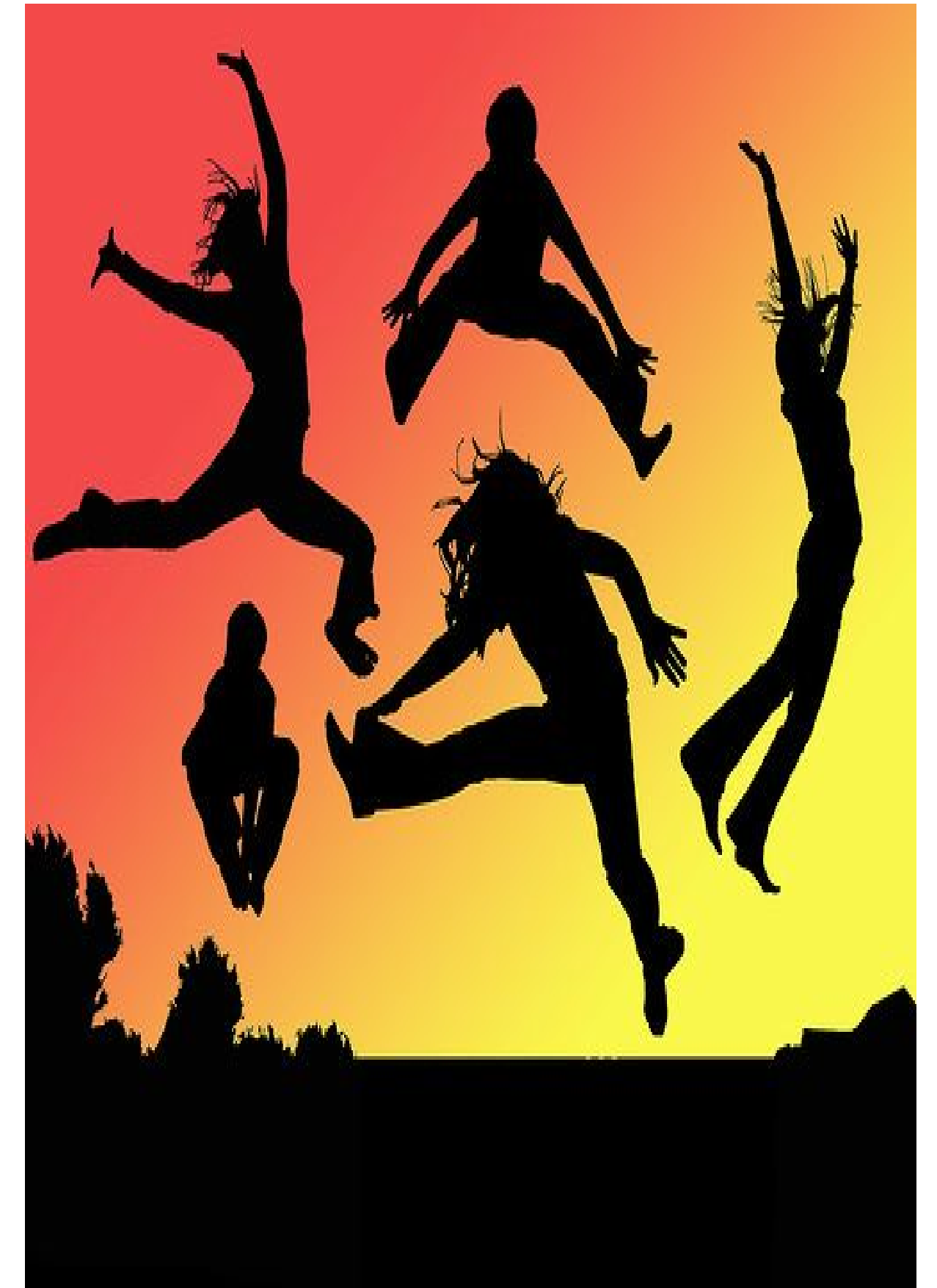
Researchers function as authors, editors, reviewers, citers and users of the literature. **Different trust judgments to bear for each function**

**Editors** thinking dominated by picture of themselves as information providers, people offering trustworthy collections. Police the system and like the way it works. Warts and all.

Researchers have **more freedom as users/readers** - can use blogs, OA etc. to their heart's content, but not cite them. ***If there is a wave it starts here***

**As a citer** stricter, more focussed and more 'political' than user behaviour (more on this later)

**Authors** have the biggest quality worry – ranked journals. Career maker and breaker. Reputational risks.





## General: metrics and trust proxies (Impact Factors and the like)

- Scholarly world **governed by algorithms** - only way to maintain a grip in information tsunami
- As a consequence creativity and new ideas being driven out by a (high) metric-driven culture. IF beats appropriate audience now
- **Scientists unquestioning about merits** of metrics; social scientists **uneasy** but felt had no choice; humanities scholars felt **culturally uncomfortable** and alienated, but were part of it.
- Early career researchers in social sciences/humanities thought themselves **'slaves' to a metric-based/journal focussed system**; adhere to rules to climb academic ladder but thought ladder broken. Journals a manifestation of all that was wrong with scholarly communications. But they have to breathe the same air
- 'dashboard' of metrics to embrace all scholarly activities



# Social media generally

Only early career think social media more than **a side-show or informal communications**

Lack of interest explained by **validity problems**, but also because:

- a) many scholars are novices;
- b) many antagonistic towards it;
- c) no free time (where have we heard this before?);
- d) put off going down that route by the current HE climate;
- e) informal language of social media unsuitable for scholarly discourse.

But saw social media **valuable for**:

- a) obtaining new ideas;
- b) self-promotion of publications (outreach);
- c) passing around refs

Of BIG interest was that social media could increase visibility and citations



## Social media (2)

Early career researchers made more use of social media but scared to embrace it and camouflaged use. Benefits for them though:

- a) develop a personal network fast;
- b) facilitates collaboration;
- c) finding researchers to work with (in real-time);
- d) staying in touch with events;
- e) 'stalking' authors



## Open access generally

Lots of investment on part of librarians

However, distrust of open access from an author and reader perspective.

Some confusion though – what is and what is not

Distrust diminishes considerably when OA journals published by traditional publisher

Early career researchers liked *idea* of OA , but scared to fully embrace because academe not made up mind about it. But provides a foot in – take any opportunity they can.

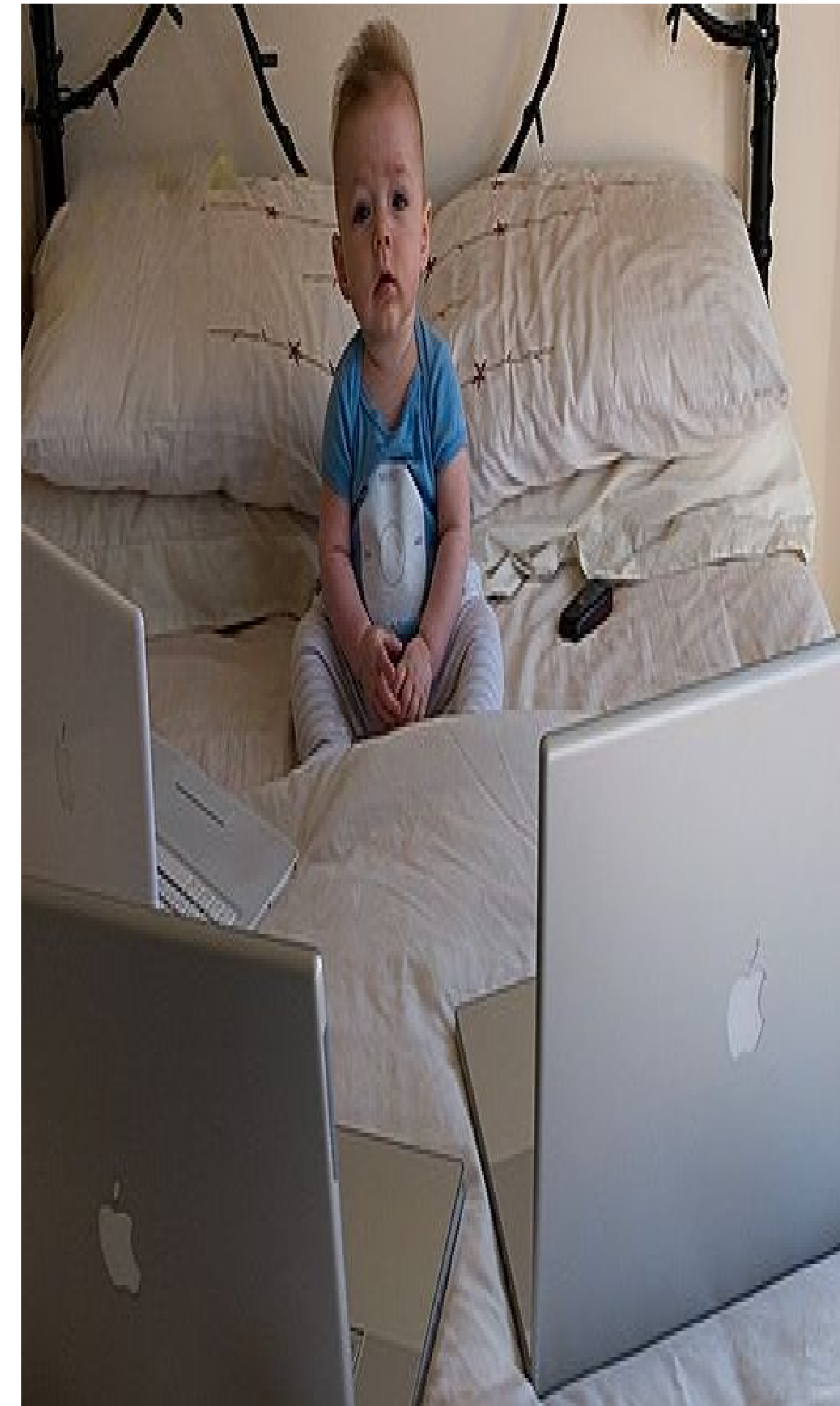
If published in OA journal, or cited one, might have backed wrong horse and found had published in a second-rate journal. *Might be a reputation threat.*



# Usage and reading behaviour

*‘If I don’t recognise the author, then be careful; if additionally you don’t recognise the institutional affiliation be even more careful, and if you don’t recognise the journal as well, it is definitely not worth looking at’.*

**[The elephant in the room is information overload]**





# Usage: types of sources

**Digital sources.** Trust enhanced if also available in print. Merits in paper. Thus:

- a) paper was thought to provide more confidence because less ephemeral;
  - b) there were clear length limitations this focussed the mind and produced better copy.
- Early career researchers thought opposite; could not believe anyone would think like that.

**Data.** Some trust concerns because:

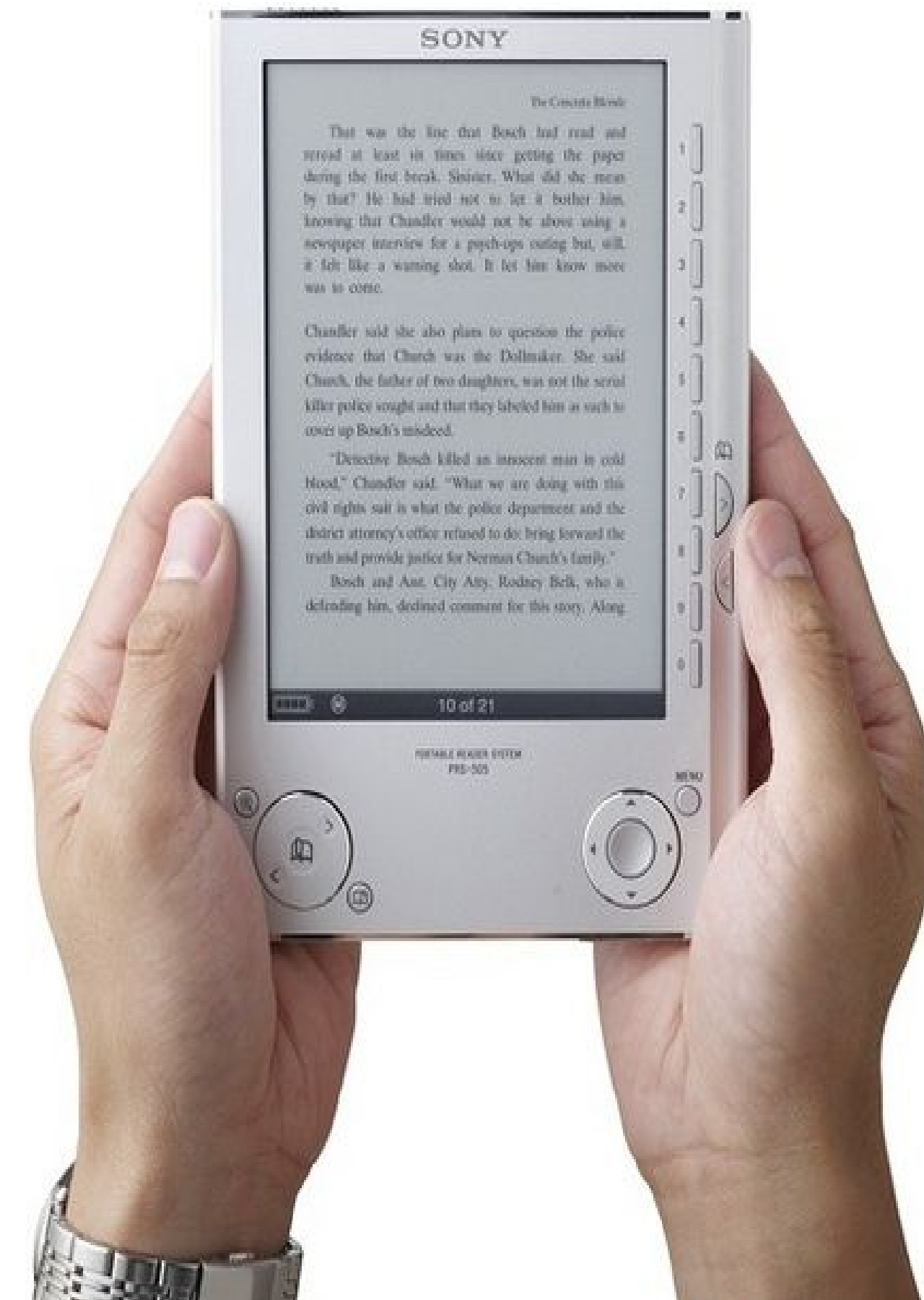
- a) presumed absence of peer review; needed because could not decide given size and complexity of data.
- b) Liked idea of data being attached to an article, the article giving it authority. Also felt that name of the author was even more important in case of data.

**Conferences.**

- a) peer reviewing mechanisms poor, absent or done on abstract;
- b) increasing number of sharks out there that sully the name of conferences;*
- c) do not have the same visibility and standing, but can attract large number of citations.

# Usage: searching

- ‘Trusted’ big fat information pipe not publisher platform or library catalogue; it is the Internet. Hence popularity of Google. Google Scholar thought to be *surprisingly* good.
- Did not mention their publisher’s website, but did mention gateway sites (PMC)
- **Libraries** mentioned in a nostalgic fashion.
- Do not see libraries as the point of entry to the information they are looking.
- Libraries *perceived as incomplete* sources of information in a borderless information world and open access might be killing their main role for researchers
- Disintermediation from searching phase...maybe soon storage



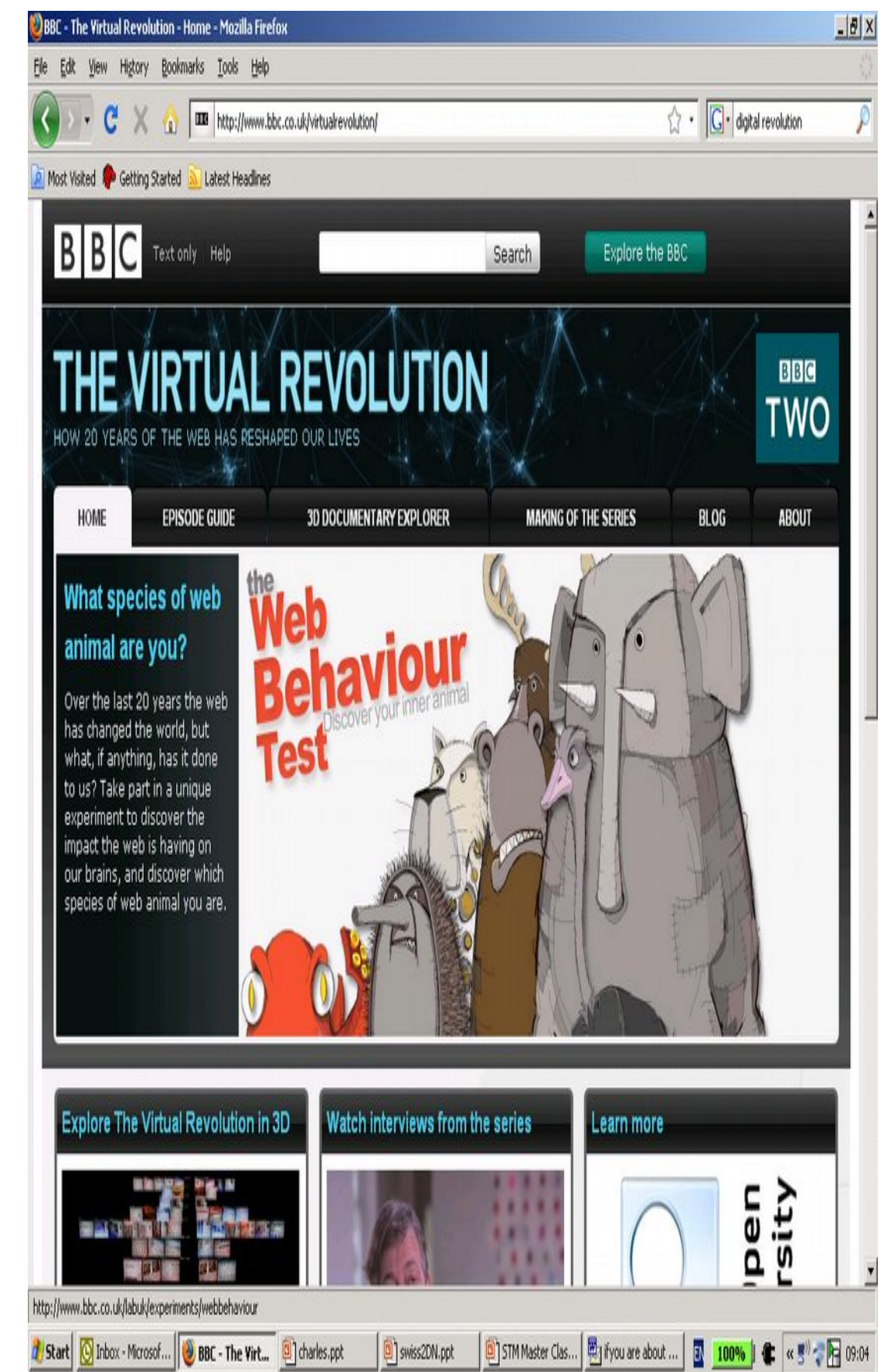
# Citing behaviour

Authors weigh up sources carefully. There are political issues; only have real choice over a few of your citations. Lot of window dressing

## Citation practices/gaming:

- 1) cite own work to raise your H index;
- 2) cite papers in journal to which you submit;
- 3) cite the papers reviewers suggest;
- 4) cite very high impact articles because they set the agenda/benchmark and represent the very pinnacles of science (halo effect);
- 5) cite post hoc – use citations to support your position, give your ideas more weight; particularly important if your ideas are novel;
- 6) Don't cite your competitors

Know people are gaming because researchers say they don't do it, but know people that do. Gamification, but huge is altmetrics





# Citing behavior (2)

## Early career researchers.

Pressure from supervisors to cite peer-reviewed articles. *You see interesting things elsewhere (i.e. social media) but you cannot use/cited them.*

Cited social media sources as ‘personal communications’

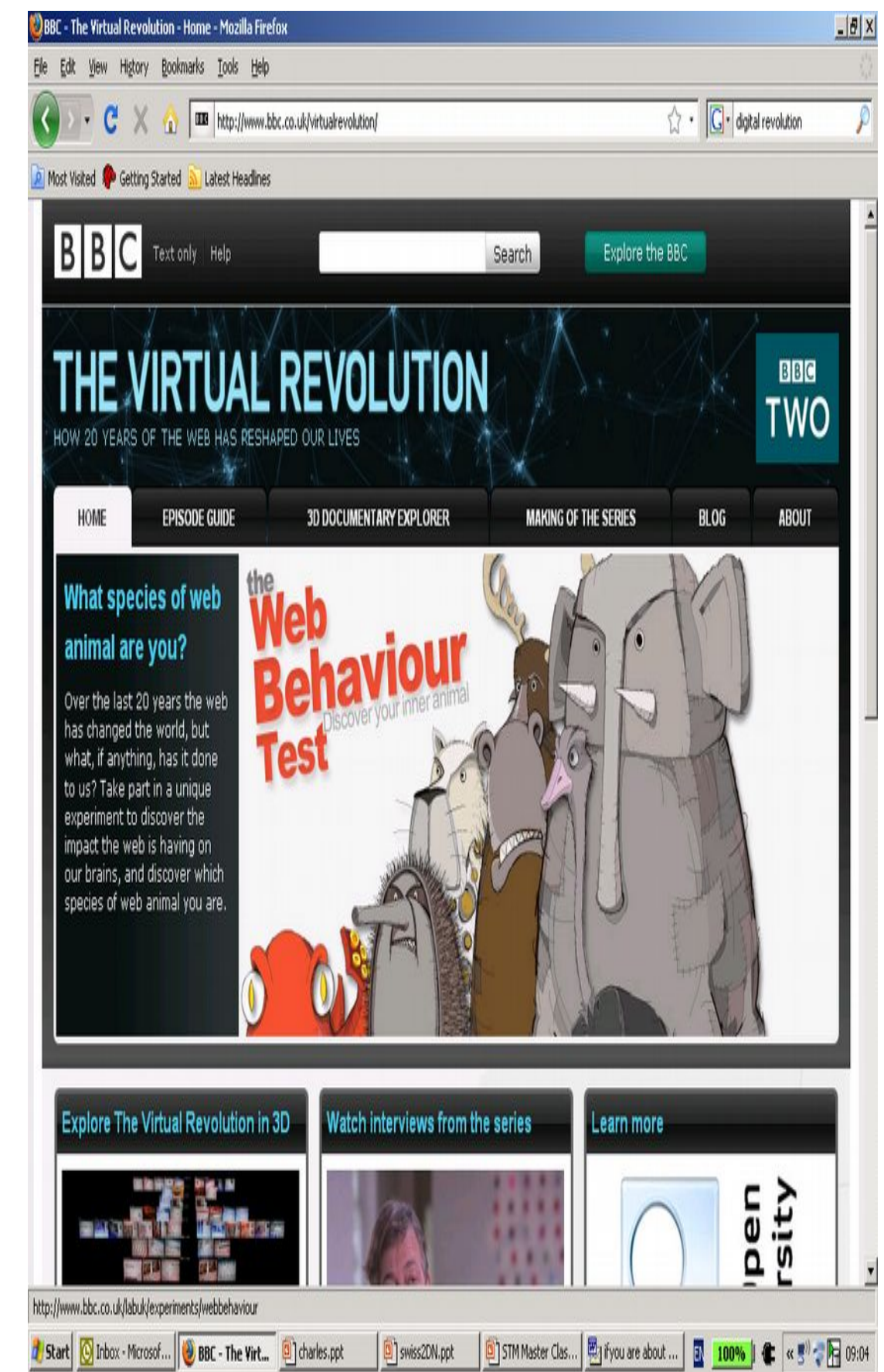
## Academics from teaching intensive universities different

Would not cite something they have not read and would cite anything, including trade publications.

## Social media.

*twitter not used as an information source: it would be like citing a conversation in the bar.*

Blogs not to be sourced: many blogs ‘*were just streams of consciousness stuff*’.



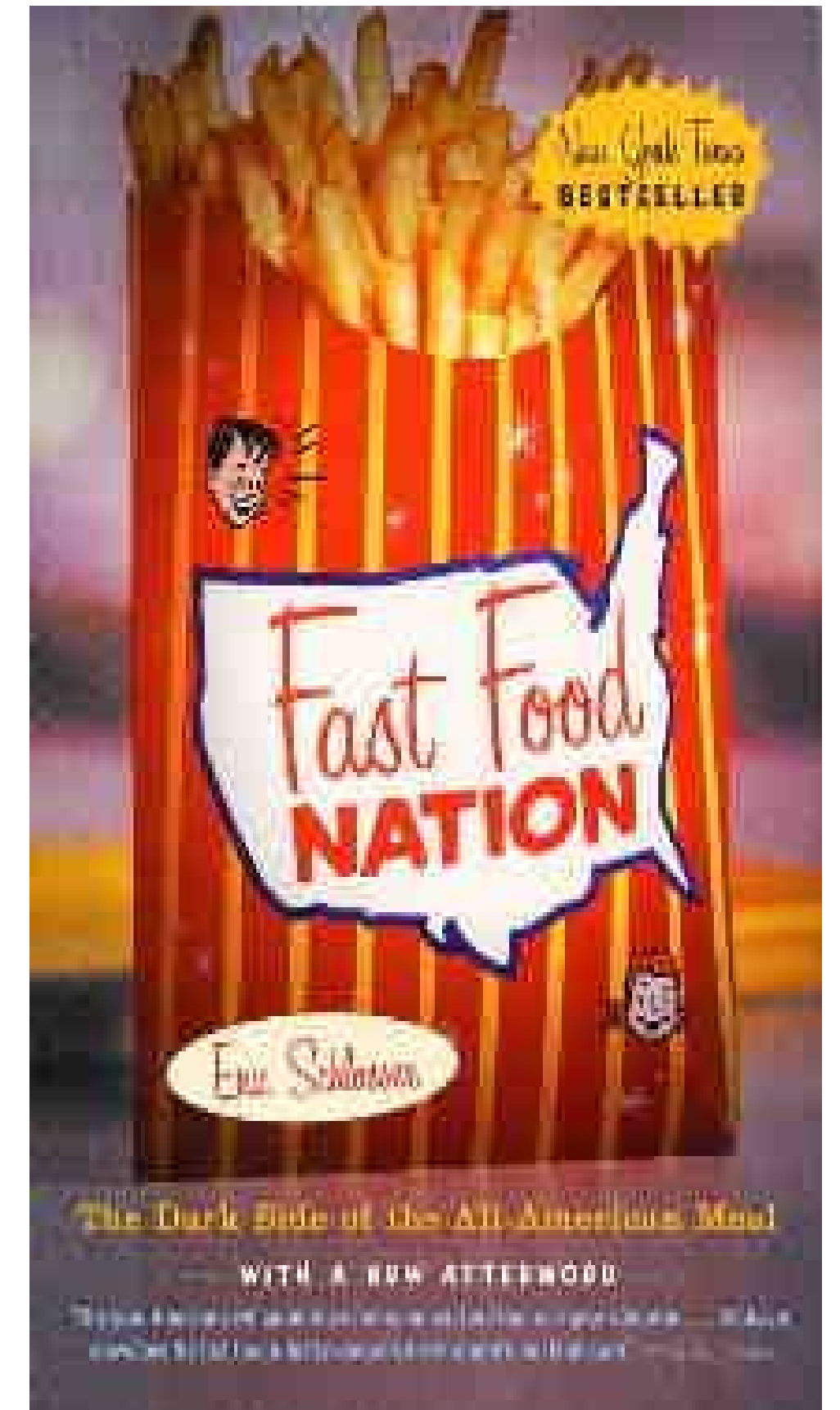
# Publishing/Dissemination

## Pressures to publish - impact on quality.

- Biggest concern not growth in literature, but what is driving growth : the increased pressure to publish.
- Creating an '*avalanche of bad/mediocre journal articles*'...And '*there is a huge amount of junk floating around the system.*' Manifests itself in big article rejection rates '*50% are rubbish*'. Problems of emerging nations joining the reputational 'gravy train'

## Massive influence of REF (in UK): an example to ponder

- REF is all-pervading and persuasive.* REF says don't go on citation scores of submitted paper but no-one believes this and continue publishing in high impact journals. Leads to a distortion where articles should be placed. Penalising inspirational and creative academics
- REF guilty of forcing people to publish more than they otherwise would, something which leads to higher levels of poor content being published.





# Publishing: peer review

Few thought that review process broken. Early career researchers least fond  
**Publishers.** Organising peer review central role of publisher.

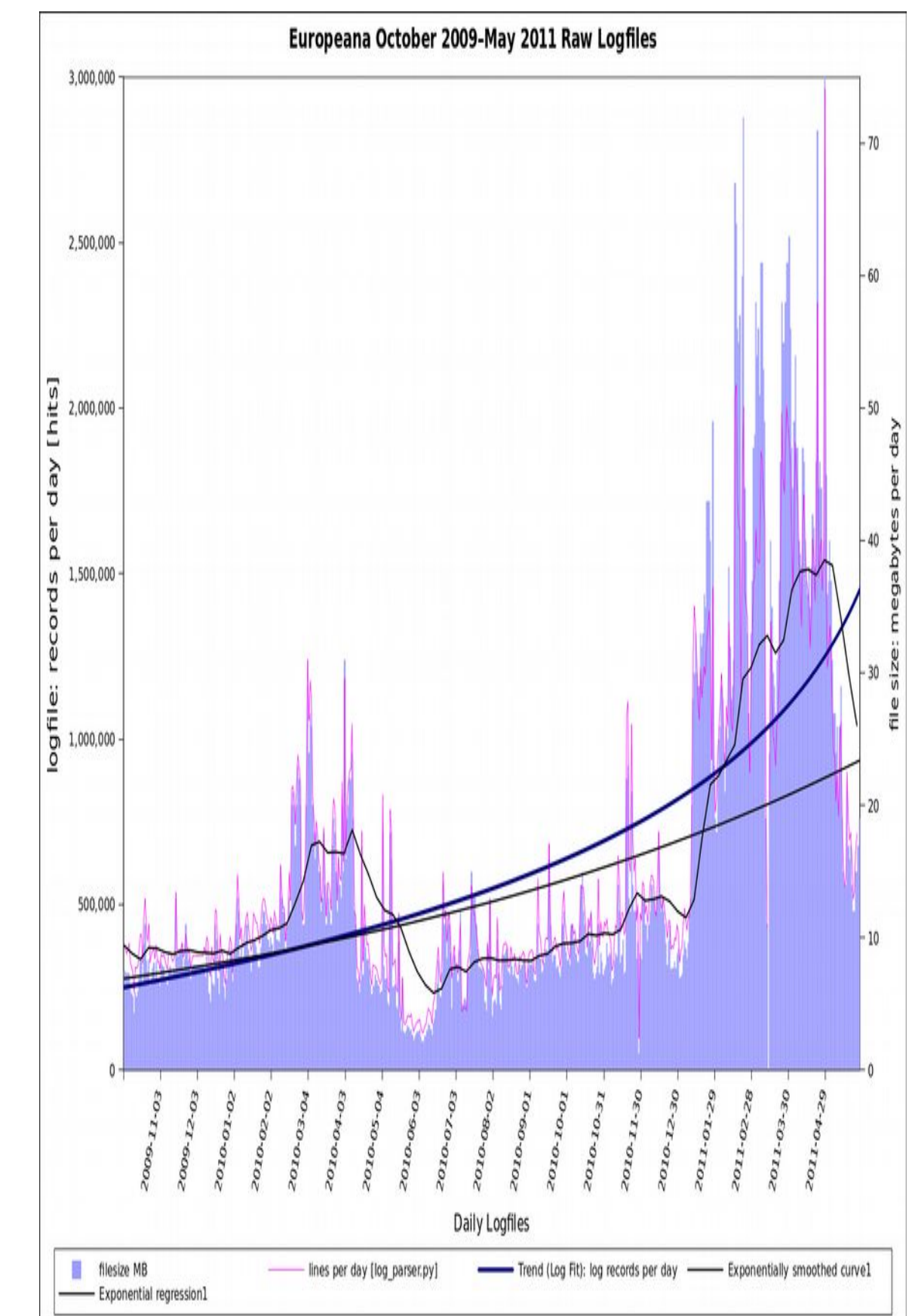
**Rejection rates.** Badge of honour/quality.

## The practice

- a) liked blind reviewing - reviewers freer to comment;
- b) mixed opinions about benefits of author-suggested referees;
- c) light touch peer review not liked; heavy leads to better papers;
- d) editors the ultimate judges; be proactive and not always heed reviewers;
- e) referees improve an article even if they reject it.

**Dislikes:** too slow. Need to obtain decision in 2 months; weakness predatory OA publishers take full advantage of (in their advertising, if not in reality).

**Concerns:** *quality is being sacrificed. [for speed]*



# Publishing: Open access

- Few researchers admit to OA publishing. Few realised traditional publishers produce OA articles
- Imposed (political), rather than actually needed. *It's open anyway.*
- Policy directives mean there is no choice. EC and British Government forcing direction of travel

## **Worries:**

- Poor quality. '*Rubbish*' '*vanity publishing*', '*self-deluded authors*'. '*Why would you want to (pay to) publish in something in a start-up, which is easy to get into and has no reputation.*
- Business model undermines rigorous review; concerns about possible two track peer review, with OA articles being treated more leniently because of payment;
- Uneasy about author pay model that underpins gold OA . Passing of money sullies the transaction. Concern that you could pay your way into publishing;

## Publishing: Open access (more worries)

- Poorly run and unprofessional. *Fails to recognise that there is a good deal of professionalism and standards behind publishing;*
- Concerns that academics might **have to** publish in OA journals and subscription journals might end up featuring different content and authors.
- Predatory OA publishers spoil things

# Publishing: Plagiarism and unethical practices

**Plagiarism.** With article avalanche comes *dodgy* content. More rife and widespread than thought.

While early career researchers agree plagiarism is a no-no, they are less antagonistic towards cut-and-pasting, providing attribution given.

While academics from teaching-intensive universities are not supportive they are not that hard on it. Thought it a fuzzy area and understood the reasons/pressures for doing it. Self-plagiarism is a less serious offence; maybe not an offence at all.

Publisher data shows plagiarism and duplication detected down from 30% to 10% in last 3 years. CrossCheck

**Making it up/fabrication.** Everyone knew cases. Big pressure to do so in some parts of the world. It was alleged it could be as much as 10-20% in biological sciences. Difficult to establish.



# Change: better/worse than a decade ago?

More bad/mediocre stuff around because;

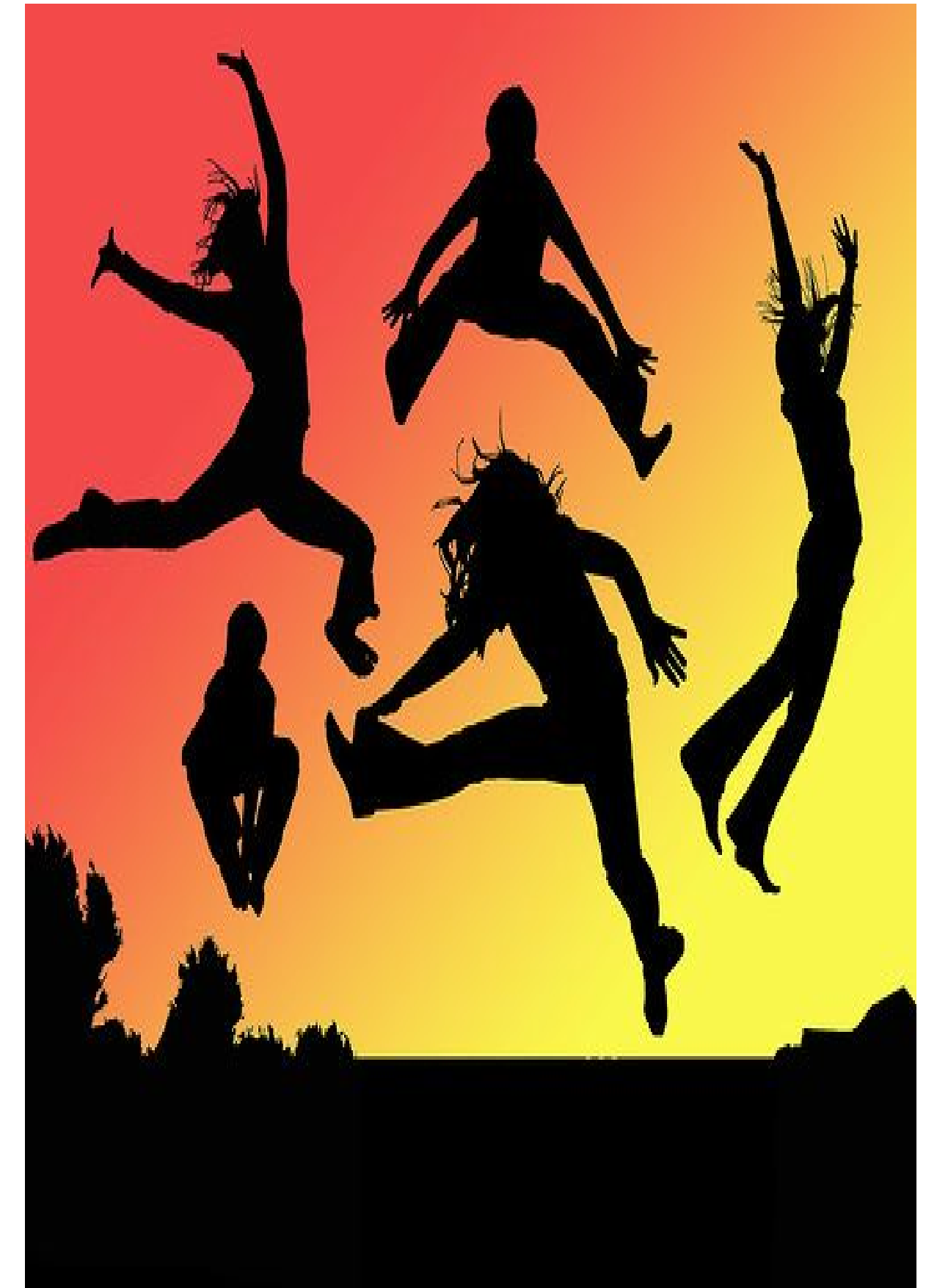
- a) more accessible
- b) more opportunities to publish

But thought that quality had risen over the years. Rise in quality meant could live with bad and boring stuff and overload

Rise in quality result of more people entering field and greater competition that comes with it. Niche/specialist journals that have taken full benefit of an abundance of run-of-the-mill material

*'There is a massive sea of mediocrity now because it is just easier to publish, but at the higher end the quality is better because of better training, greater competition and rewards for publishing'*

But didn't want any changes, they like disintermediation (sorry!)





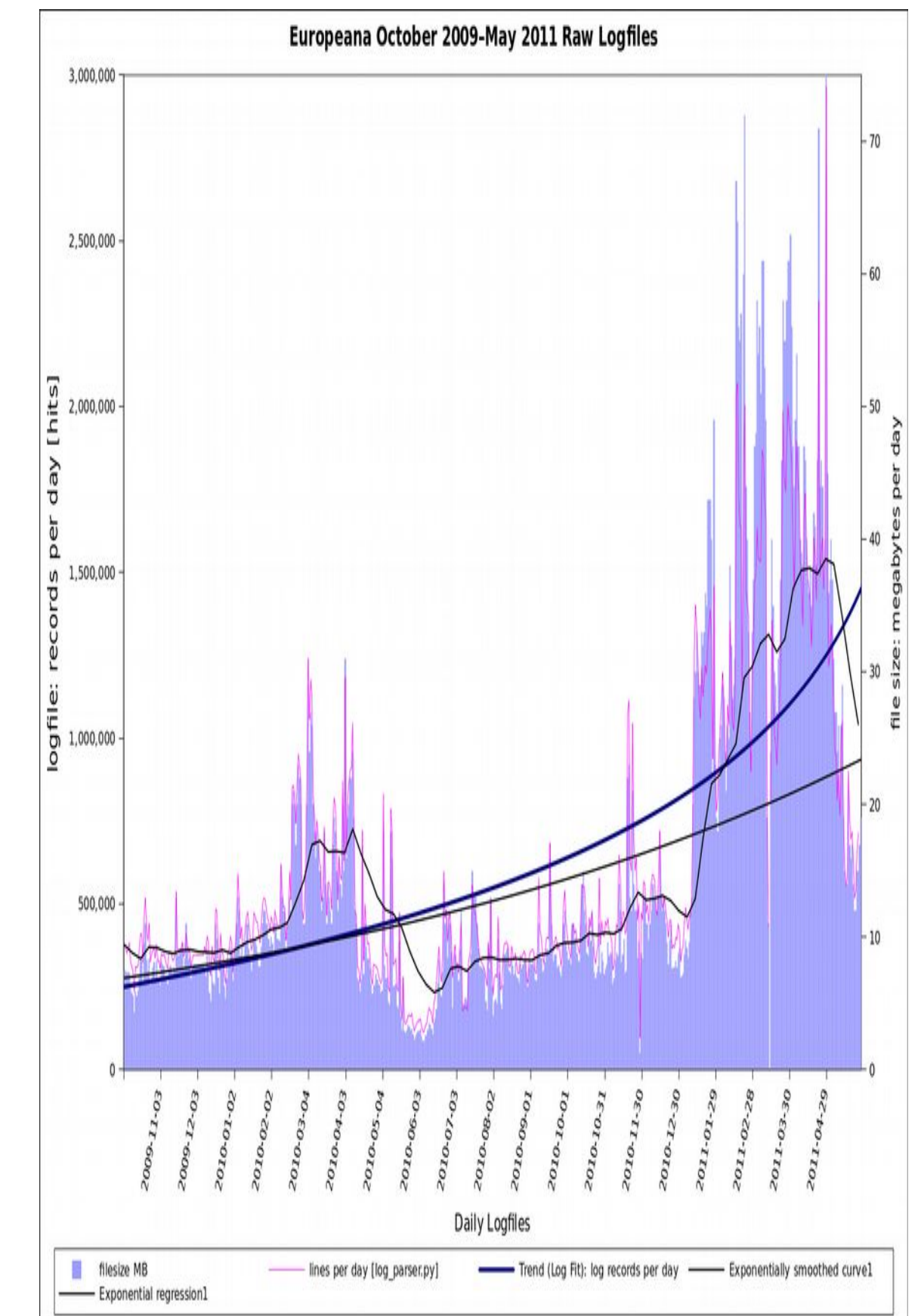
# Overarching conclusions (to 2013)

*Publishing in high IF, peer review journals main way to obtain reputation, get a job, obtain promotion. **Until no longer the case, nothing will change.***

*Researchers moved inexorably from a print-based system to digital system, but not significantly changed way decide what to trust or how to build reputation. **Digital transition not led to digital transformation.***

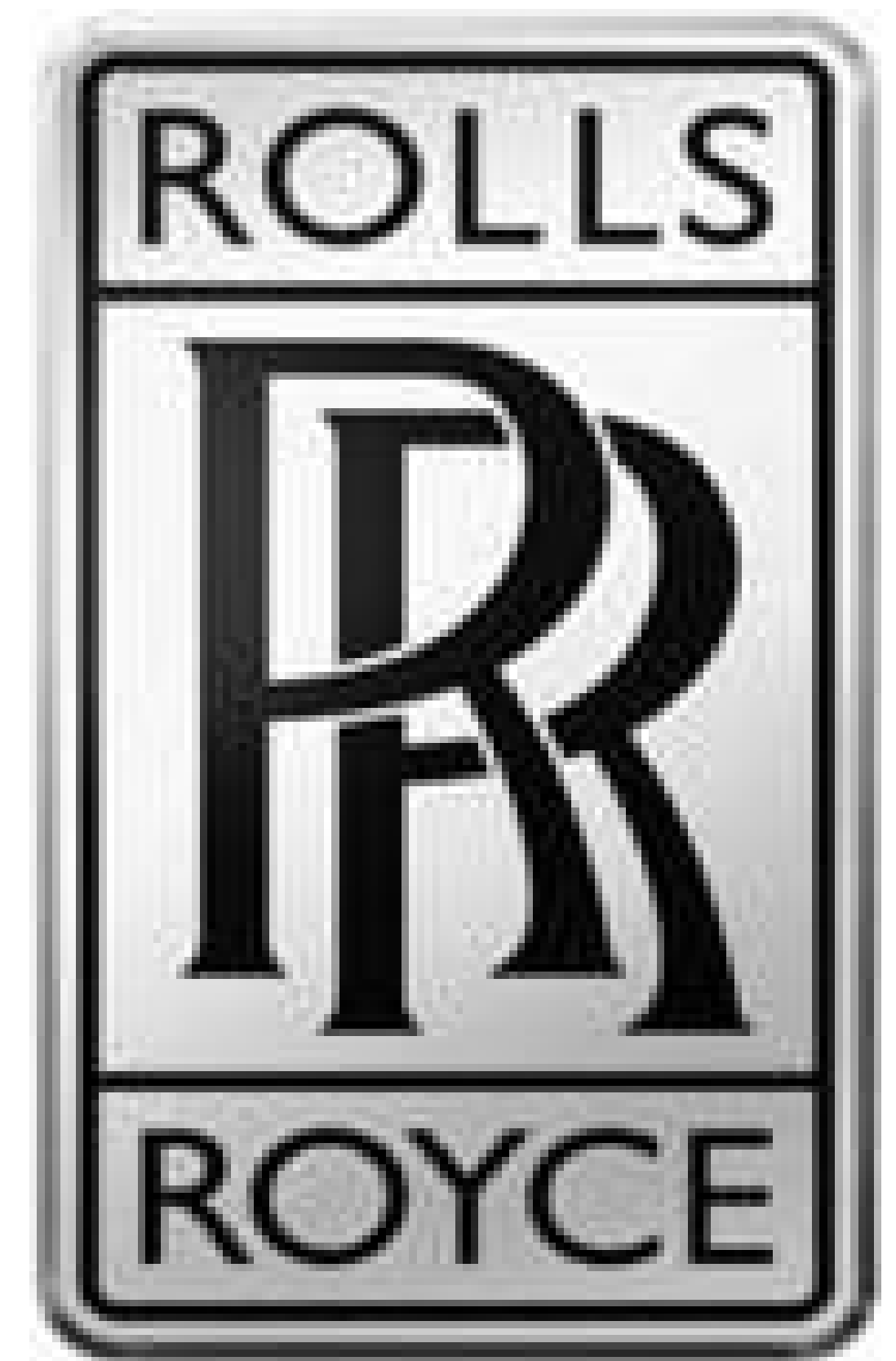
*Main 'change' has been reinforcement of established norms in the face of rapid expansion in scholarly communications and the digital tsunami unleashed. **Instead of looking to the future for lifeboat (called Web 2.0?), researchers looked to past & gripped established practices more firmly***

*Lack of any plans for transformed scholarly communication system even among those who strongly attack present one. Librarians and OA advocates preach new systems, for example, based on usage on crowd sourced peer review, but few researchers thought them the future.*



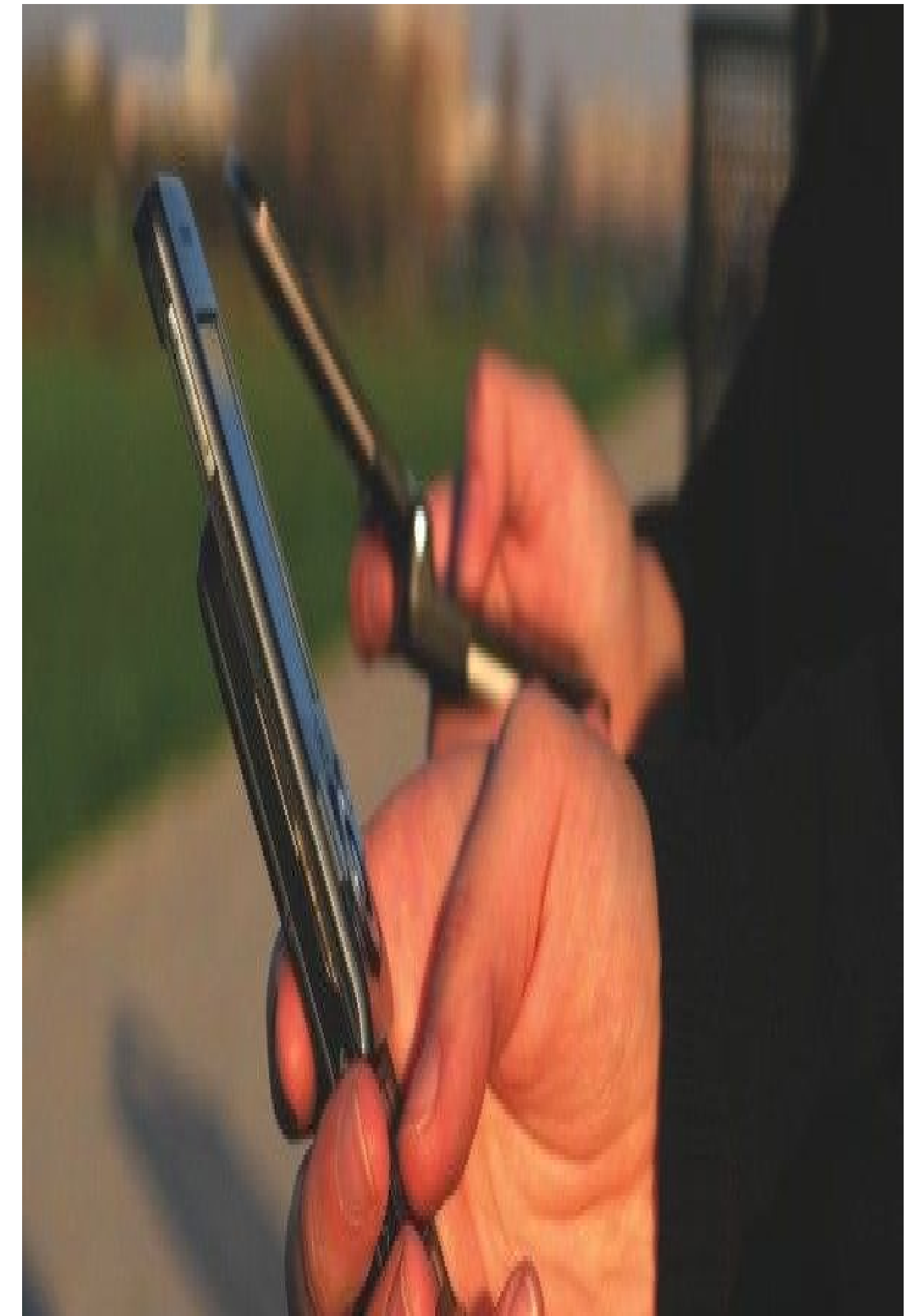
## Summing-up: implications for libraries and information professionals

- Nostalgia
- Perception of incompleteness.
- Social media another round of disintermediation?
- Real implications of Open Access/Institutional Repositories
- Role in trust chain?
- Google Scholar, Social media etc. create a new value proposition by providing citation and other (alt) metrics so users can form own views on what is a good.
- And then there is the smartphone (*see tomorrow's conference*)



## Summing-up: implications for publishers and researchers

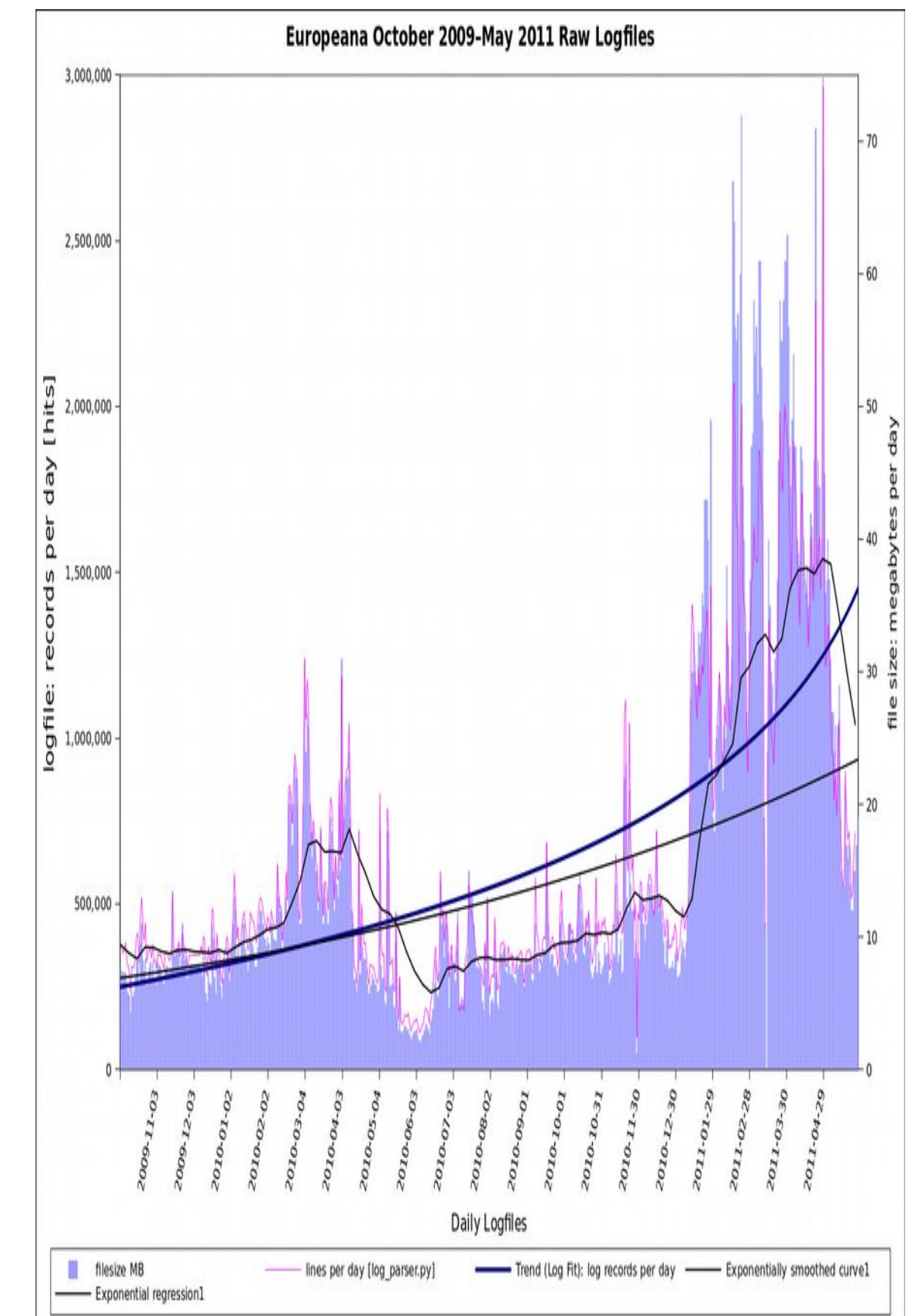
- Peer review still King Information flood reinforcing traditional practices
- Metrics power increases in a more competitive/global world.
- Social media not a substitute for journal articles, reinforces and supports
- Publisher still a trusted brand
- Peer reviewed, high ranked journals even more crucial for reputation/career development
- Some evidence that while early career social science researchers behave the same, because of a fear of the system, they actually think differently. Is this the first sighting of the new wave?
- Researchers believe more untrustworthy stuff around but also believe that more good stuff around





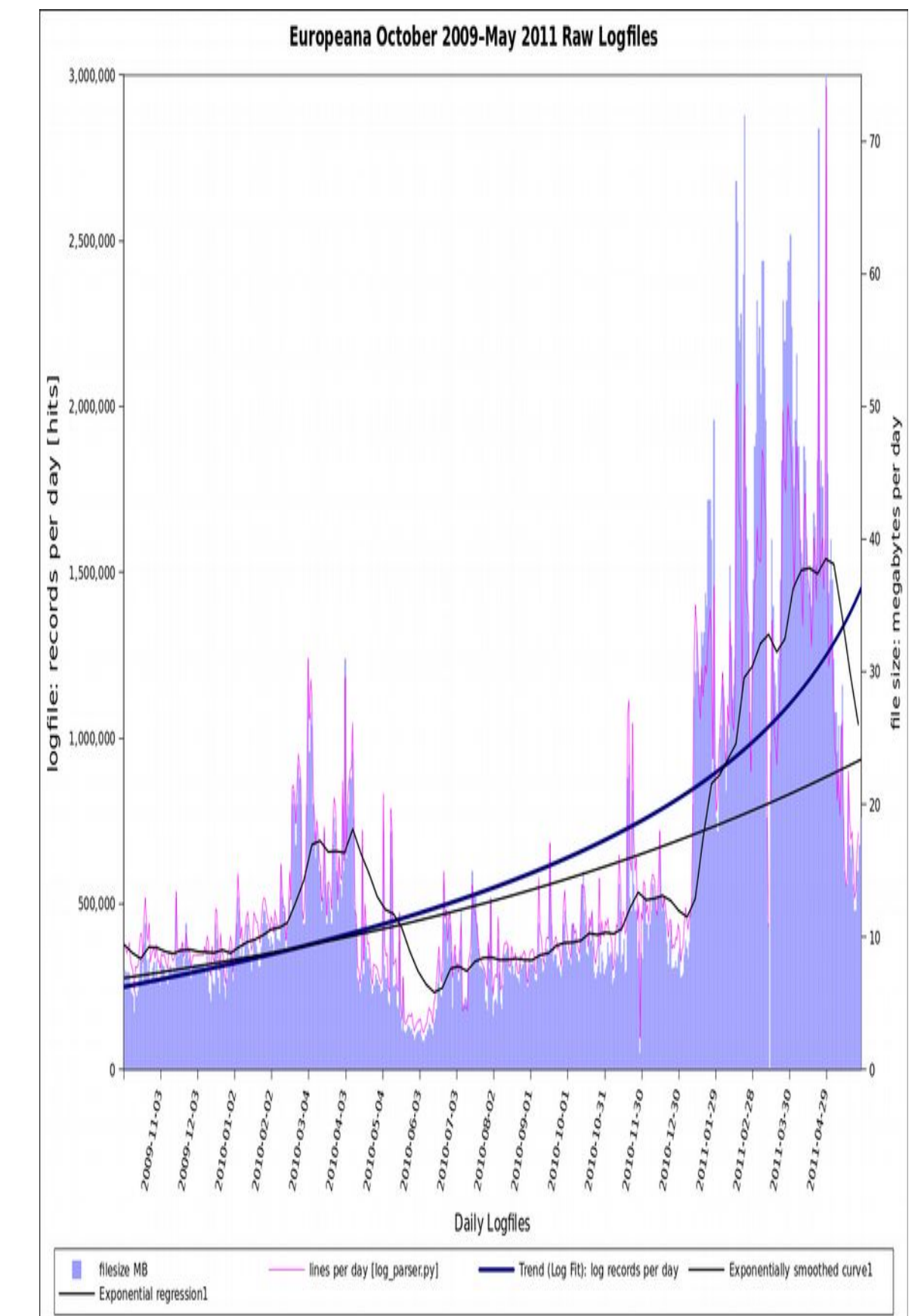
# Postscript (its changing): EU, making the system 'Open' and the age of reputational systems

- EC believe there are huge benefits to making the scholarly system more open and are forcing the issue
- There are economic and societal benefits here
- As mentioned traditionally, scientific reputation of scholars linked to research and in this regard largely to publication in high-impact journals, and citations
- It's the peer reviewed, high impact factor journal stupid!
- Its one source and one dodgy metric!
- Light shines on one very small part of the scholarly activity spectrum
- Conventional indicators, such as those used, fall short in reflecting adequately scholar's reputation and impact. The reputation spotlight is on one activity and one particular manifestation of that activity. When there are 58 scholarly activities!
- ResearchGate, Academia.edu and Kudos (all big 'digital libraries') are the new kinds on the block – how are we going to incorporate them?



# Postscript (its changing): EU, making the system 'Open' and the age of reputational systems

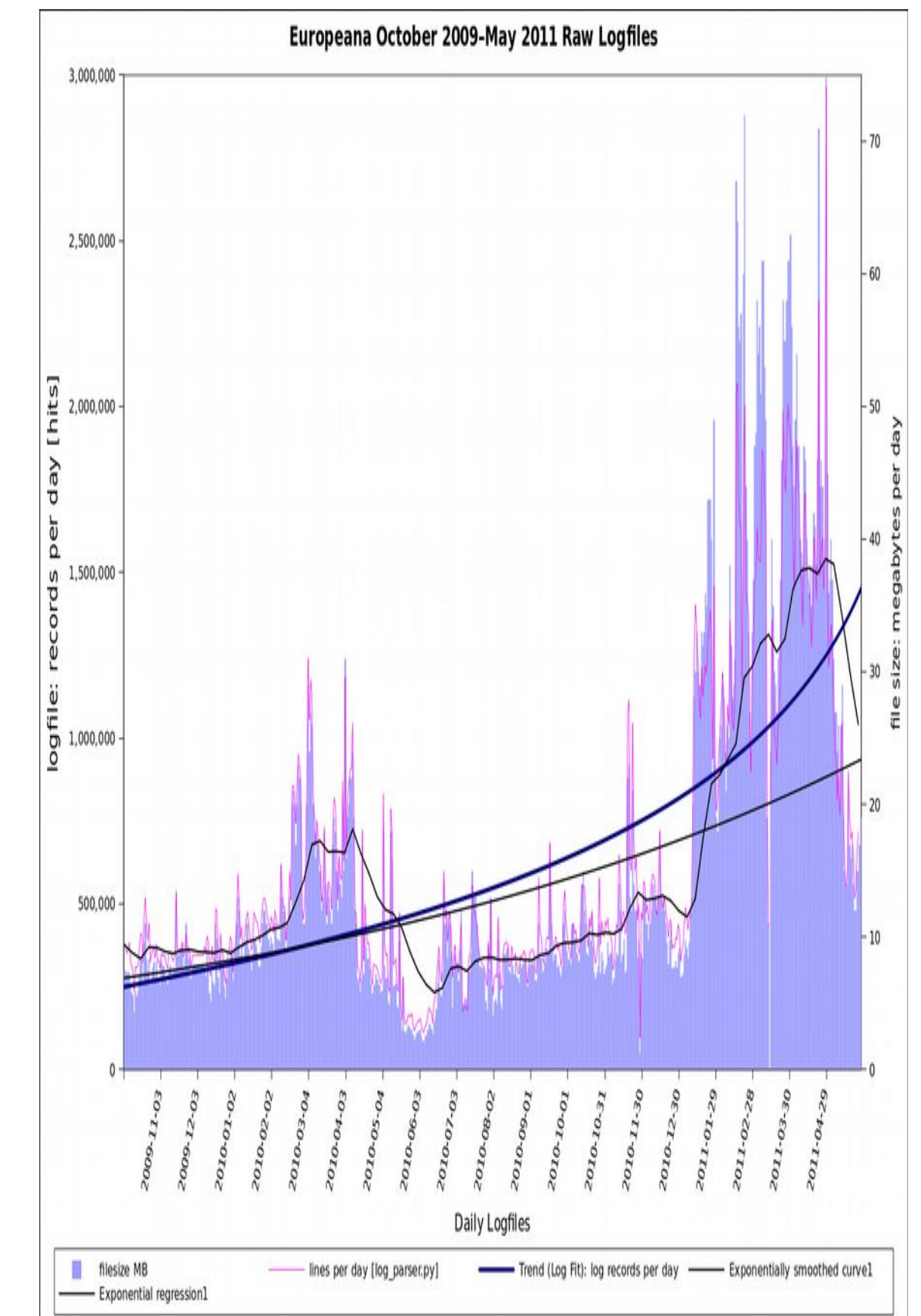
- Web 2.0 changes (techno disruption): a) given rise to new formats for conducting, publishing and disseminating science and research (and teaching); b) ushered in increasing numbers of 'actors' and new types of actors (free-lance scientists, innovators, citizen researchers). All scholars now
- With new forms of working & new actors evaluating and measuring scientific reputation becomes a new challenge
- Could we be destroying trust in science?





# Change, change and change again

- If the environment has changes so massively and lots of change in the pipeline how come universities and libraries so little changed?
- Parallel universes?
- Personal reflections (remote, international, social and fast)
- And the dog?



# More information

1. **Emerging reputational mechanisms: what are they, who are they, how are they doing and do they fit the bill?** [http://ciber-research.eu/download/20141029-JRC-IPTS\\_expert\\_workshop.pdf](http://ciber-research.eu/download/20141029-JRC-IPTS_expert_workshop.pdf)
2. **Trust and Authority in Scholarly Communications in the Light of the Digital Transition** <http://www.uksg.org/event/conference14>

