

# Vluchtige tweets en honderden likes

Sociale media-archivering en het gebruik ervan door onderzoekers

---

**Anne Helmond** (Universiteit van Amsterdam).

---

'Webinar Sociale media-archivering?,' Netwerk Digitaal Erfgoed, 25 juni 2020.



# **De onderzoeksmogelijkheden van archieven en platformen**

# Introductie

- Archieven en archiveringspraktijken ‘vormen’ het corpus en beïnvloeden de soorten vragen die gesteld kunnen worden (zie Brügger, 2005; 2019).
- Sociale media platformen vormen ook het corpus door hun sterk gecontroleerde archiveringsmogelijkheden (zie Helmond en van der Vlist, 2019).
  - Technische controle: beperkte toegang tot een selectie van data
  - Contractuele controle: gebruik en hergebruik van data

# Vormen van webarchivering

1. Making an image
2. Making a screen movie
3. Downloading individual files
4. Web crawling
5. Collecting web material from a database via an API
6. Collecting the web that has been taken off-line and preserved unchanged
7. Collecting the web as presented in other media types

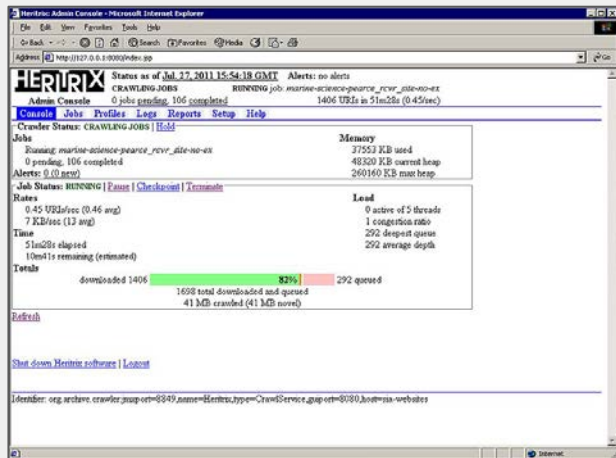
(Brügger, 2018: 80).



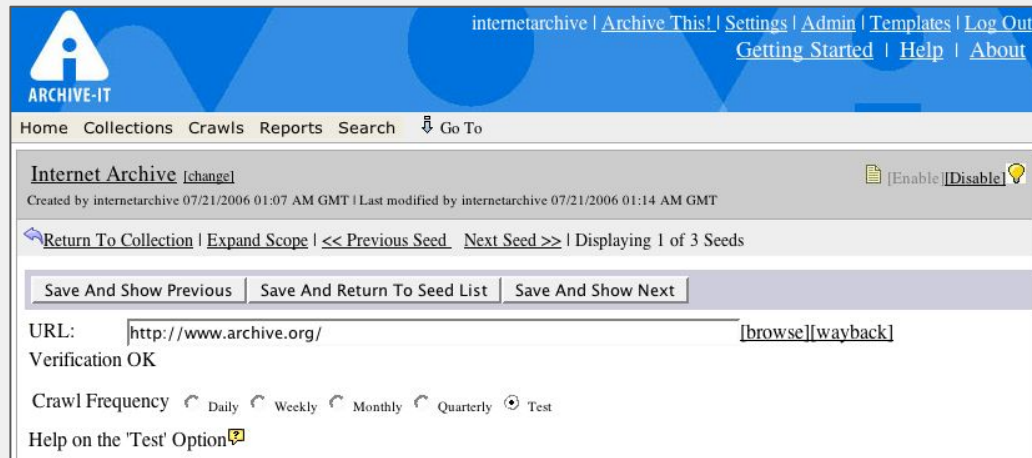
# Web crawling

- **Crawl:** A web archiving (or "capture") operation that is conducted by an automated agent, called a crawler, a robot, or a spider. Crawls identify materials on the live web that belong in your collections, based upon your choice of seeds and scope. Crawl can also reference the archived content associated with the action.
- **Crawler:** Explores the web and collects data about its contents. A crawler can also be configured to capture web-based resources. It starts a capture process from a seed list of entry-point URLs (EPUs).

## [Glossary of Archive-It and Web Archiving Terms](#)

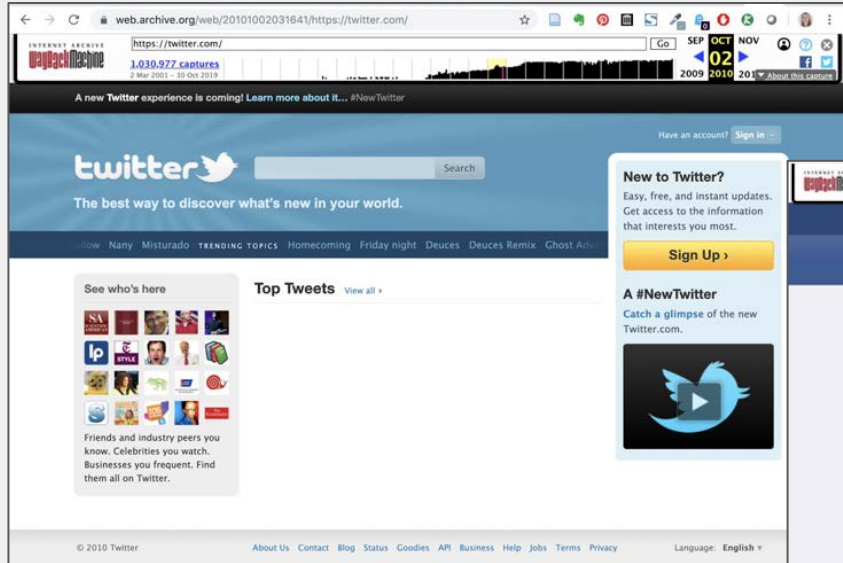


The screenshot shows the Heritrix Admin Console interface. At the top, it displays the status of the crawler: "Status as of Jul\_27\_2011\_15:54:18 GMT Alerts: no alerts". Below this, there are sections for "Admin Console" and "Crawler Status". The "Crawler Status" section includes a progress bar showing "downloaded 1406" (32%) and "292 queued". Other metrics include "1698 total downloaded and queued" and "41 MB crawled (41 MB stored)".

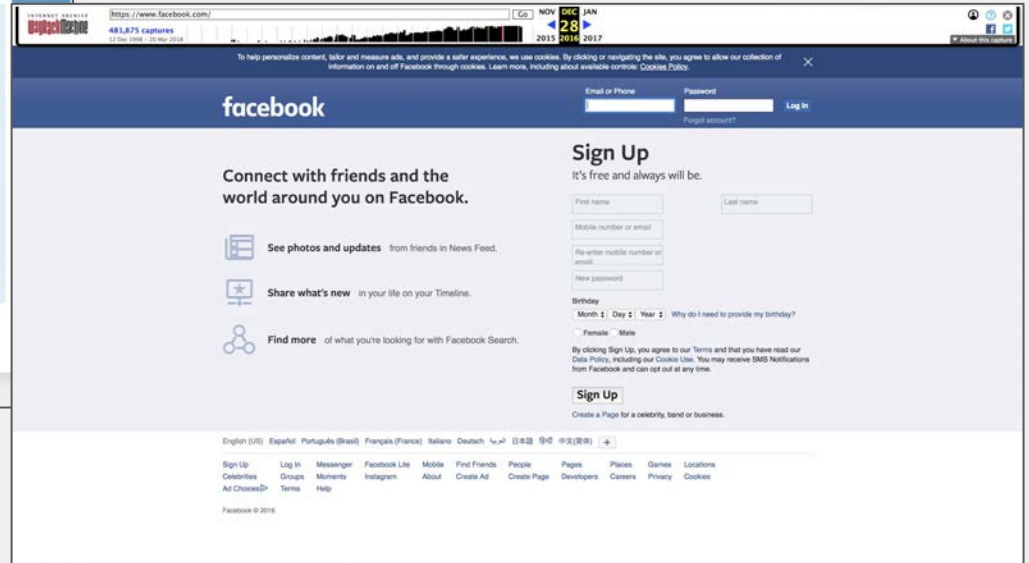


The screenshot shows the Internet Archive website's "Archive This!" interface. The header includes the Internet Archive logo and navigation links: "Home Collections Crawls Reports Search Go To". The main content area displays the URL "http://www.archive.org/" and provides options to "Save And Show Previous", "Save And Return To Seed List", and "Save And Show Next". There are also links for "Return To Collection", "Expand Scope", and "Previous Seed / Next Seed". The interface includes a "Crawl Frequency" selector with options for Daily, Weekly, Monthly, Quarterly, and Test. A "Help on the 'Test' Option" link is also present.

# Het crawlen van sociale media



<https://twitter.com/>



<https://facebook.com/>

# Crawler profielen (bijv. Charlie Archivist)

The image shows a screenshot of a Facebook profile page for 'Charlie Archivist' as it appeared in early 2018. The browser's address bar shows the URL 'https://www.facebook.com/' and the Wayback Machine logo. The page features a blue navigation bar with the user's name 'Charlie', 'Home', and 'Find Friends' options. On the left, a sidebar lists navigation options like 'News Feed', 'Messenger', 'Watch', 'Marketplace', and 'Explore'. The main content area displays a 'Welcome to Facebook' message with a 'Next' button. To the right, a 'Trending' section lists several news items, including 'Wall Street Global Markets Sink, Suggesting Stock Rout Will Go On' and 'Anglo-Eastern Group Perates release crew of oil tanker hijacked off West Africa'. At the bottom, there are links for 'Privacy', 'Terms', 'Advertising', 'Ad Choices', 'Cookies', and 'More', along with the copyright notice 'Facebook © 2018'.

Internet Archive Wayback Machine  
https://www.facebook.com/ Go  
481,875 captures  
12 Dec 1998 - 20 Mar 2018  
JAN FEB MAR  
06  
2017 2018 2019  
About this capture

Charlie Home Find Friends

Charlie Archivist

Make Post Photo/Video Album Live Video

What's on your mind, Charlie?

Photo/Video Feeling/Activity

News Feed  
Messenger  
Watch  
Marketplace

Explore  
Events  
Groups  
Pages  
Fundraisers  
Friend Lists  
On This Day  
Pages Feed  
Photos  
Games  
Find Friends  
See More...

Create  
Ad Page Group Event  
Fundraiser

Welcome to Facebook  
Get started by adding friends. You'll see their videos, photos and posts here.

Next

Trending

Wall Street  
Global Markets Sink, Suggesting Stock Rout Will Go On - nystimes.com

Anglo-Eastern Group  
Perates release crew of oil tanker hijacked off West Africa - cnn.com

Best Buy  
Best Buy is pulling CDs from its stores -- and people are freaking out - businessinsider.com

See More  
Sponsored Create Ad

Earn your M.S. in Strategic Communication  
sps.columbia.edu  
Learn from top industry professionals at Columbia SPS's Strategic Communication program...

Visit us today!  
http://www.shopalamedalanding.com  
Alameda Landing is a premiere bayside shopping and dining destination offering a unique bl...

English (US) · Español · Português (Brasil) · Français (France) · Deutsch +

Privacy · Terms · Advertising · Ad Choices · Cookies · More  
Facebook © 2018

# Tools voor sociale media archivering

Voor **kleine** individuele projecten:

Conifer to 'create high-fidelity, interactive captures'

- 👍 Gratis account 5GB opslagruimte. Online interface. Opnemen en afspelen van websites. Standaard .warc file.
- 👎 Files nemen veel ruimte in. 1 website tegelijk.

Webrecorder 'to capture and replay interactive websites'

- 👍 Lokale versie van Conifer. Opnemen en afspelen van websites. Standaard .warc file.
- 👎 Files nemen veel ruimte in. 1 website tegelijk.

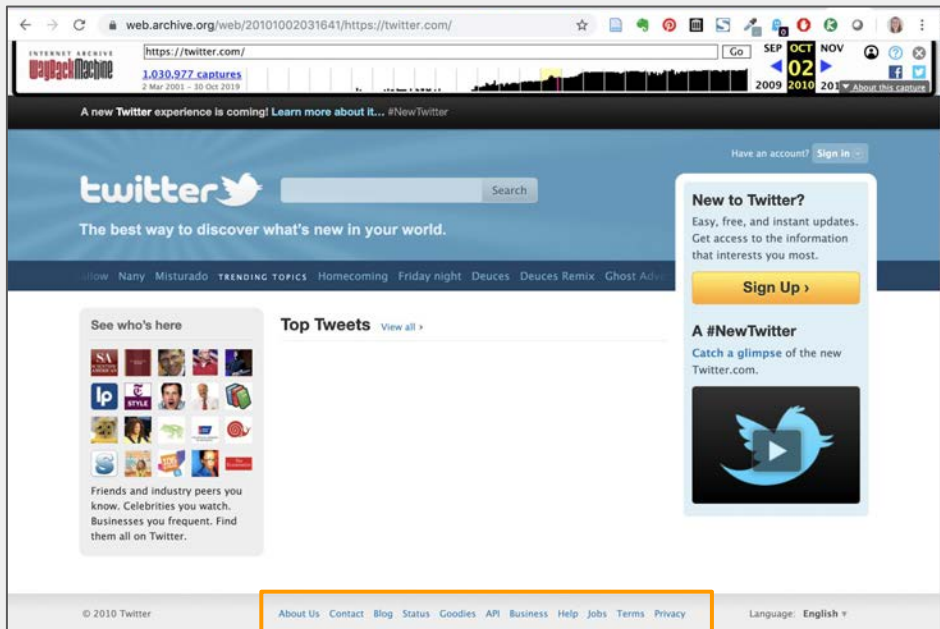




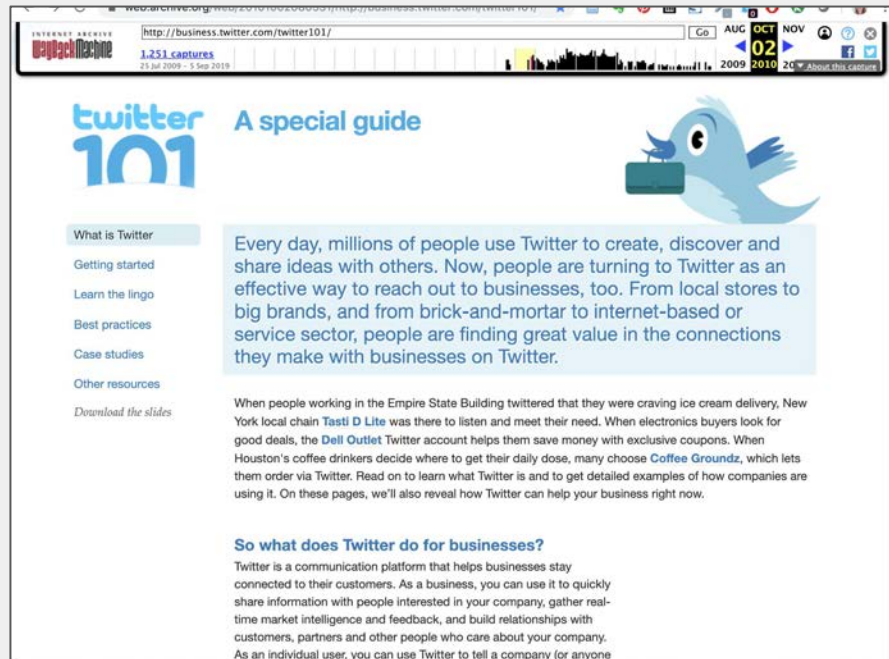
# Sociale media archivering via crawlers

- De archivering van sociale media *via crawlers* levert een (leeg) **gebruikers blik** op het platform die verschillende vormen van **interface analyse** en **platform analyse** mogelijk maakt.
- De archivering van sociale media *via Conifer/Webrecorder* levert een **individuele gebruikers blik** die een **interface analyse** en **autobiografische analyse** mogelijk maakt.

# De vele gebruikers van sociale media



<https://twitter.com/>



<http://business.twitter.com/>

# Typen sociale media gebruikers en hun bronnen

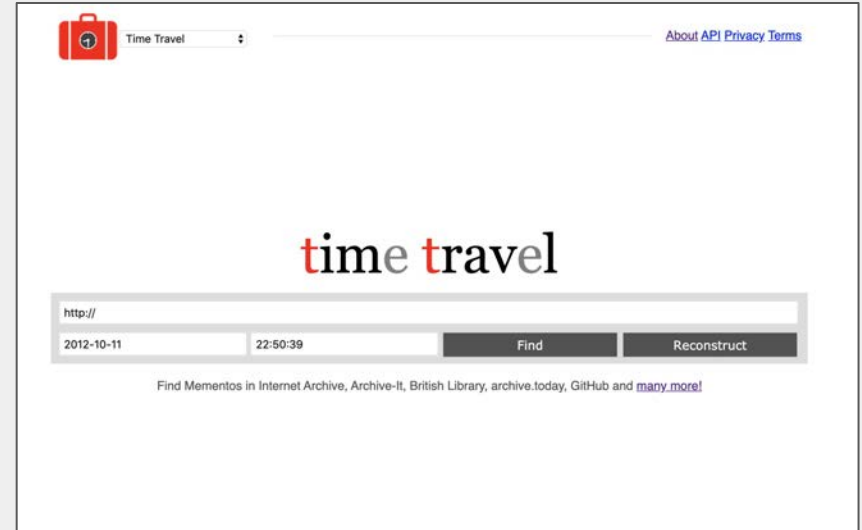
**Table A-2.** User groups of social media platforms.

user group	archived resources (sample)	afforded histories (sample)
<i>end users</i>	<ul style="list-style-type: none"> <li>● graphical user interfaces and ‘empty’ frames</li> <li>● sign up and registration procedures</li> <li>● about and feature pages</li> <li>● data and privacy policies</li> <li>● terms of service and use</li> <li>● end-user license agreements (EULA)</li> <li>● account security pages</li> <li>● help pages</li> <li>● language support</li> </ul>	<ul style="list-style-type: none"> <li>● self-description histories<sup>17</sup></li> <li>● feature and practice histories<sup>18</sup></li> <li>● ‘stakeholder politics’ histories<sup>19</sup></li> <li>● revenue model histories<sup>20</sup></li> <li>● data and privacy policy histories</li> <li>● terms of service and use histories<sup>21</sup></li> </ul>
<i>developers</i>	<ul style="list-style-type: none"> <li>● tools and product pages</li> <li>● application programming interfaces (APIs) and endpoints</li> <li>● software development kits (SDKs)</li> <li>● integrated development environments (IDEs)</li> <li>● software and developer tools and frameworks</li> <li>● guides for app development, best practices, app review, and privacy and consent</li> <li>● online training courses for developers</li> <li>● developer support, help pages, and frequently asked questions (FAQs)</li> <li>● API reference documentation, version histories, and changelogs</li> <li>● developer news, blog posts, and blog archives</li> <li>● open source projects and code repositories</li> <li>● programming, query, and markup languages</li> <li>● bug reports</li> <li>● platform status</li> <li>● annual developer conferences</li> <li>● developers community groups, meetups and local developer communities</li> <li>● startup accelerator programmes</li> <li>● platform policies</li> <li>● careers</li> <li>● platform and privacy policies</li> <li>● cookies</li> <li>● terms of service and use</li> </ul>	<ul style="list-style-type: none"> <li>● API-based data sharing histories<sup>22</sup></li> <li>● data strategy and ‘intraoperability’ histories<sup>23</sup></li> <li>● ‘programmability’ and app development histories<sup>24</sup></li> <li>● app ecosystem histories</li> <li>● tracking technology histories</li> <li>● standards and protocol histories</li> <li>● ‘datastructuring’ histories<sup>25</sup></li> <li>● platform architecture design and governance and control histories<sup>26</sup></li> <li>● platform growth and embedding histories<sup>27</sup></li> <li>● platform status, maintenance, repair, and ‘issue’ histories</li> <li>● platform and privacy policy histories<sup>28</sup></li> </ul>
<i>business</i>	<ul style="list-style-type: none"> <li>● ad creation and management</li> <li>● tools and product pages</li> <li>● business news, blog pages, and archives</li> </ul>	<ul style="list-style-type: none"> <li>● platform growth and embedding histories<sup>29</sup></li> </ul>

Helmond A and van der Vlist FN (2019) Social Media and Platform Historiography: Challenges and Opportunities. *TMG – Journal for Media History* 22(1): 6–34. <http://doi.org/10.18146/tmg.434>

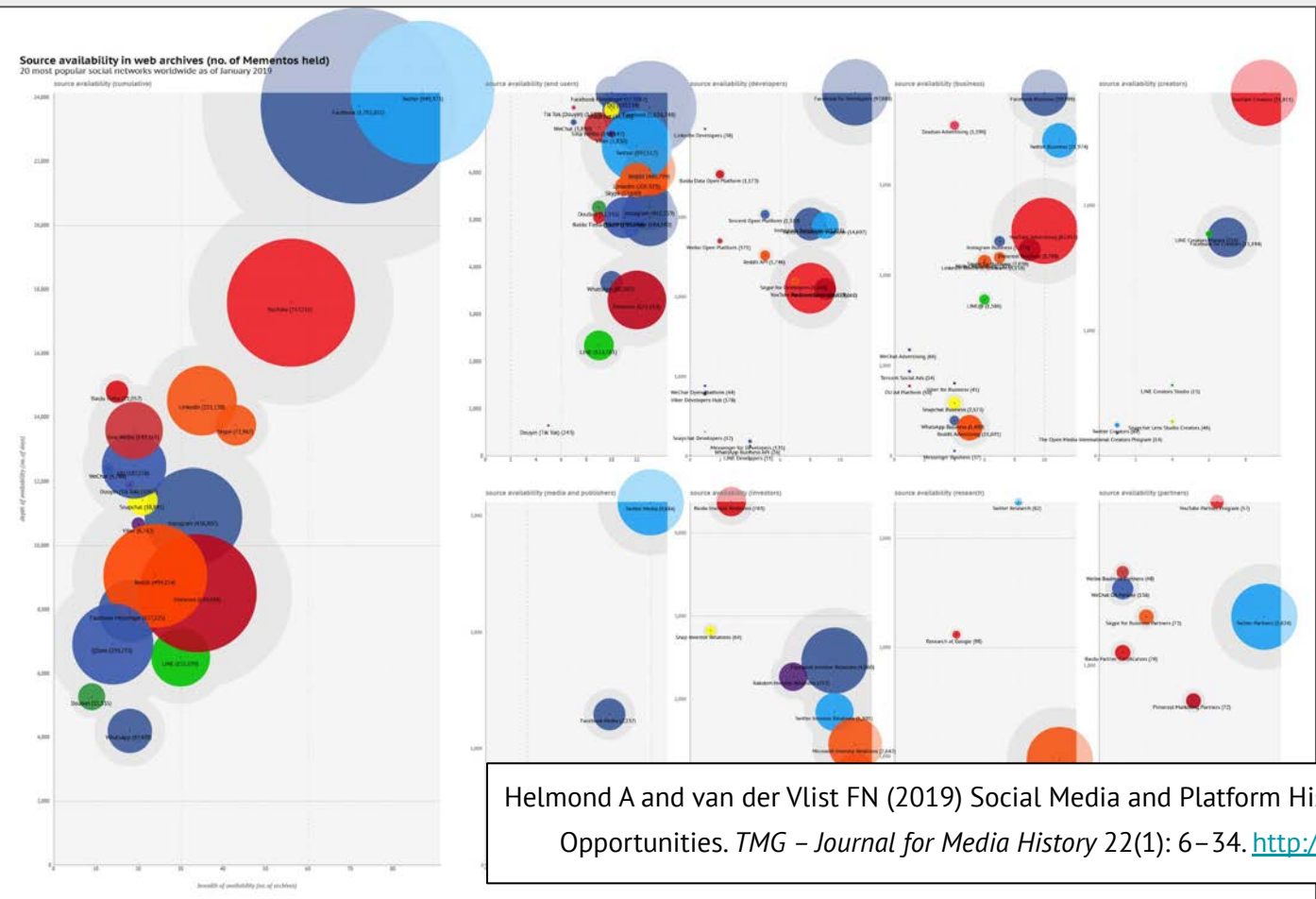
# Beschikbaarheid materialen: Memento & Memgator

- De beschikbaarheid van sociale media platform URLs voor alle gebruikersgroepen opvragen in 20+ web archieven
  - facebook.com
  - developers.facebook.com
  - facebook.com/business
  - facebook.com/politics
  - facebook.com/creators
  - etc
- Tools: Memento Time Travel API via Memgator (Alam & Nelson, 2016).



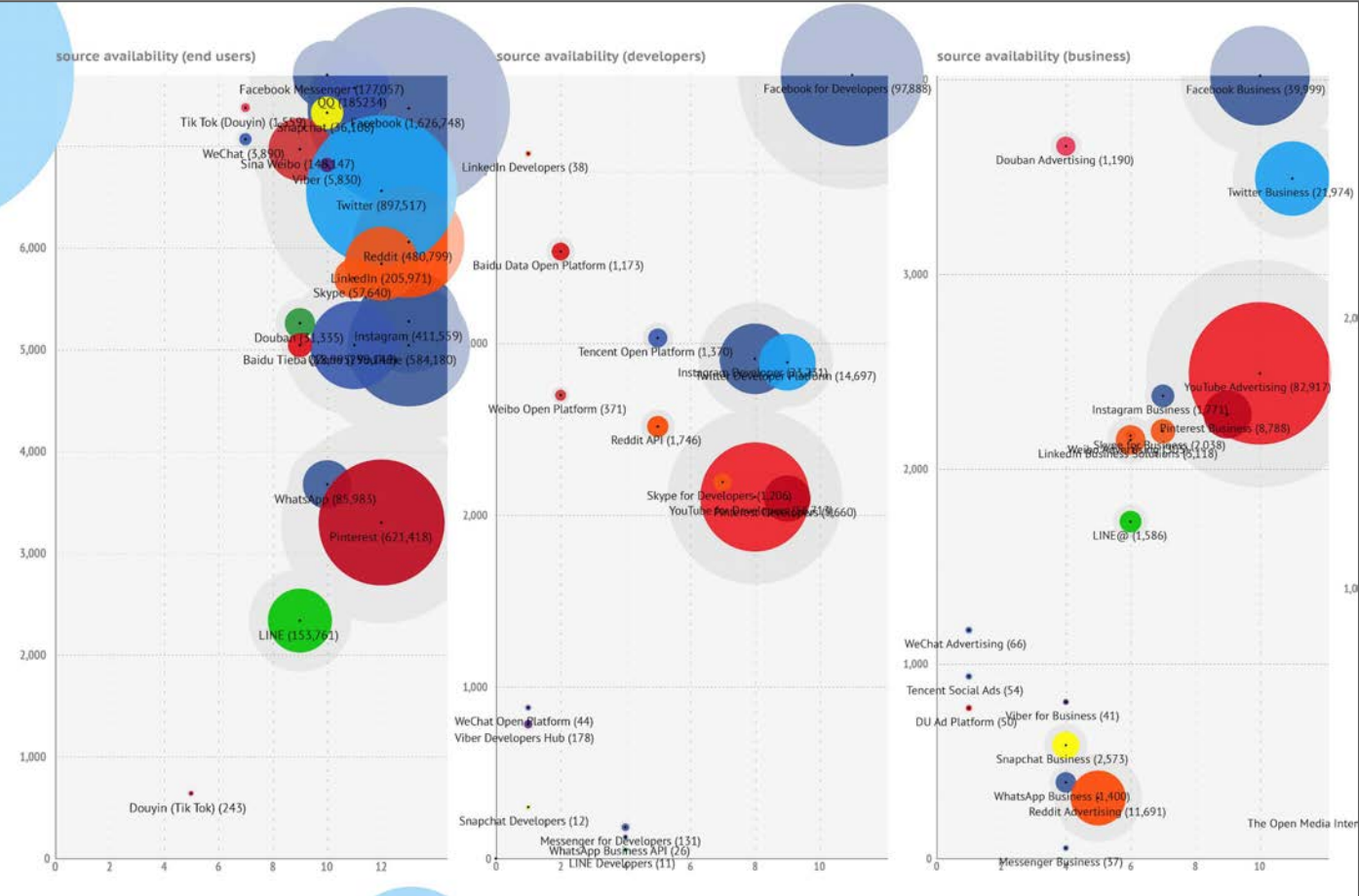
<https://timetravel.mementoweb.org/>

# Sociale media bronnen in web archieven

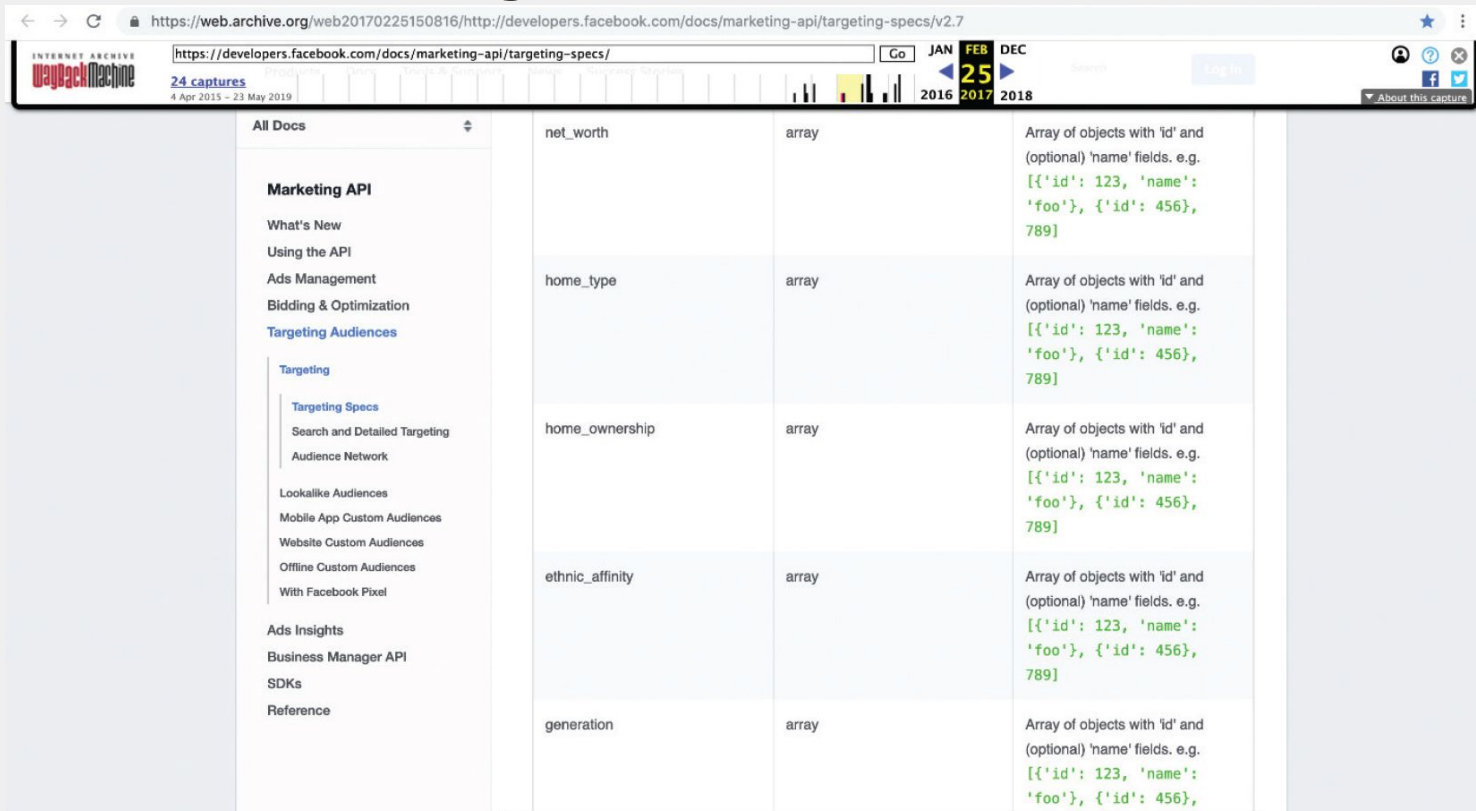


Helmond A and van der Vlist FN (2019) Social Media and Platform Historiography: Challenges and Opportunities. *TMG – Journal for Media History* 22(1): 6–34. <http://doi.org/10.18146/tmg.434>

# Sociale media bronnen in web archieven



# Advertentie doelgroepen van Facebook



The screenshot shows a web browser displaying the Facebook Marketing API targeting specifications page. The browser's address bar shows the URL: <https://web.archive.org/web/20170225150816/http://developers.facebook.com/docs/marketing-api/targeting-specs/v2.7>. The page content includes a navigation menu on the left and a table of targeting specifications.

Field Name	Type	Description
net_worth	array	Array of objects with 'id' and (optional) 'name' fields. e.g. <pre>[{'id': 123, 'name': 'foo'}, {'id': 456}, 789]</pre>
home_type	array	Array of objects with 'id' and (optional) 'name' fields. e.g. <pre>[{'id': 123, 'name': 'foo'}, {'id': 456}, 789]</pre>
home_ownership	array	Array of objects with 'id' and (optional) 'name' fields. e.g. <pre>[{'id': 123, 'name': 'foo'}, {'id': 456}, 789]</pre>
ethnic_affinity	array	Array of objects with 'id' and (optional) 'name' fields. e.g. <pre>[{'id': 123, 'name': 'foo'}, {'id': 456}, 789]</pre>
generation	array	Array of objects with 'id' and (optional) 'name' fields. e.g. <pre>[{'id': 123, 'name': 'foo'}, {'id': 456}, 789]</pre>

Screen capture of Facebook Marketing API audience targeting specifications at [developers.facebook.com/docs/marketing-api/targeting-specs/](https://developers.facebook.com/docs/marketing-api/targeting-specs/), including the **ethnic\_affinity** field (now disabled). *Internet Archive Wayback Machine, February 25, 2017* (Helmond & van der Vlist, 2019).

# De partners van Facebook



Partner Directory

About

Success Stories

Search



Facebook certified partners that can help your business learn and grow

Expand All

169 Partners Displayed

Specialties



Industries



Countries



Languages



4C

4C builds technology that makes TV and Social Media work better together.

SPECIALTIES

Ad Technology, Community Management



Acxiom

Acxiom is an enterprise data, analytics and software as a service company focused on strengthening connections between people, businesses and their partners.

SPECIALTIES

Audience Onboarding, Audience Data Providers, Measurement



Adaptly

Adaptly enables the world's biggest advertisers to scale campaigns across walled gardens like Facebook, Instagram, Snapchat, Twitter, and Pinterest through technology and strategic services.

SPECIALTIES

Ad Technology



AdEspresso

AdEspresso is the easiest solution to manage Facebook Ads for anyone spending between \$500 and \$50,000 per month on advertising. We are a full service platform with great customer support, allowing you to save both time and money managing your ads



Adglow

Adglow is an independent ad tech business with over 500 customers globally, with a presence in 12 countries. We use technology and teams to increase the effectiveness of our clients' paid social activities. We are looking for partners in new markets!



adjust

adjust is a mobile attribution and analytics company that provides app marketers with a comprehensive business intelligence platform.

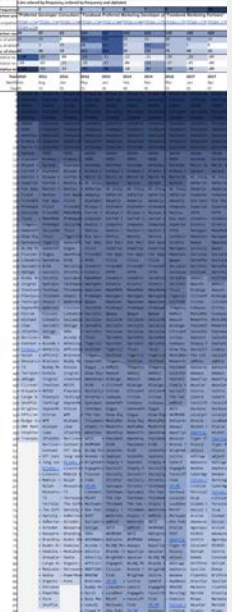


# Officiële Facebook partners, 2010–2017

2010	2011	2012	2012	2013	2014	2014	2016	2017	2017
Dec	Aug	Jan	May	Jan	Feb	Nov	Mar	Jan	Apr
05	13	03	12	18	08	05	12	30	07
+ Brand Networks	Brand Networks	Brand Networks	Brand Networks	Brand Networks	Brand Networks	Brand Networks	Brand Networks	Brand Networks	Brand Networks
+ Hearsay Systems	Hearsay Systems	Hearsay Systems	Hearsay Systems	Hearsay Systems	Hearsay Systems	Hearsay Systems	Hearsay Systems	Hearsay Systems	Hearsay Systems
+ Komfo	Komfo	Komfo	Komfo	Komfo	Komfo	Komfo	Komfo	Komfo	Komfo
+ SocialBakers	SocialBakers	SocialBakers	SocialBakers	SocialBakers	SocialBakers	SocialBakers	SocialBakers	SocialBakers	SocialBakers
+ Zibana	Zibana	Zibana	Zibana	Zibana	Zibana	Zibana	Zibana	Zibana	Zibana
+ Adobe	+ Conversocial	Conversocial	Conversocial	Conversocial	Conversocial	Conversocial	Conversocial	Conversocial	Conversocial
+ KRDS	+ Fanbooster	Fanbooster	Fanbooster	Fanbooster	Fanbooster	Fanbooster	Fanbooster	Fanbooster	Fanbooster
+ Kenshoo	+ Hootsuite Media	Hootsuite Media	Hootsuite Media	Hootsuite Media	Hootsuite Media	Hootsuite Media	Hootsuite Media	Hootsuite Media	Hootsuite Media
+ Kremsa Digital	+ Shoutlet	Shoutlet	Shoutlet	Shoutlet	Shoutlet	Shoutlet	Shoutlet	Shoutlet	Shoutlet
+ Marin Software	+ StitcherAds	StitcherAds	StitcherAds	StitcherAds	StitcherAds	StitcherAds	StitcherAds	StitcherAds	StitcherAds
+ Sprout	KRDS	KRDS	Adobe	Adobe	Adobe	Adobe	Adobe	Adobe	Adobe
+ Alphabet	Kremsa Digital	Kremsa Digital	KRDS	KRDS	KRDS	KRDS	- KRDS	Kenshoo	Kenshoo
+ Blueye Creative	Sprout	Alphabet	Kenshoo	Kenshoo	Kenshoo	Kenshoo	Kenshoo	Marin Software	Marin Software
+ Carrot Creative	Alphabet	Blueye Creative	Kremsa Digital	Kremsa Digital	Kremsa Digital	Kremsa Digital	- Kremsa Digital	Sprout	Sprout
+ Dachis Group	Blueye Creative	Carrot Creative	Marin Software	Marin Software	Marin Software	Marin Software	Marin Software	4C Insights	4C Insights
+ Experian	Carrot Creative	Dachis Group	+ 4C Insights	Sprout	Sprout	Sprout	Sprout	AdParlor	AdParlor
+ Fan Appz	Dachis Group	Dentsu	+ AdParlor	4C Insights	4C Insights	4C Insights	4C Insights	Adaptly	Adaptly
+ Fluid	+ Dentsu	Fan Appz	+ Adaptly	AdParlor	AdParlor	AdParlor	AdParlor	Computerology	Computerology
+ Friend2Friend	Fan Appz	Fluid	Alphabet	Adaptly	Adaptly	Adaptly	Adaptly	Die Socialisten	Die Socialisten
+ Promoqube	Fluid	Friend2Friend	Blueye Creative	Alphabet	Alphabet	- Alphabet	Computerology	Experian	Experian
+ SocialAmp	Friend2Friend	MakeMeReach	Carrot Creative	Blueye Creative	Blueye Creative	- Blueye Creative	- Dentsu	HYFN	HYFN
+ Thuzl	+ MakeMeReach	Promoqube	+ Computerology	Carrot Creative	Carrot Creative	- Carrot Creative	Die Socialisten	Innobirds Media	Innobirds Media
+ 77Agency	Promoqube	SocialAmp	Dachis Group	Computerology	Computerology	Computerology	Experian	Kinetic Social	Kinetic Social
+ Gamaroff Digital	SocialAmp	Thuzl	Dentsu	Dachis Group	Dachis Group	- Dachis Group	HYFN	Nanigans	MakeMeReach
+ Glow Digital Medi	Thuzl	Tigerlily	+ Die Socialisten	Dentsu	Dentsu	Dentsu	Innobirds Media	Napoleon	Nanigans
+ Syncapse	+ Tigerlily	Gamaroff Digital	Fan Appz	Die Socialisten	Die Socialisten	Die Socialisten	Kinetic Social	Qwaya	Napoleon

[bit.ly/2oYvpI5](http://bit.ly/2oYvpI5)

Zoom: 25%



Helmond A, Nieborg DB and van der Vlist FN (2019) Facebook's evolution: development of a platform-as-infrastructure. Internet Histories 3(2): 123–146. DOI: [10.1080/24701475.2019.1593667](https://doi.org/10.1080/24701475.2019.1593667).

# Sociale media platforms: GUI versus API

## Graphical User Interface (GUI):

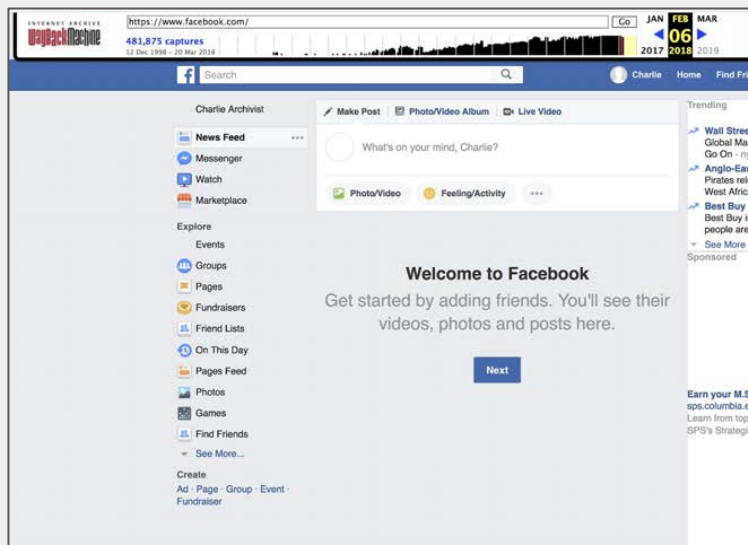
- Archiveringsmethode: crawler
- Toegang: via login
- De “voorkant” van sociale media, toegang tot de gebruikersinterface.
- Gebruikersgroepen: eindgebruikers, maar ook politici, adverteerders, etc.

## Application Programming Interface (API):

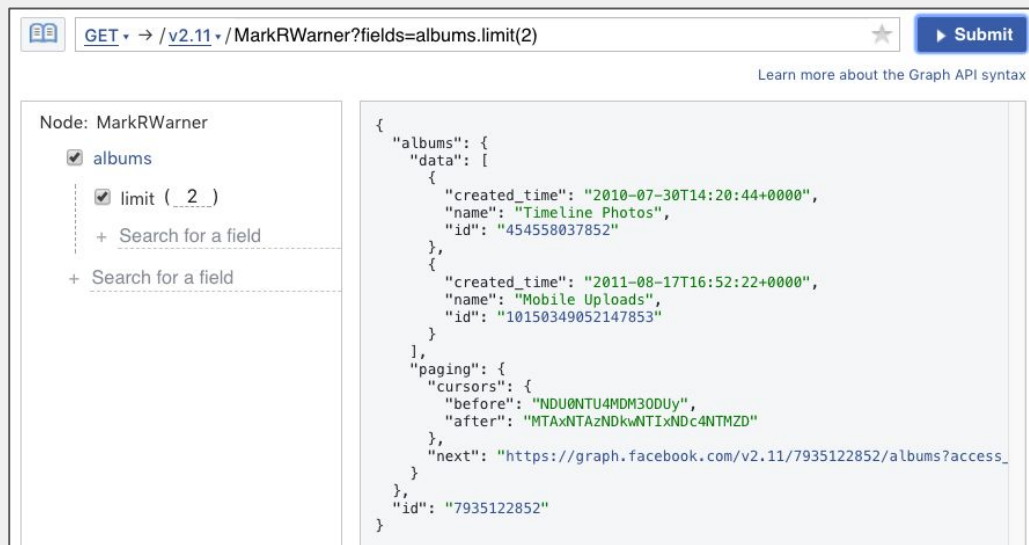
- Archiveringsmethode: API
- Toegang: via developer account
- De “achterkant” van sociale media, toegang tot de data in de database.
- Gebruikersgroepen: (app) ontwikkelaars, adverteerders en marketing bedrijven.

# Sociale media archivering: GUI/API

## Crawler-methode



## API-methode



```
GET → /v2.11 /MarkRWarner?fields=albums.limit(2) Submit
Learn more about the Graph API syntax

Node: MarkRWarner
 albums
   limit ( 2 )
  + Search for a field
+ Search for a field

{
  "albums": {
    "data": [
      {
        "created_time": "2010-07-30T14:20:44+0000",
        "name": "Timeline Photos",
        "id": "454558037852"
      },
      {
        "created_time": "2011-08-17T16:52:22+0000",
        "name": "Mobile Uploads",
        "id": "10150349052147853"
      }
    ],
    "paging": {
      "cursors": {
        "before": "NDU0NTU4MDM3ODUy",
        "after": "MTAxNTAzNDkwNTIxNDc4NTMzZD"
      },
      "next": "https://graph.facebook.com/v2.11/7935122852/albums?access_
    }
  },
  "id": "7935122852"
}
```

**GUI ≠ API: Niet alle data die je in de GUI ziet kun je via de API krijgen!**

# Sociale media archivering via APIs

- De archivering van sociale media via APIs levert een **data-blik** op het platform die verschillende vormen van **data-analyse** mogelijk maakt.
- Onderzoekers maken zelf datasets of gebruiken bestaande datasets.
  - Bestaande datasets gebruiken:
    - 👍 Iemand anders heeft al waardevolle historische data verzameld
    - 👎 Lastig te vinden en niet altijd duidelijk gedocumenteerd
  - Zelf datasets maken:
    - 👍 De onderzoeksvraag bepaalt welke data je nodig hebt
    - 👎 Tools, skills en (veel) opslagruimte nodig

# Bestaande datasets gebruiken

- Opslag en ontsluiting van sociale media data is technisch lastig en kan zeer veel ruimte kosten.
  - ‘The Twitter Archive at the Library of Congress: Challenges for information practice and information policy’ ([Zimmer, 2015](#)).
  - ‘The Library of Congress Twitter Archive: A Failure of Historic Proportions’ ([Bruns, 2018](#)).
- Zeer sterke restricties voor het maken, delen en gebruiken van datasets.
  - Veranderende terms of service.
  - Platformen stellen steeds minder data beschikbaar ‘APIcalypse’ ([Bruns, 2019](#)).
  - Twitter: datasets herpubliceren alleen op basis van tweet-ID.
  - Facebook: [Social Science One](#) (partnerovereenkomst)
  - Historische data als verdienmodel (Twitter).

# Bestaande Twitter datasets ([DocNow Catalog](#))



## Catalog

The DocNow Catalog is a collectively curated listing of Twitter datasets. Public datasets are shared as Tweet IDs, which can be hydrated back into full datasets using our [Hydrator](#) desktop application.

**118 Records comprising 4,688,354,772 tweets**

[ADD RECORD](#)

Subjects: All ▾ | Tweets Start: 21/03/2006 | Tweets End: 25/06/2020 | Search

Note: all metadata is shared under a CC0 license. Please read our [Code of Conduct](#) for more information about contributing datasets.

ADDED ↓	DATE RANGE	TITLE	TWEET COUNT	CREATORS	SUBJECTS
05/25/2020	02/01/2020 to 05/01/2020	<a href="#">GeoCoV19: A Dataset of Hundreds of Millions of Multilingual COVID-19 Tweets with Location Information</a>	524,353,432	Umair Qazi, Muhammad Imran, Ferda Ofli	COVID-19, Twitter, Social media, Disease outbreak, Geolocation inference
05/19/2020	03/21/2006 to 07/31/2009	<a href="#">Twitter Historical Dataset</a>	1,499,896,115	Daniel Gayo-Avello	Social Media, History, Twitter, Politics, Languages
05/13/2020	01/26/2008 to 05/07/2020	<a href="#">116th Congress</a>	2,817,744	Laura Wrubel, Dan Kerchner	Congress, Government, Politics
04/19/2020	02/13/2020 to 04/15/2020	<a href="#">Tyendinaga tweet ids</a>	77,585	Nick Ruest	Climate change, Climate action, First Nations, Indigenous land, Tyendinaga, Wet'suwet'en, Coastal GasLink, 2020 Canadian pipeline and railway protests, Wet'suwet'en

1229894165770555393  
 1229894160943124480  
 1229894149819838469  
 1229894149622714368  
 1229894147114401795  
 1229894144774082563  
 1229894141225644033  
 1229894131897339905  
 1229894126512091137  
 1229894114314817536  
 1229894112402276352  
 1229894097097363457  
 1229894089866272769  
 1229894069146411008  
 1229894055301087234  
 1229894054202179586  
 1229894053052870657  
 1229894029363601410  
 1229894016851902464  
 1229893976347426816  
 1229893953857769473  
 1229893942839332864

Scholars Portal  
Dataverse

# Van tweet id naar volledige tweet

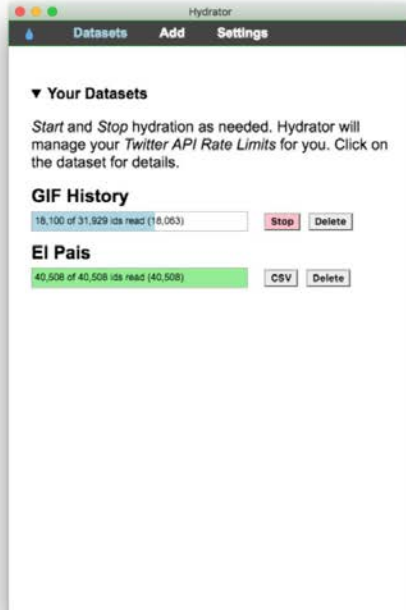
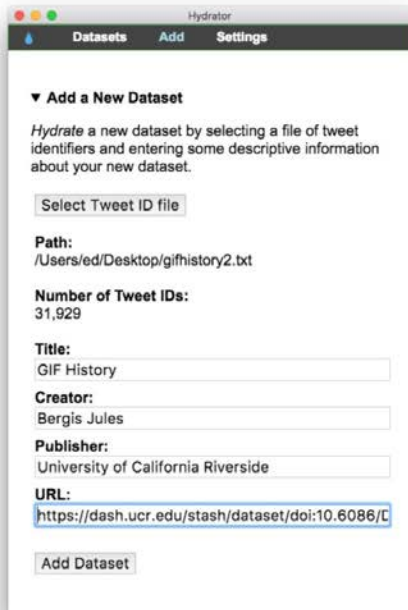
"id": 1050118621198921728



```
{
  "created_at": "Wed Oct 10 20:19:24 +0000 2018",
  "id": 1050118621198921728,
  "id_str": "1050118621198921728",
  "text": "To make room for more expression, we will now count all emojis as equal-including those with skin tones. https://t.co/MkGjXf9aXm",
  "truncated": true,
  "entities": {
    "hashtags": [],
    "symbols": [],
    "user_mentions": [],
    "urls": [
      {
        "url": "https://t.co/MkGjXf9aXm",
        "expanded_url": "https://twitter.com/i/web/status/1050118621198921728",
        "display_url": "twitter.com/i/web/status/1...",
        "indices": [
          117,
          140
        ]
      }
    ]
  }
},
"source": "<a href='\"http://twitter.com\"' rel='\"nofollow\"'>Twitter Web Client</a>",
"in_reply_to_status_id": null,
"in_reply_to_status_id_str": null,
"in_reply_to_user_id": null,
"in_reply_to_user_id_str": null,
"in_reply_to_screen_name": null,
"retweeted": false,
"retweet_count": 0,
"retweet_results": [],
"favorited": false,
"favorite_count": 0,
"lang": "en",
"possibly_sensitive": false,
"possibly_sensitive_editable": true
}
```

```
"user": {
  "id": 6253282,
  "id_str": "6253282",
  "name": "Twitter API",
  "screen_name": "TwitterAPI",
  "location": "San Francisco, CA",
  "description": "The Real Twitter API. Tweets about API changes, service issues and our Developer Platform. Don't get an answer? It's on my website.",
  "url": "https://t.co/8IkCzCDr19",
  "entities": {
    "url": {
      "urls": [
        {
          "url": "https://t.co/8IkCzCDr19",
          "expanded_url": "https://developer.twitter.com",
          "display_url": "developer.twitter.com",
          "indices": [
            0,
            23
          ]
        }
      ]
    }
  },
  "description": {
    "urls": []
  }
},
"protected": false,
"followers_count": 6128663,
"friends_count": 12,
"listed_count": 12900,
"created_at": "Wed May 23 06:01:13 +0000 2007",
"favourites_count": 32,
"utc_offset": null,
"time_zone": null,
"geo_enabled": null,
"verified": true,
"statuses_count": 3659,
"media_count": 111
}
```

# DocNow Twitter Hydrator



Build & Release passing

Hydrator is an [Electron](#) based desktop application for [hydrating](#) Twitter ID datasets. Twitter's Terms of Service do not allow the full JSON for datasets of tweets to be distributed to third parties. However they do allow datasets of tweet IDs to be shared. Hydrator helps you turn these tweet IDs back into JSON and also CSV from the comfort of your desktop.



# Zelf data verzamelen: Twitter Search API

## Feature summary

Category	Product name	Supported history	Query capability	Counts endpoint	Data fidelity
Standard	Standard Search API	7 days	Standard operators	Not available	Incomplete
Premium	Search Tweets: 30-day endpoint	30 days	Premium operators	Available	Full
Premium	Search Tweets: Full-archive endpoint	Tweets from as early as 2006	Premium operators	Available	Full
Enterprise	30-day Search API	30 days	Premium operators	Included	Full
Enterprise	Full-archive Search API	Tweets from as early as 2006	Premium operators	Included	Full

# Tools voor sociale media archivering (Twitter 1)

Twitter Archiving Google Sheet (TAGS): <https://tags.hawksey.info/>

- 👍 Gratis, veel mogelijkheden om Twitter data te archiveren via de Twitter API. Gekoppeld aan Google Sheets. Enkele ingebouwde analyse mogelijkheden voor onderzoekers.
- 👎 Alleen tweets van de laatste 7 dagen (limitatie Twitter API)

# Tools voor sociale media archivering (Twitter 2)

The Digital Methods Initiative Twitter Capture and Analysis Toolset (DMI-TCAT) allows one to retrieve and collect tweets from Twitter and to analyze them in various ways:

<https://github.com/digitalmethodsinitiative/dmi-tcat>

- 👍 Gratis, open source. Zeer veel mogelijkheden om Twitter data te archiveren via de Twitter API. Zeer veel ingebouwde analyse mogelijkheden voor onderzoekers (zie [instructie video](#)).
- 📦 Installeren op eigen server (ook een voordeel).

## Analyses

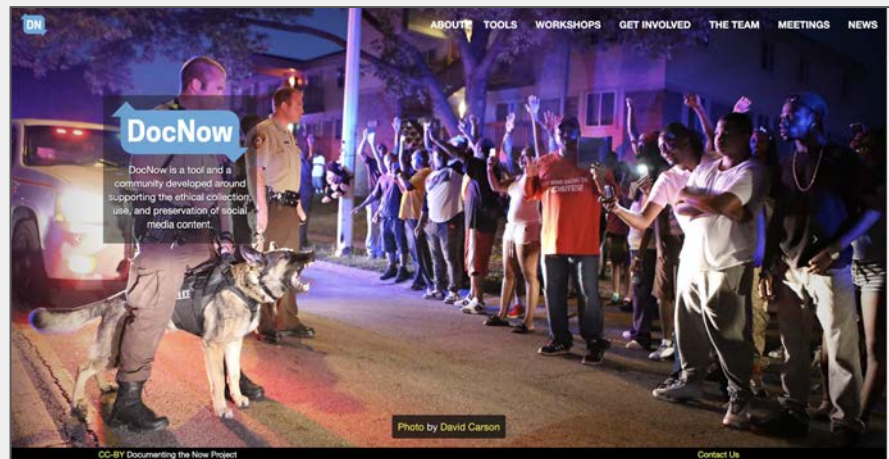
- **#hashtags**: sociale en culturele issues, bijvoorbeeld #BlackLivesMatterNL, #coronamaatregelen
- **mentions**: identificeren van expertise, discussie netwerken
- **following**: volgnetwerken
- **retweets**: resonantie, viraliteit
- **URL**: distributie van content

# **De rol van web archieven en instanties**

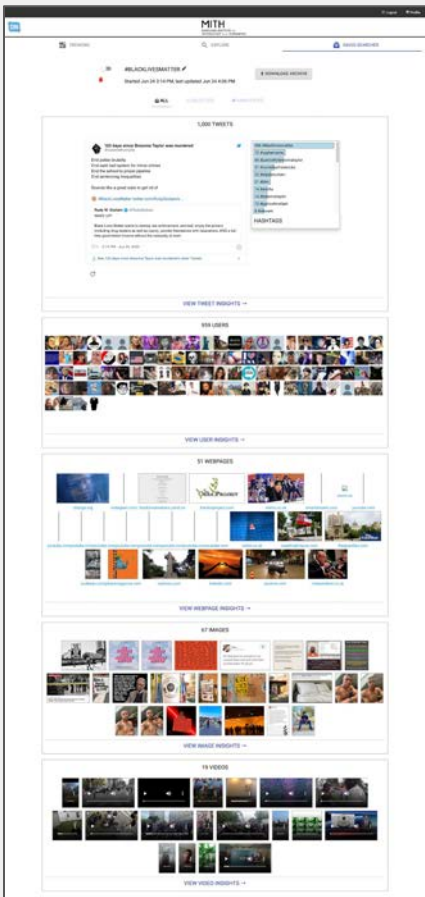
# Tools voor archivarissen

[DocNow](#) is an **appraisal tool** for the web.

“DocNow allows archivists to tap into conversations in Twitter to help them discover what web resources are in need of archiving. Its goal is to help ensure **ethical practices** in web archiving by building conversations between archivists and the communities they are documenting.”



# DocNow (demo)



72 #sayhername

65 #justiceforbreonnataylor

31 #corneliusfredericks

22 #elijahmcclain

21 #blm

14 #antifia

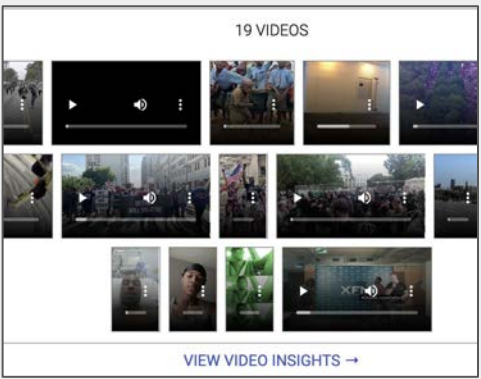
14 #breonnataylor

12 #justiceforelijah

8 #retweet

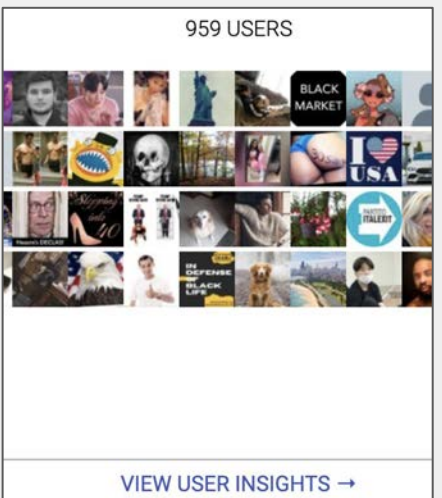
7 #racism

## HASHTAGS



19 VIDEOS

[VIEW VIDEO INSIGHTS →](#)



959 USERS

[VIEW USER INSIGHTS →](#)

# Doel van de collectie

- Keuzes over selectie bepalen later welke vragen onderzoekers kunnen stellen.
- Wie krijgt er toegang tot de collectie en hoe en waar?
  - Onderzoekers werken het liefst met 'rauwe data' op hun eigen computer.
  - Maar: privacy en ethiekvraagstukken en platform regels.






# Collectiebeschrijving en metadata

- Essentieel voor onderzoekers is informatie over:
  - Hoe is de collectie gemaakt?
  - Welke beslissingen zijn er genomen?
  - Wat zijn de selectiecriteria?
  - Welke data zit er in de set?
  - Hoe is deze data verzameld (en met welke API)?
- “Web archives **provenance**: what users need to know about how a collection was made as they use, analyze, and make inferences from these aggregations” (Maemura et al., 2018).
- Een collectiebeschrijving: Metadata over het gearchiveerde corpus.
- Rauwe data, bijvoorbeeld in .csv of .json (.warc is lastig om mee te werken)



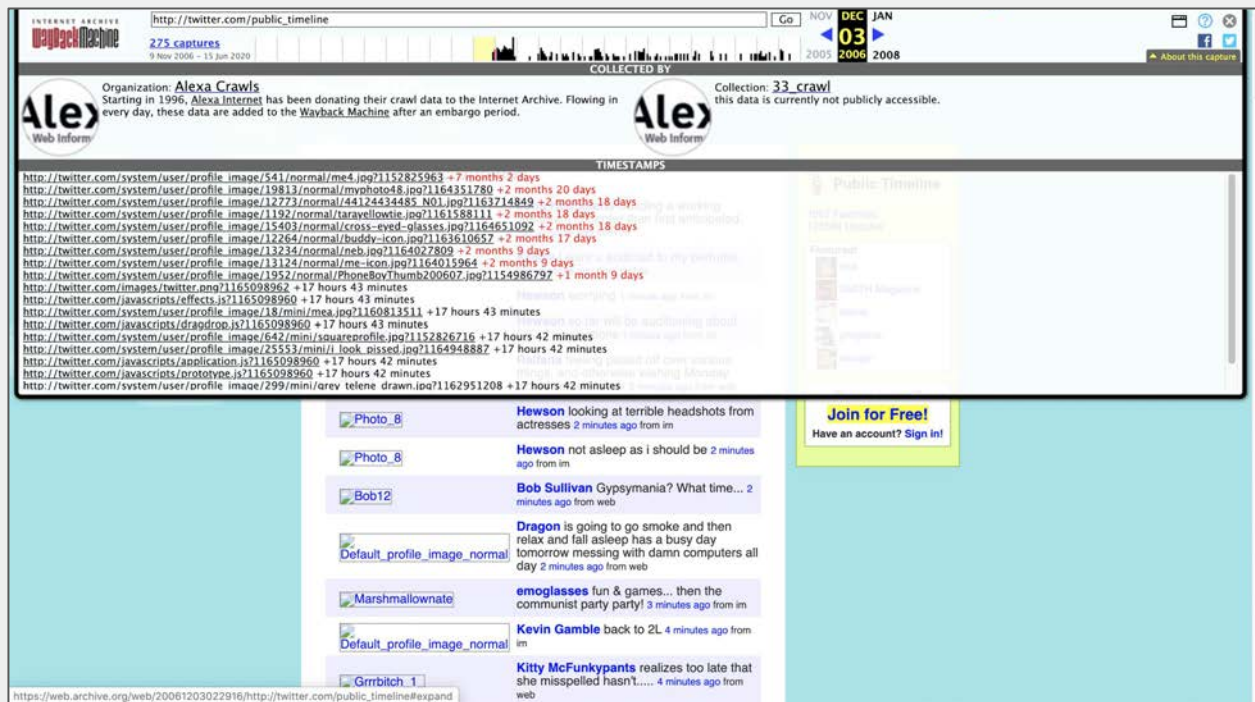
# Voorbeeld collectiebeschrijving (1)

- Bode, P. de, Lin, K., Teszelszky, K. (2019) Chinese Netherlands web collection. KB Lab: The Hague. <https://lab.kb.nl/dataset/web-collection-chinese-netherlands>

Information about the collection and its heritage value can be found in a  [collection description](#) (in English) a collection description in  [Traditional Chinese](#) and one in  [Simplified Chinese](#). The collection can be studied on the terminals in the reading room of KB with a valid library card. Researches can also use the  [dataset with URL's](#) (note: UTF-8 encoding) and a  [link analysis](#).

# Voorbeeld collectiebeschrijving (2)

- Internet Archive Wayback Machine 'About this capture'



The screenshot displays the Internet Archive Wayback Machine interface for the URL [http://twitter.com/public\\_timeline](http://twitter.com/public_timeline). The page is dated November 03, 2006, at 03:03. It shows a collection of timestamps for various images and scripts, along with a public timeline of tweets.

**Organization:** Alexa Crawls  
Starting in 1996, Alexa Internet has been donating their crawl data to the Internet Archive. Flowing in every day, these data are added to the Wayback Machine after an embargo period.

**Collection:** 33\_crawl  
this data is currently not publicly accessible.

**TIMESTAMPS**

- [http://twitter.com/system/user/profile\\_image/541/normal/me4.jpg?1152825963](http://twitter.com/system/user/profile_image/541/normal/me4.jpg?1152825963) + 7 months 2 days
- [http://twitter.com/system/user/profile\\_image/19813/normal/myphoto48.jpg?1164351780](http://twitter.com/system/user/profile_image/19813/normal/myphoto48.jpg?1164351780) + 2 months 20 days
- [http://twitter.com/system/user/profile\\_image/12773/normal/44124434485\\_N01.jpg?1163714849](http://twitter.com/system/user/profile_image/12773/normal/44124434485_N01.jpg?1163714849) + 2 months 18 days
- [http://twitter.com/system/user/profile\\_image/1192/normal/tarayellowtie.jpg?1161588111](http://twitter.com/system/user/profile_image/1192/normal/tarayellowtie.jpg?1161588111) + 2 months 18 days
- [http://twitter.com/system/user/profile\\_image/115403/normal/cross-eyed-glasses.jpg?1164651092](http://twitter.com/system/user/profile_image/115403/normal/cross-eyed-glasses.jpg?1164651092) + 2 months 18 days
- [http://twitter.com/system/user/profile\\_image/12264/normal/buddy-icon.jpg?1163610652](http://twitter.com/system/user/profile_image/12264/normal/buddy-icon.jpg?1163610652) + 2 months 17 days
- [http://twitter.com/system/user/profile\\_image/13234/normal/neb.jpg?1164027809](http://twitter.com/system/user/profile_image/13234/normal/neb.jpg?1164027809) + 2 months 9 days
- [http://twitter.com/system/user/profile\\_image/13124/normal/me-icon.jpg?1164015964](http://twitter.com/system/user/profile_image/13124/normal/me-icon.jpg?1164015964) + 2 months 9 days
- [http://twitter.com/system/user/profile\\_image/1352/normal/PhoneBoyThumb200607.jpg?1154986792](http://twitter.com/system/user/profile_image/1352/normal/PhoneBoyThumb200607.jpg?1154986792) + 1 month 9 days
- <http://twitter.com/images/twitter.png?1165098962> + 17 hours 43 minutes
- <http://twitter.com/javascripts/effects.js?1165098960> + 17 hours 43 minutes
- [http://twitter.com/system/user/profile\\_image/18/mini/mea.jpg?1160813511](http://twitter.com/system/user/profile_image/18/mini/mea.jpg?1160813511) + 17 hours 43 minutes
- <http://twitter.com/javascripts/dragdrop.js?1165098960> + 17 hours 43 minutes
- [http://twitter.com/system/user/profile\\_image/642/mini/squareprofile.jpg?1152826716](http://twitter.com/system/user/profile_image/642/mini/squareprofile.jpg?1152826716) + 17 hours 42 minutes
- [http://twitter.com/system/user/profile\\_image/25553/mini/i\\_look\\_pissed.jpg?1164948882](http://twitter.com/system/user/profile_image/25553/mini/i_look_pissed.jpg?1164948882) + 17 hours 42 minutes
- <http://twitter.com/javascripts/application.js?1165098960> + 17 hours 42 minutes
- <http://twitter.com/javascripts/prototype.js?1165098960> + 17 hours 42 minutes
- [http://twitter.com/system/user/profile\\_image/299/mini/arev telene drawn.jpg?1162951208](http://twitter.com/system/user/profile_image/299/mini/arev telene drawn.jpg?1162951208) + 17 hours 42 minutes

**Public Timeline**

- Hewson** looking at terrible headshots from actresses 2 minutes ago from im
- Hewson** not asleep as i should be 2 minutes ago from im
- Bob Sullivan** Gypsymania? What time... 2 minutes ago from web
- Dragon** is going to go smoke and then relax and fall asleep has a busy day tomorrow messing with damn computers all day 2 minutes ago from web
- emoglasses** fun & games... then the communist party party! 3 minutes ago from im
- Kevin Gamble** back to 2L 4 minutes ago from im
- Kitty McFunkypan** realizes too late that she misspelled hasn't..... 4 minutes ago from web

**Join for Free!**  
Have an account? Sign in!

[http://web.archive.org/web/20061203022916/http://twitter.com/public\\_timeline#expand](http://web.archive.org/web/20061203022916/http://twitter.com/public_timeline#expand)

# Voorbeeld collectiebeschrijving (3)

- The DocNow Catalog

DN	Catalog
<b>Title:</b> Twitter Historical Dataset	<b>Description:</b> This dataset is distributed by Daniel Gayo-Avello, an associate professor at the Department of Computer Science in the University of Oviedo, for the sole purpose of non-commercial research and it just includes tweet ids.
<b>Repository:</b> Zenodo <b>Repository URL:</b> <a href="https://doi.org/10.5281/zenodo.3833781">https://doi.org/10.5281/zenodo.3833781</a>	<b>Description:</b> The dataset contains tweet IDs for all the published tweets (in any language) between March 21, 2006 and July 31, 2009 thus comprising the first whole three years of Twitter from its creation, that is, about 1.5 billion tweets (see file <i>Twitter-historical-20060321-20090731.zip</i> ).
<b>Creator(s):</b>  Daniel Gayo-Avello	<b>Description:</b> It covers several defining issues in Twitter, such as the invention of hashtags, retweets and trending topics, and it includes tweets related to the 2008 US Presidential Elections, the first Obama's inauguration speech or the 2009 Iran Election protests (one of the so-called Twitter Revolutions).
<b>Subjects:</b>  Social Media History Twitter Politics Languages	<b>Description:</b> Finally, it does contain tweets in many major languages (mainly English, Portuguese, Japanese, Spanish, German and French) so it should be possible—at least in theory—to analyze international events from different cultural perspectives.
<b>Dates:</b>  2006-03-21T17:04:15.796Z - 2009-07-31T16:04:15.808Z	<b>Description:</b> The dataset was completed in November 2016 and, therefore, the tweet IDs it contains were publicly available at that moment. This means that there could be tweets public during that period that do not appear in the dataset and also that a substantial part of tweets in the dataset has been deleted (or locked) since 2016.
<b>Number of Tweets:</b> 1,499,896,115	<b>Description:</b> To make easier to understand the decay of tweet IDs in the dataset a number of representative samples (99% confidence level and 0.5 confidence interval) are provided.

# Conclusie

- Archieven, archiveringspraktijken en sociale media platformen ‘vormen’ het corpus en beïnvloeden de soorten vragen die gesteld kunnen worden.
- De onderzoeksvraag is leidend voor welke archief of welke data je nodig hebt.
- Het nauwkeurig documenteren van een collectie is essentieel voor onderzoekers om gebruik te maken van de gearchiveerde sociale media data.
- Voor web archieven, instellingen en onderzoekers is API kennis belangrijk.

# Bedankt! Vragen?

Helmond A and van der Vlist FN (2019) Social Media and Platform Historiography: Challenges and Opportunities. *TMG – Journal for Media History* 22(1): 6–34. doi:10.18146/tmg.434

Helmond A, Nieborg DB and van der Vlist FN (2019) Facebook's evolution: Development of a platform-as-infrastructure. *Internet Histories: Digital Technology, Culture and Society*, 3(2), 123–146. doi: 10.1145/3097286.3097324.

---

Anne Helmond (Universiteit van Amsterdam)  
**a.helmond@uva.nl**

*This work is part of the research programme Innovational Research Incentives Scheme Veni with project number 275-45-009, which is (partly) financed by the Dutch Research Council (NWO).*



# Bronnen en links

- Brügger N (2018a) *The Archived Web: Doing History in the Digital Age*. Cambridge, MA: The MIT Press.
- Brügger N (2018b) *Web History and Social Media*. In: Burgess J, Poell T, and Marwick A (eds) *The SAGE Handbook of Social Media*. London: SAGE Publications, pp. 196–212.
- Bruns A (2019) After the 'APicalypse': social media platforms and their fight against critical scholarly research. *Information, Communication & Society* 22(11). Routledge: 1544–1566. DOI: 10.1080/1369118X.2019.1637447.
- Helmond A and van der Vlist FN (2019) Social Media and Platform Historiography: Challenges and Opportunities. *TMG – Journal for Media History* 22(1): 6–34. <http://www.tmgonline.nl/articles/434/>
- Helmond A, Nieborg DB and van der Vlist FN (2019) Facebook's evolution: development of a platform-as-infrastructure. *Internet Histories* 3(2): 123–146. DOI: [10.1080/24701475.2019.1593667](https://doi.org/10.1080/24701475.2019.1593667).
- <https://tags.hawksey.info/>
- <https://github.com/digitalmethodsinitiative/dmi-tcat>
- <https://www.docnow.io/>
- <https://catalog.docnow.io/>
- <https://webrecorder.net/>
- <https://conifer.rhizome.org/>
- <https://timetravel.mementoweb.org/>
- <https://socialscience.one/>
- <https://github.com/emilymae/web-archives-bib/blob/master/research-by-theme.md#5-twitter-and-social-media>