

# **The Googlization of academia**

## **Scientific content between search engine optimization and personalization**

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# Searching for academic content in the age of digital social networks

## ...an anecdote from Twitter



Tamara Ch[redacted] @Tam[redacted]

17 Jan

@R\_Koenig Hi! I have some homework about you and I cant find your 4 theories of fashion spread.Could you help me out a lil bit? Thanks LOTS!

Gespräch verbergen

Antworten Retweeten

7:55 AM - 17 Jan 13 · Details



Tamara Ch[redacted] @Tam[redacted]

19 Jan

@R\_Koenig omm actually I google you ,then I found your blog and then your twitter! I already finish my HM & ur theories are awsm!

Gespräch verbergen

Antworten Retweeten Favorisieren Mehr

2:00 AM - 19 Jan 13 · Details



René König, German sociologist  
(1906-1992)

"Search engine society" (Halavais 2008)

"Society of the query" (Lovink 2012)

# **Search engines matter.**

search engine optimization (SEO)

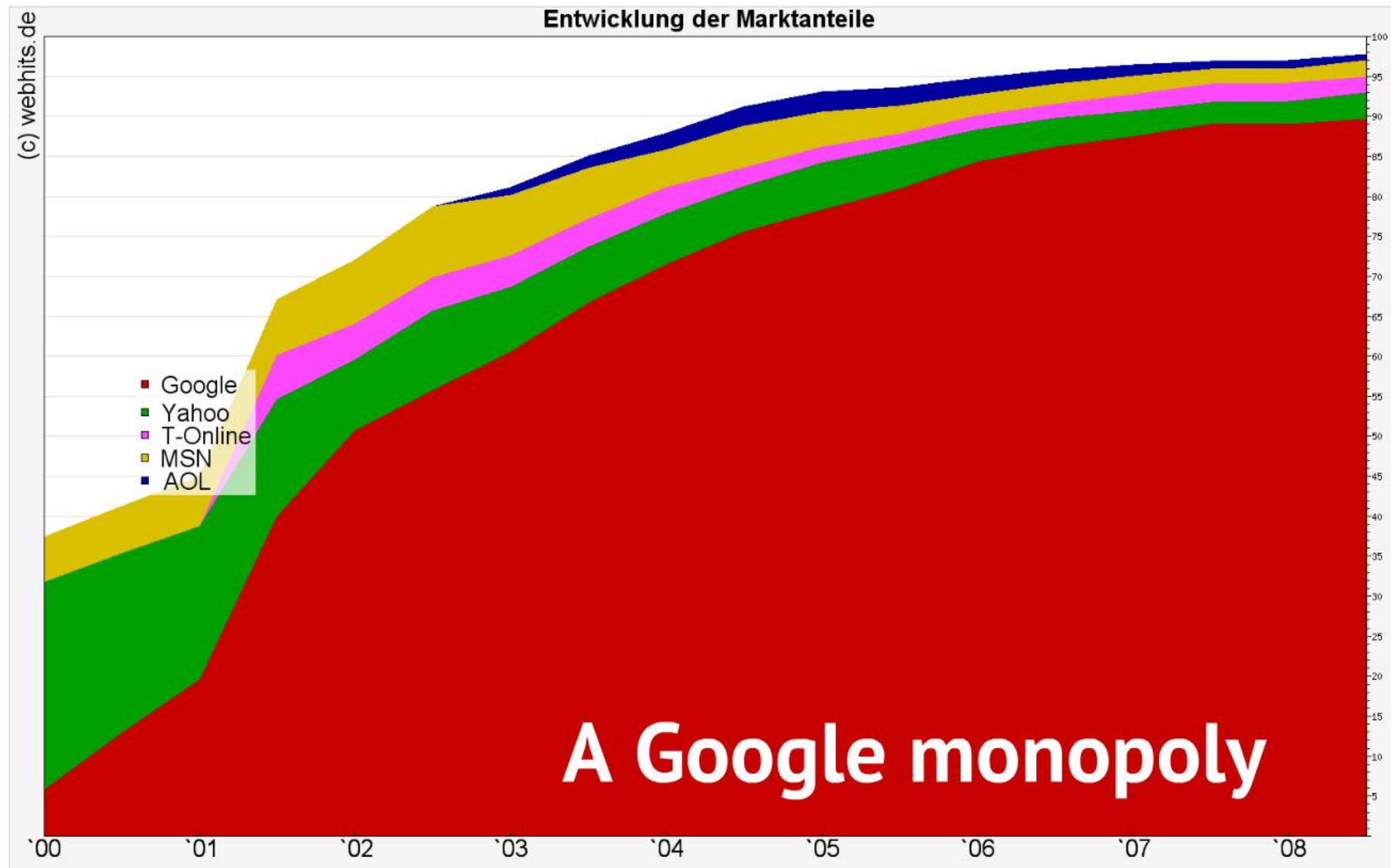
user behaviour  
(popularity of search  
engines...)

"Google society" (Lehmann et al. 2006)

"Googlization of everything"  
(Vaidhyathan 2011)



# Search engine market





A black and white photograph showing the two towers of the World Trade Center. Thick, dark smoke is billowing from the top of both towers, rising into the sky. The towers are seen from a low angle, looking up. The text "A case study: 9/11" is overlaid in the center of the image.

# A case study: 9/11

wtc 7  
wtc 7  
wtc 7 collapse  
wtc 7 conspiracy  
wtc 7 video

### [WTC7.net the hidden story of Building 7: The Collapse of WTC ...](#)

[www.wtc7.net/](http://www.wtc7.net/)

20 Aug 2011 – An investigation of **WTC 7's** collapse, evidence of controlled demolition.

Videos - The Silence Surrounding ... - Contents - About

### [7 World Trade Center - Wikipedia, the free encyclopedia](#)

[en.wikipedia.org/wiki/7\\_World\\_Trade\\_Center](http://en.wikipedia.org/wiki/7_World_Trade_Center)

**7 World Trade Center** is a building in New York City located across from the **World Trade Center** site in Lower Manhattan. It is the second building to bear that ...

The original 7 World Trade ... - The current 7 World Trade ... - See also - References

### [HOW DID WORLD TRADE CENTER 7 FALL? - YouTube](#)



[www.youtube.com/watch?v=8T2\\_nedORjw](http://www.youtube.com/watch?v=8T2_nedORjw)

22 Sep 2006 - 4 min - Uploaded by losvigil  
was the collapse of **WTC** building seven a planned controlled demolition ?

### [100 % PROOF BBC Knew WTC 7 Would Collapse - YouTube](#)



[www.youtube.com/watch?v=A83846Pb1-A](http://www.youtube.com/watch?v=A83846Pb1-A)

17 Jul 2012 - 3 min - Uploaded by CrusaderLuis  
Veritas † Vincit † Omnia † ~ This video represents Clear & Striking Proof that CNN & the BBC, both had ...

More videos for **wtc 7** »

### [WTC 7 - Debunking 911 Conspiracy Theories and Controlled ...](#)

[www.debunking911.com/pull.htm](http://www.debunking911.com/pull.htm)

Debunking 9/11 Conspiracy Theories and Controlled Demolition - **World Trade Center 7** - Building 7.

### [World Trade Center 7 Report Puts 9/11 Conspiracy Theory to Rest ...](#)

[www.popularmechanics.com](http://www.popularmechanics.com) » ... » Engineering » Architecture

21 Aug 2008 – **World Trade Center 7** stands amid the rubble of the recently collapsed Twin ... Since **WTC 7** housed Secret Service and CIA offices, conspiracy ...



## 7 World Trade Center



[en.wikipedia.org](http://en.wikipedia.org)

7 World Trade Center is a building in New York City located across from the World Trade Center site in Lower Manhattan. It is the second building to bear that name and address in that location.

[Wikipedia](#)

**Height:** 226 m

**Opened:** May 23, 2006

**Floors:** 49

**Architecture firm:** Skidmore, Owings and Merrill

**Architect:** [David Childs](#)

### People also search for



[Freedom Tower](#)



[150 Greenwich Street](#)



[The Pentagon](#)



[World Trade Center M...](#)



[World Trade Center 6](#)

[Feedback](#)





wtc 7 scientific investigation



Suche

Ungefähr 160.000 Ergebnisse (0,13 Sekunden)

Web

[A Scientific Theory of the WTC 7 Collapse | Foreign Policy Journal](#)

[www.foreignpolicyjournal.com/.../a-scientific-th...](#) - Diese Seite übersetzen

14 Feb 2011 – This building was 7 World Trade Center (**WTC 7**), a 47-story building ... a doubt that a thorough independent **scientific investigation** into the 9/11 ...

Bilder

Maps

Videos

[LETTER: How did al-Qaida pull off the destruction of WTC 7? - The ...](#)

[www.thewesterlysun.com/.../article\\_9351ddce-e...](#) - Diese Seite übersetzen

24 Aug 2012 – So please consider helping the "Architects and Engineers for 9/11 Truth" obtain an independent, **scientific investigation** of why **WTC 7** fell on ...

News

Shopping

Mehr

[FAQs - NIST WTC 7 Investigation](#)

[www.nist.gov > ... > World Trade Center](#) - Diese Seite übersetzen

13 Sep 2011 – However, NIST's **WTC 7** investigation did follow the core tenet of NFPA 921, which is the application of the **scientific method**. The investigation ...

Das Web

Seiten auf

Deutsch

Übersetzte Seiten

Mehr Optionen

[Architects & Engineers for 9/11 Truth - Wikipedia, the free ...](#)

[en.wikipedia.org/wiki/Architects.../11\\_Truth](#) - Diese Seite übersetzen

The mainstream **scientific** and engineering community has generally rejected the ... 2.1 **World Trade Center** towers; 2.2 **7 World Trade Center**; 2.3 Criticism of the official .... **Investigations** by the Federal Emergency Management Agency and the ...

[WTC7](#)

[www.911blogger.com/taxonomy/term/712](#) - Diese Seite übersetzen

14 Jul 2012 – This page forms a 1,500 word online glossary for the scientific




Out of the first 10 Google results only 1 result links to the actual scientific report on WTC 7.

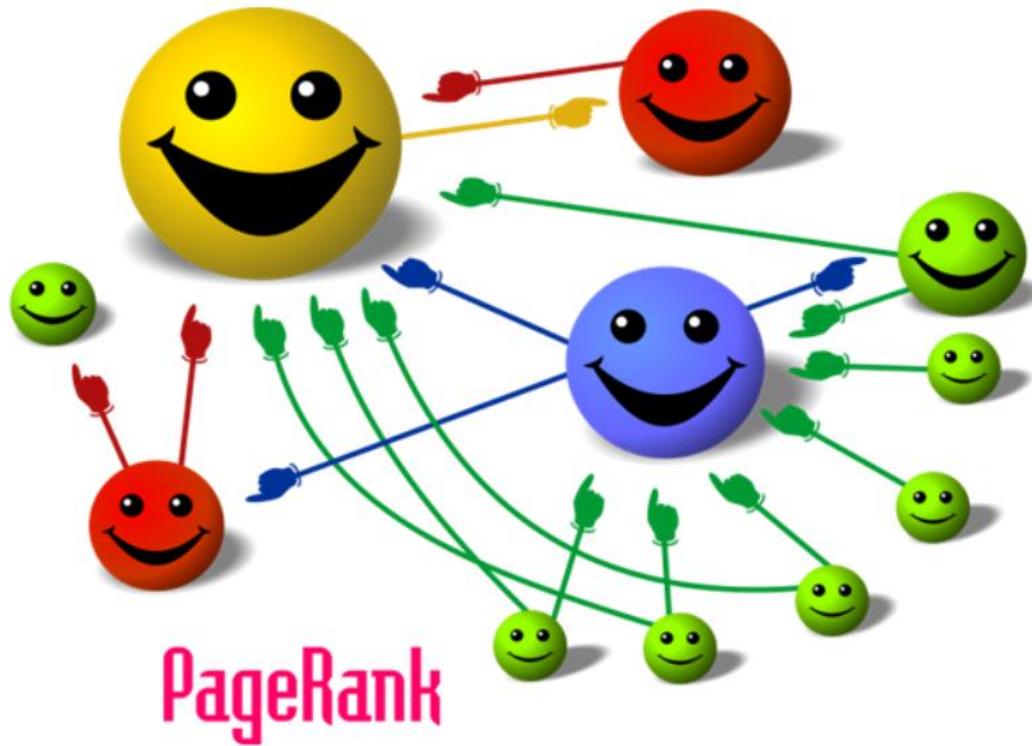
All other links represent pseudoscientific alternative theories.



wtc 7 scientific investigation



Why do marginalized  
positions receive  
such high rankings?



Google favors well-linked websites.

Websites representing alternative accounts of 9/11 ARE well-linked.



# 9/11 Truth Movement



## Journal of 9/11 Studies

Thank you for visiting The Journal of 9/11 Studies, a peer-reviewed, open-access, electronic-only journal, covering the whole of research related to the events of 11 September, 2001. Many fields of study are represented in the journal, including Engineering, Physics, Chemistry, Mathematics and Psychology. All content is freely available online. Our mission in the past has been to provide an outlet for evidence-based research into the events of 9/11 that might not otherwise have been published, due to the resistance that many established journals and other institutions have displayed toward this topic. The intention was to provide a rapid acceptance process with full peer review. That has been achieved. It is now our belief that the case for falsity of the official explanation is so well established and demonstrated by papers in this Journal that there is little to be gained from accepting more papers here. Instead we encourage all potential contributors to prepare papers suitable for the more established journals in which scientists might more readily place their trust. Refereed papers have already been published in mainstream peer-reviewed journals: [Fourteen Points...](#) ([Bentham](#)) and [Environmental Anomalies at the World Trade Center: Evidence for energetic materials](#) ([SpringerLink](#)), and [Active Thermic Material Discovered in Dust from the 9/11 World Trade Center Catastrophe](#) ([The Open Chemical Physics Journal](#)).





Thank you for visiting The Journal of 9/11 Studies, a peer-reviewed, open-access, electronic-only journal, covering the whole of research related to the events of 11 September, 2001. Many fields of study are represented in the journal, including Engineering, Physics, Chemistry, Mathematics and Psychology. All content is freely available online. Our mission in the past has been to provide an outlet for evidence-based research into the events of 9/11 that might not otherwise have been published, due to the resistance that many established journals and other institutions have displayed toward this topic. The intention was to provide a rapid acceptance process with full peer review. That has been achieved. It is now our belief that the case for falsity of the official explanation is so well established and demonstrated by papers in this Journal that there is little to be gained from accepting more papers here. Instead we encourage all potential contributors to prepare papers suitable for the more established journals in which scientists might more readily place their trust. Refereed papers have already been published in mainstream peer-reviewed journals: [\*Fourteen Points...\[Bentham\]\*](#) and [\*Environmental Anomalies at the World Trade Center: Evidence for energetic materials \[SpringerLink\]\*](#), and [\*Active Thermite Material Discovered in Dust from the 9/11 World Trade Center Catastrophe \[The Open Chemical Physics Journal\]\*](#).

**"[...] a peer-reviewed, open-access, electronic journal, covering the whole of research related to the events of 11 September, 2001"**

# What about



"Google Scholar aims to rank documents the way researchers do, weighing the full text of each document, where it was published, who it was written by, as well as how often and how recently it has been cited in other scholarly literature."

<http://scholar.google.com/intl/en/scholar/about.html>





wtc 7



Scholar

About 33,500 results (0.04 sec)

Articles

Legal documents

Any time

Since 2012

Since 2011

Since 2008

Custom range...

Sort by relevance

Sort by date

☒ include patents

☒ include citations

☒ Create alert

[PDF] [Why Indeed Did the WTC Buildings Collapse?](#)

SE Jones - Griffin and Scott, eds, 2006 - d.umn.edu

... provides important clues regarding its composition, as we shall see. Next, I invite you to consider the collapse of the 47-story **WTC 7**, which was never hit by a jet, as a basis for further discussion. ... Page 3. **WTC 7**: 47 - Story, steel-frame building.. **WTC 7** on afternoon of 9-11-01. ...

Cited by 34 Related articles All 37 versions Cite More▼

[CITATION] [WTC 7: A Short Computation](#)

K Kuttler - Journal of, 2006

Cited by 9 Related articles Cite

[A useful interpolation between static and motional narrowing limits for vibrational dephasing](#)

DW Oxtoby - The Journal of Chemical Physics, 1981 - jcp.aip.org

... a tabulated function. 5 For integral values of  $M2T \sim$  still simpler closed form expressions may be obtained<sup>4</sup>; for example, with  $M2T \sim = 1$ ,  $I(w) = 1/Tc \text{sech}(\sim W Tc)$ . (7) There are several advantages to this ansatz. First, as we ...

Cited by 34 Related articles All 2 versions Cite

[GIS in the World Trade Center attack—trial by fire](#)

MJ Kevany - Computers, Environment and Urban Systems, 2003 - Elsevier

... Actual, because the City's Emergency Operating Center (EOC) and its GIS were housed in **WTC 7** that was destroyed by fire that day, and, thus, the first line GIS response was literally destroyed by fire. ... The GIS Utility office was a block from **WTC 7** at 75 Park Place (Fig. ...

Cited by 49 Related articles All 3 versions Cite

[\[PDF\] Limited metallurgical examination](#)

J Barnett, RR Biederman... - Appendix C of World ..., 2002 - 911research.wtc7.net  
... field. The first appeared to be from **WTC 7** and the second from either **WTC 1** or **WTC 2**. Samples were taken from these beams and labeled Sample 1 and Sample 2, respectively. A metallurgic examination was conducted. C ...

[Cited by 12](#) [Related articles](#) [All 28 versions](#) [Cite](#)



[HTML] [Extremely high temperatures during the World Trade Center destruction](#)

[SE Jones, J Farrer, GS Jenkins, F Legge, J Gourley...](#) - [Journal of](#), 2008 - [neilslade.com](#)

... In an effort to better understand the conditions that led to complete collapses of the World Trade Center Towers and **WTC 7**, we apply scanning-electron-microscope (SEM) and energy dispersive x-ray spectroscopy (XEDS) methods to analyze the dust generated, with an ...

[Cited by 22](#) [Related articles](#) [All 35 versions](#) [Cite](#) [More▼](#)

# What does this mean?

- Search engines renegotiate the relevance of scientific content
- Although search engine algorithms partly try to copy academic relevance indicators, they may come to very different results



**Scientific relevance ≠  
algorithmic relevance**

# **Paper suggesting "academic search engine optimization"**

"Academic search engine optimization (ASEO) is the creation, publication, and modification of scholarly literature in a way that makes it easier for academic search engines to both crawl it and index it."

(Beel et al. 2010: 176)

Methods: correct usage of metadata, strategic placement of keywords and selection of publishers...

Jöran Beel, Bela Gipp, and Erik Wilde (2010): Academic Search Engine Optimization (ASEO): Optimizing Scholarly Literature for Google Scholar and Co. *Journal of Scholarly Publishing*, 41 (2): 176–190.



# Criticism

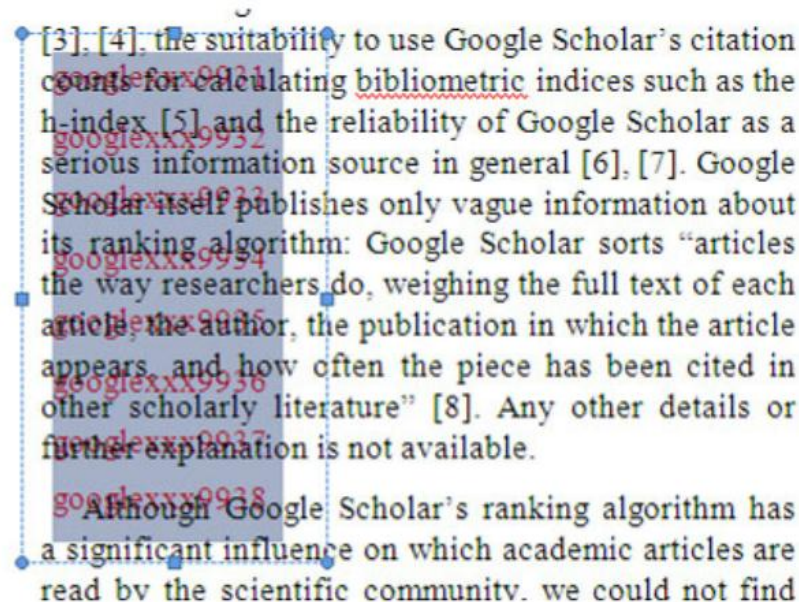
Danger of manipulation  
through spamming  
techniques etc.



# Authors agree. Study confirms:

"Google Scholar is far easier to spam than the classic Google Search for Web pages."  
(Beel/Gipp 2010)


Manipulation e.g. by  
adding invisible text,  
creating nonsense  
publications with  
citations...



[3], [4], the suitability to use Google Scholar's citation counts for calculating bibliometric indices such as the h-index [5] and the reliability of Google Scholar as a serious information source in general [6], [7]. Google Scholar itself publishes only vague information about its ranking algorithm: Google Scholar sorts "articles the way researchers do, weighing the full text of each article, the author, the publication in which the article appears, and how often the piece has been cited in other scholarly literature" [8]. Any other details or further explanation is not available.

Although Google Scholar's ranking algorithm has a significant influence on which academic articles are read by the scientific community, we could not find

Joeran Beel and Bela Gipp (2010): Academic Search Engine Spam and Google Scholar's Resilience Against it, Journal of Electronic Publishing 13 (3).



Impact not  
only on  
academic  
publications



**evaluation**  
Impact not  
**general information**  
only on  
**people**  
academic  
publications  
**organizations**

# Conclusion

Algorithmic shift: Algorithms will more and more decide over scholars' visibility and relevance

Externally determined relevance: These algorithms are opaque and controlled by non-academic commercial companies; relevance indicators (e.g. links) are not necessarily tied to academia

Professionalization? Will academia (as well as search engines) adapt and re-establish common hierarchies also in search engine results?



# A look ahead

The background of the slide is a dark blue field filled with a complex network of lighter blue lines and nodes. These lines and nodes form a stylized world map, with the continents of North America, South America, Europe, Africa, and Asia clearly visible. The network of lines suggests a global web of connections, such as the internet or trade routes.

From the link to the  
"like economy"?  
(Gerlitz/Helmond 2013)

# Still...

quantitative indicators for relevance,  
not tied to academic qualification  
(no matter if links or likes)

 **Danger of populism and manipulation**

...at the same time, increasing  
importance of personalization

 **Towards academic  
"filter bubbles" (Pariser)?**