# New digital research methods

## Peter M. Dahlgren

HAS, April 19, 2017

## I will show some:

- Interesting data sources
- Experimentation with methods (lots of R)
- Open science and open data

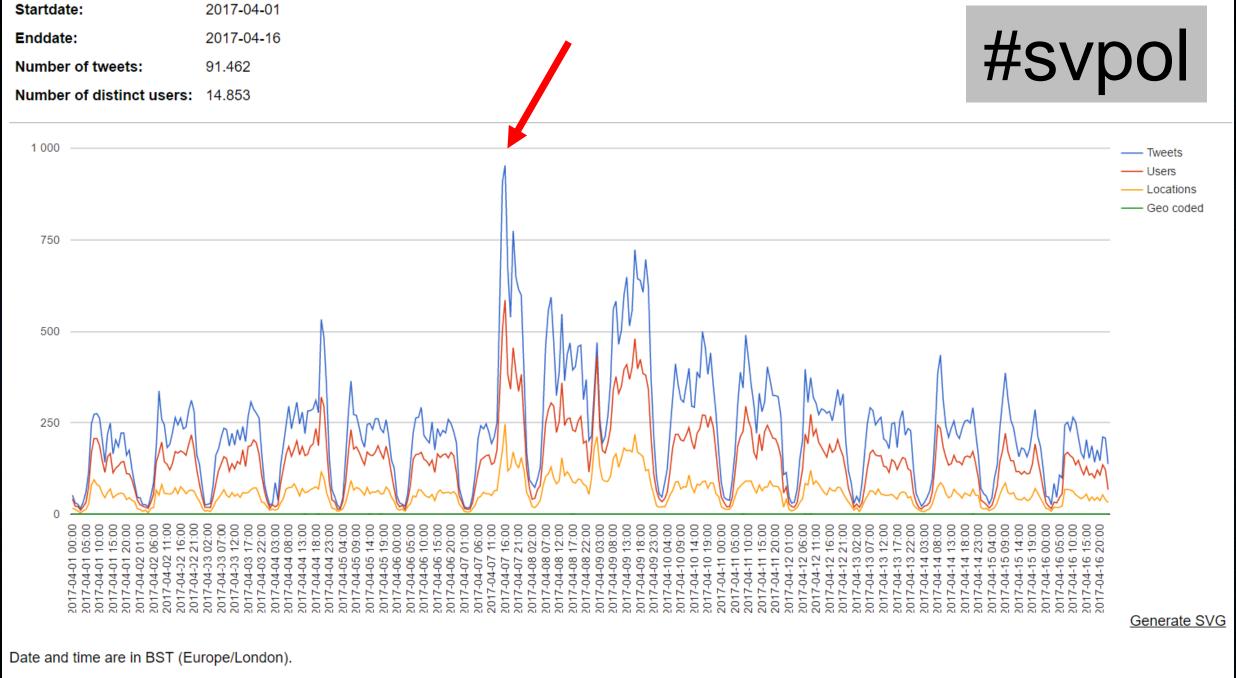
### **DMI-TCAT**

### R

- 1. Trump tweets sentiment
- 2. Drottninggatan tweets
- 3. Wikipedia breakout detection
- 4. **GDELT** (Television Explorer)
- 5. Microsoft Cognitive Services
- 6. statcheck

## Open science

- Open Science Framework
- Notebooks
- Open data
- Shiny



update graph



[Home]

#### Download

CRAN

#### R Project

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#### **R** Foundation

Foundation Board Members Donors Donate

#### Help With R

Getting Help



## The R Project for Statistical Computing

### Getting Started

R is a free software environment for statistical computing and graphics. It compiles and runs on a wide variety of UNIX platforms, Windows and MacOS. To **download R**, please choose your preferred CRAN mirror.

If you have questions about R like how to download and install the software, or what the license terms are, please read our answers to frequently asked questions before you send an email.

### News

- R version 3.4.0 (You Stupid Darkness) prerelease versions will appear starting Tuesday 2017-03-21. Final release is scheduled for Friday 2017-04-21.
- R version 3.3.3 (Another Canoe) has been released on Monday 2017-03-06.
- useR! 2017 (July 4 7 in Brussels) has opened registration and more at http://user2017.brussels/
- Tomas Kalibera has joined the R core team.
- The R Foundation welcomes five new ordinary members: Jennifer Bryan, Dianne Cook, Julie Josse,
   Tomas Kalibera, and Balasubramanian Narasimhan.
- The R Journal Volume 8/1 is available.
- The useR! 2017 conference will take place in Brussels, July 4 7, 2017.
- R version 3.2.5 (Very, Very Secure Dishes) has been released on 2016-04-14. This is a rebadging
  of the quick-fix release 3.2.4-revised.
- Notice XQuartz users (Mac OS X) A security issue has been detected with the Sparkle update
  mechanism used by XQuartz. Avoid updating over insecure channels.
- The R Logo is available for download in high-resolution PNG or SVG formats.
- useR! 2016, hase taken place at Stanford University, CA, USA, June 27 June 30, 2016.
- The P Journal Volume 7/2 is available



[Home]

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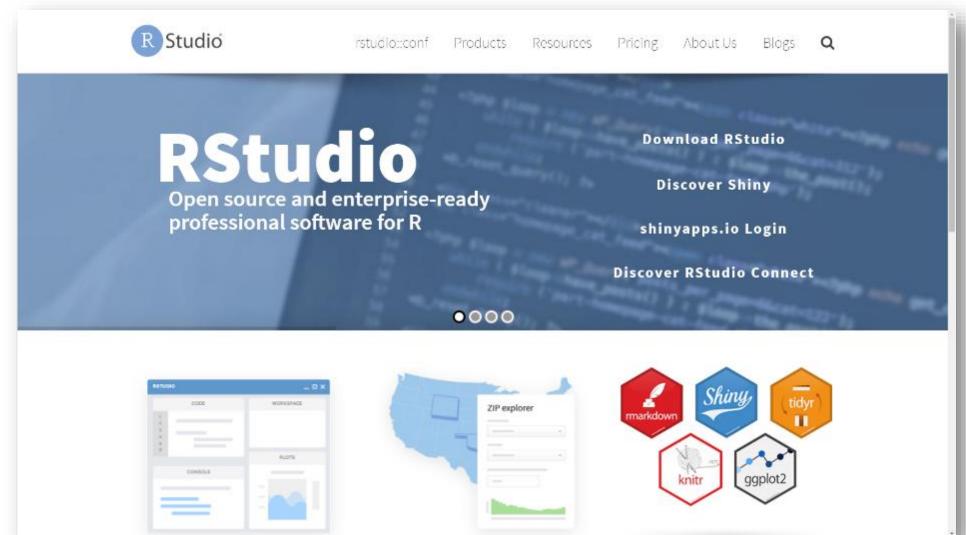
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## The R Project for Statistical Computing



mechanism used by XQuartz. Avoid updating over insecure channels.

le for download in high-resolution PNG or SVG formats.

r-project.org + rstudio.com en place at Stanford University, CA, USA, June 27 - June 30, 2016.





# Watching The Entire World

GDELT monitors the world's news media from nearly every corner of every country in print, broadcast, and web formats, in over 100 languages, every moment of every day.

Watching Our World Unfold

massive computing power to see the world through others'

## Using GDELT

The GDELT Project is an open platform for research and analysis of global society and thus all datasets released by the GDELT Project are available for unlimited and unrestricted use for any academic, commercial, or governmental use of any kind without fee.

gdeltproject.org



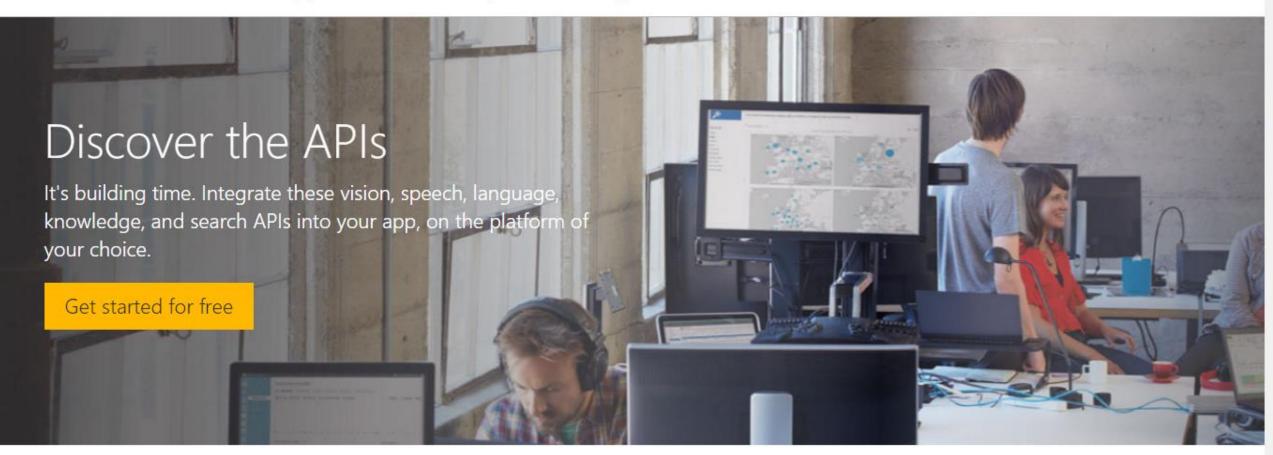
## Cognitive Services

Home APIs ♥

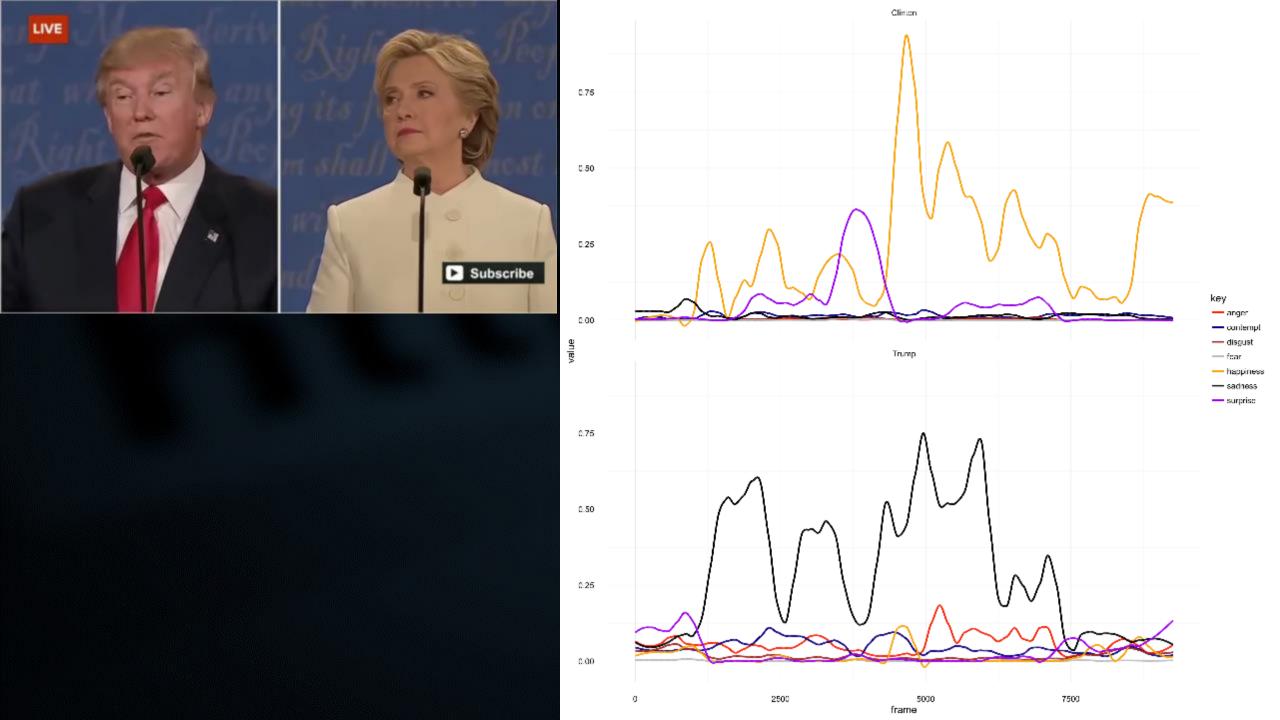
Apps

Docs + Help ▼

Pricing







#### HFST-SweNER – A New NER Resource for Swedish

### Dimitrios Kokkinakis<sup>§</sup>, Jyrki Niemi<sup>±</sup>, Sam Hardwick<sup>±</sup>, Krister Lindén<sup>±</sup>, Lars Borin<sup>§</sup>

§Språkbanken, Department of Swedish University of Gothenburg, Sweden E-mail: first.last@svenska.gu.se \*Department of Modern Languages University of Helsinki, Finland E-mail: first.last@helsinki.fi

#### Abstract

Named entity recognition (NER) is a knowledge-intensive information extraction task that is used for recognizing textual mentions of

```
entities t
difficult
       (a) <s id=jc04-041> Han kom till <ENAMEX TYPE="LOC" SBT="PPL">Stockholm</ENAMEX> <TIMEX TYPE="TME"
language
       SBT="DAT">1885</TIMEX> , fick en organisatorisk bas i <ENAMEX TYPE="ORG" SBT="PLT">Socialdemokratiska
of social
       klubben</ENAMEX> ( senare <ENAMEX TYPE="ORG" SBT="PLT">Socialdemokratiska förbundet</ENAMEX> ) ,
environn
(HFST) r
       kunde starta <ENAMEX TYPE="PRS" SBT="HUM">Social-Demokraten</ENAMEX> och fick
generic
       medarbetare som <ENAMEX TYPE="PRS" SBT="HUM">Axel Danielsson</ENAMEX> , <ENAMEX TYPE="PRS"
(gazettee
       SBT="HUM">Fredrik Sterky</ENAMEX> och , <TIMEX TYPE="TME" SBT="DAT">året därpå</TIMEX> , <ENAMEX
       TYPE="PRS" SBT="HUM">Hjalmar Branting</ENAMEX> . <s>
Keyword
       (b) <s id=jc04-041> Han kom till <name type=place> Stockholm </name> 1885 , fick en organisatorisk bas i <name
       type=inst> Socialdemokratiska klubben </name> ( senare <name type=inst> Socialdemokratiska förbundet
       </name> ) , kunde starta <name type=inst> Social-Demokraten </name> och fick medarbetare som <name</pre>
Named
       type=person> Axel Danielsson </name> , <name type=person> Fredrik Sterky </name> och , året därpå , <name
languag
       type=person> Hjalmar Branting </name> . <s>
```

Figure 1. Example sentence from the gold standard used for evaluation (see Section 7.3), annotated by the HFST-SweNER (a) and the original manual annotation (b). Note that in (a) the entity *Social-Demokraten*, is erroneously annotated as a person (PRS), which according to the manual annotation in the gold standard it should have been an *inst* (ORGanization).

#### HFST-SweNER – A New NER Resource for Swedish

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Collect

| Collect | Clean | C

Keyword

TYPE="PRS" SBT="HUM">Hjalmar Branting</ENAMEX> . <s>

Named

(b) <s id=jc04-041> Han kom till <name type=place> Stockholm </name> 1885 , fick en organisatorisk bas i <name type=inst> Socialdemokratiska klubben </name> ( senare <name type=inst> Socialdemokratiska förbundet </name> ) , kunde starta <name type=inst> Social-Demokraten </name> och fick medarbetare som <name type=person> Axel Danielsson </name> , <name type=person> Fredrik Sterky </name> och , året därpå , <name type=person> Hjalmar Branting </name> . <s>

Figure 1. Example sentence from the gold standard used for evaluation (see Section 7.3), annotated by the HFST-SweNER (a) and the original manual annotation (b). Note that in (a) the entity *Social-Demokraten*, is erroneously annotated as a person (PRS), which according to the manual annotation in the gold standard it should have been an *inst* (ORGanization).



STANDARDS PARTICIPATE MEMBERSHIP ABOUT W3C

Views: desktop mobile print

0

#### **GROUP DETAILS**

Charter

**Group Participants** 

Wiki

Issue Tracker

Patent Policy Status

## RECOMMENDATIONS AND NOTES

#### Recommendations

Web Annotation Data

Model

Web Annotation

Vocabulary

Web Annotation

Protocol

#### **Working Group Notes**

Embedding Web Annotations in HTML Selectors and States Warning: this Working Group is now closed. It has published its Recommendations and Working Group Notes on the 23rd of February 2017. For further discussions on the evolution of Web Annotation technologies at W3C, possible errata, etc, please join the W3C Open Annotation Community Group.

### WEB ANNOTATION WORKING GROUP

The W3C Web Annotation Working Group is part of the <a href="Publishing@W3C">Publishing@W3C</a>, but the scope is more than just publishing; Web annotation is for all content on all devices.

A detailed list of this group's <u>publications</u> is available in the working group's specification repository.

The W3C Web Annotation Working Group is <u>chartered</u> to develop a set of specifications for an interoperable, sharable, distributed Web Annotation architecture.

Over the course of its charter, this group has created the following Recommendations:

#### Web Annotation Data Model

Describes the underlying **Annotation Abstract Data Model** as well as a JSON-LD serialization

#### Web Annotation Vocabulary

The Vocabulary which underpins the Web Annotation Data Model

#### Web Annotation Protocol

The HTTP API for publishing, syndicating, and distributing Web Annotations

## What are Web Annotations?

Traditional annotations are marginalia, errata, and highlights in printed books, maps, picture, and other physical media. Web annotations are an attempt to recreate and extend that functionality as a new layer of interactivity and linking on top of the Web. It will allow anyone to annotate anything anywhere, be it a web page, an ebook, a video, an image, an audio stream, or data in raw or visualized form. Web annotations can be linked, shared between services, tracked back to their origins, searched and discovered, and stored wherever the author wishes: the vision is for

w3.org/annotation

#### MEDIEFORSKARNA

OM MEDIEFORSKARNA.SE

Medieforskarna.se samlar bloggar från svenska forskare om medier, Journalistik och kommunikation.

Prenumerera på RSS-flödet

Föli@medieforskarna

#### Ämnen

- Allmänt
- Debatt
- Internationellt
- Internet och sociala medier
- Journalistik
- Konferenser
- Kriser
- Skogsbranden utanför Sala

Pelle Snickars

1 dag sedan

## MIT Press manuscript slowly emerging

Within our research project around Spotify we are currently together writing and building a book manuscript to be delivered to MIT Press before summer. Things are proceeding, albeit somewhat slowly. I am presently in charge of Chapter 2, which [...]

Bengt Johansson

5 dagar sedan

#### Baaad PR

United Airlines är i blåsväder. Att släpa blodiga resenärer nerför passagerargången som inte vill gå av ett överbokat plan är inte att rekommendera. I alla fall inte om man vill ha bra PR och [...]

Margareta Rönnberg

1 vecka sedan

### Ar skräckhistorier av typen vandringssägner som VARUHUSET verkligen något för 6-åringar?

I torsdags var jag dygnet-runt-föräldrastand-in för mina barnbarn och skulle i vanlig ordning inför nattningen läsa för 6åringen och 8-åringen. Jag hade tagit med Dahlins och Johanna [...] Margareta Rönnberg

2 dagar sedan

### Beror verkligen ökningen av barns närsynthet på det myckna "skärmtittandet"? På bokläsning?

Till listan av decenniets alla falskheter sällar sig nu också "falsk närsynthet"... Det senaste halvåret har i pressen och i tv:s nyhetsprogram ännu ett medielarm dykt upp: barns ögon sägs [...]

Peter M. Dahlgren

6 dagar sedan

### "Det är algoritmerna" – en förklaring som betyder "jag har ingen förklaring"

Stiftelsen för internetinfrastruktur har släppt en ny rapport vid namn Algoritmer: Så påverkar de din vardag, skriven av Jutta Haider och Olof Sundin. Här tänkte jag redogöra för min kritik mot [...]

Ulrika Hedman

1 vecka sedan

### #drottninggatan #openstockholm

Det delades en hel del rykten, spekulationer och överdrifter på Twitter igår. Det var skottlossning här, utpekade gärningsmän där, falska citat från ministrar på ett håll, ett malande om ett [...] Bengt Johansson

3 dagar sedan

### Raserar kriser samhällsförtroendet? KRISAMS drar igång

Kerlin Björn 15.00 Normal 0 21 false false false SV JA X-NONE [...]

Mediespanarna poddradio

5 dagar sedan

## 276. Terrorismens gräns och journalistens mall

Efter attentatet på Drottninggatan i Stockholm diskuterar Mediespanarna hur journalistiska genrer försvårar rapportering och vad efterföljande debatter egentligen handlar om.

Bengt Johansson

1 vecka sedan

## Where have all the flowers gone?

Blommorna som partisymboler är på väg ut. I förra veckan lanserade kristdemokraterna sin nya logotype och därmed var vitsippan borttagen från den svenska partirymden. Istället innehåller loggan bara [...]

Ulrika Hedman

1 vecka sedan

Några tankar om våra nyhetsmedier så här dagen

## medieforskarna.se

Private Make Public

Files Wiki Analytics Registrations Forks Contributors Settings

## Selective exposure

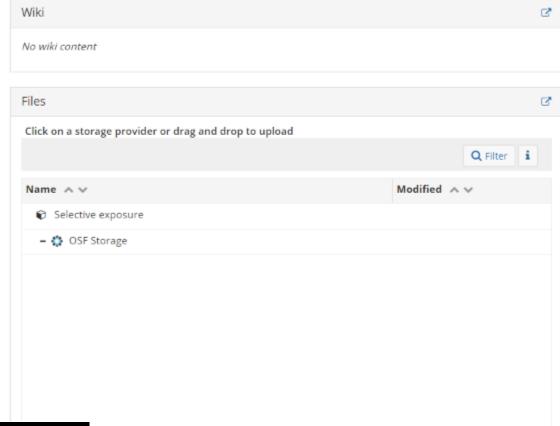
#### Contributors: Peter M. Dahlgren

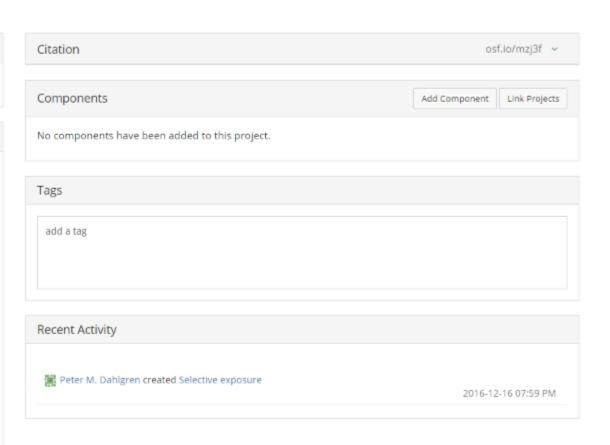
Date created: 2016-12-16 07:59 PM | Last Updated: 2016-12-16 07:59 PM

Category: Project 🕝

Description: No description

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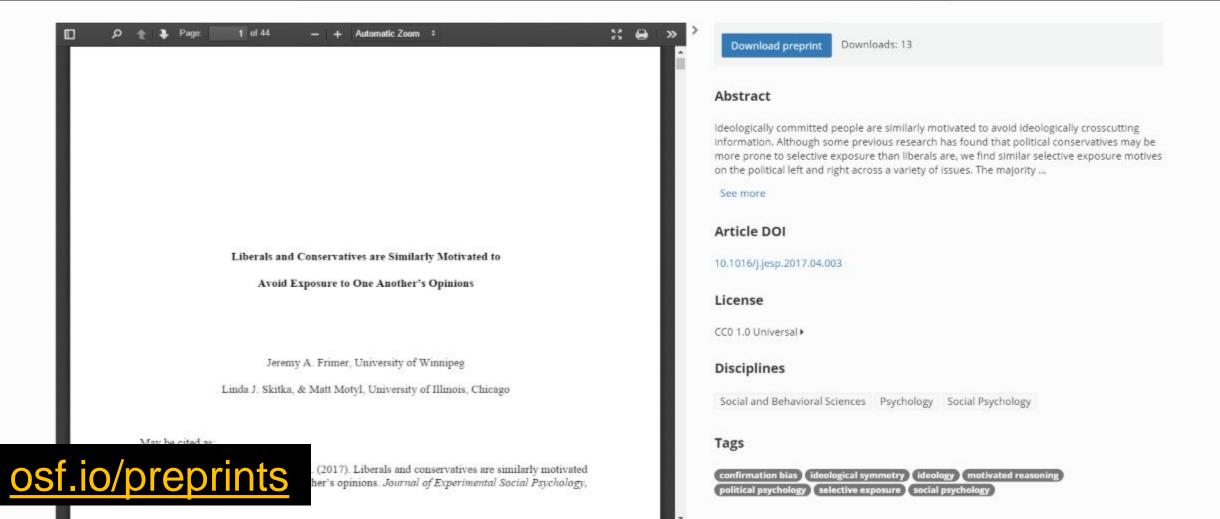




### Liberals and Conservatives are Similarly Motivated to Avoid Exposure to One Another's Opinions



Jeremy Frimer, Linda Skitka, Matt Motyl Added on: April 17, 2017 | Last edited: April 17, 2017



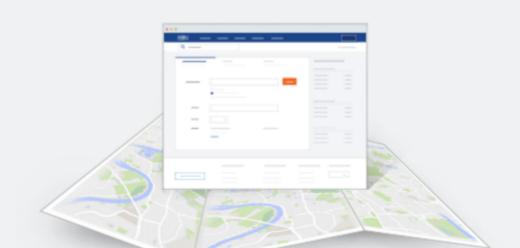
## Tomorrow's Research Today

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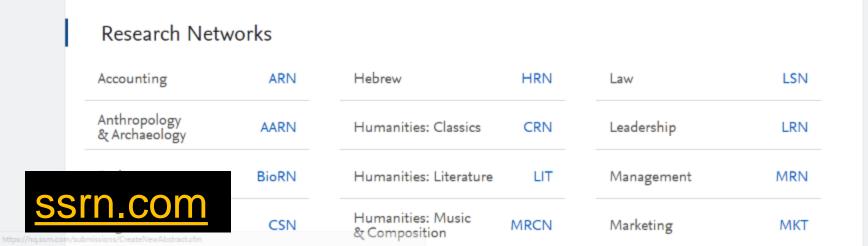
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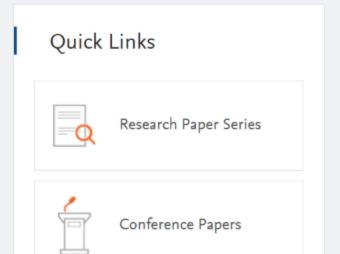
Title, Abstract, Keywords & Authors

Advanced Search



New Look & Feel of Site >







## Open Data



Download and use open data that I have collected. I only require you to cite it if you decide to publish an analysis from it.

### 1. One million news articles with Facebook and Twitter shares

**Download data:** http://dx.doi.org/10.5878/002853

This dataset contains 953,069 news articles (title and URL with shares on Facebook and Twitter) from the 12 largest Swedish news sites during 20 months, from February 2014 to October 2015. Format: CSV, TSV, SQL.

#### Cita in APA

Dahlgren, P. M. (2017). Swedish online news articles 2014-2015. Swedish National Data Service. http://dx.doi.org/10.5878/002853

## peterdahlgren.com/opendata

### Easy download of articles from home

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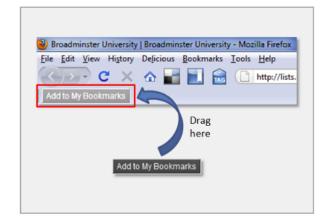
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Download this presentation, code and data at

# github.com/peterdalle/has



FORSKNING/STUDIE

Metoder och verktyg för att analysera opinioner och händelser i sociala medier