## A Collaborative Web Archiving Project on Chinese Social Media and Anti-Corruption Campaign

Yunshan Ye (East Asian Studies Librarian, Johns Hopkins University)

Justin Littman (Software Developer and Librarian, George Washington University)

## Acknowledgement

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## Acknowledgement (cont.)

- \* The (final) Team
  - \* Yunshan Ye (Project Lead), Johns Hopkins University
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  - \* Daniel Kerchner, Geroge Washington University
  - \* Yan He, George Washington University
  - Chunman Zhang (student assistant), Johns Hopkins University
  - \* Yecheng Tan (student assistant), George Washington University

## What We Accomplished

- \* Built two digital archival collections of Chinese web and social media content on Chinese anti-corruption campaign (2012-);
- \* Enhanced software (SFM) with capacity to capture and store Chinese Sina Weibo content and able to capture and store social media data in other East Asian languages as well;
- \* Documented and published the project's technical implementation, challenges and solutions to help future similar projects (<u>JEAL Oct.2017</u>);
- \* Presented and promoted our work at national conferences (ACRL 2017, CEAL 2016/2018).

### The Archive It Collection at JHU



### <u>Chinese Social Media and the Anti-Corruption</u> <u>Campaign (2012-)</u>

Collected by: Johns Hopkins University

Archived since: Sep, 2015

Description: This archive is part of a collaborative web archiving project by Johns Hopkins University, George Washington University, and Georgetown University. It is funded by the Mellon Foundation-Council on East Asian Libraries Innovation Grants for East Asian Librarians. The goal of the project is to preserve Chinese blogs and micro-blogs related to the ongoing Chinese Anti-Corruption Campaign (2012-).

Subject: Blogs & Social Media, China, Anti-Corruption, Social Media
Creator: Milton S. Eisenhower Library, Johns Hopkins University

#### Narrow Your Results

Subject Sort By: Count (A-Z)

Flies (178) Military (73) Guangdong (66) Hebei (57)

Tigers (362)

More ▼

Date Sort By: Count (A-Z)

December 2015 (80) September 2016 (68) February 2017 (56) December 2016 (55) November 2015 (52) Sites for this collection are listed below. Narrow your results at left, or enter a search query below to find a site, specific URL or to search the text of archived webpages.

Enter search terms here

Search

Clear

Sites

Search Page Text

Page 1 of 13 (1,300 Total Results)

Next Page ▶

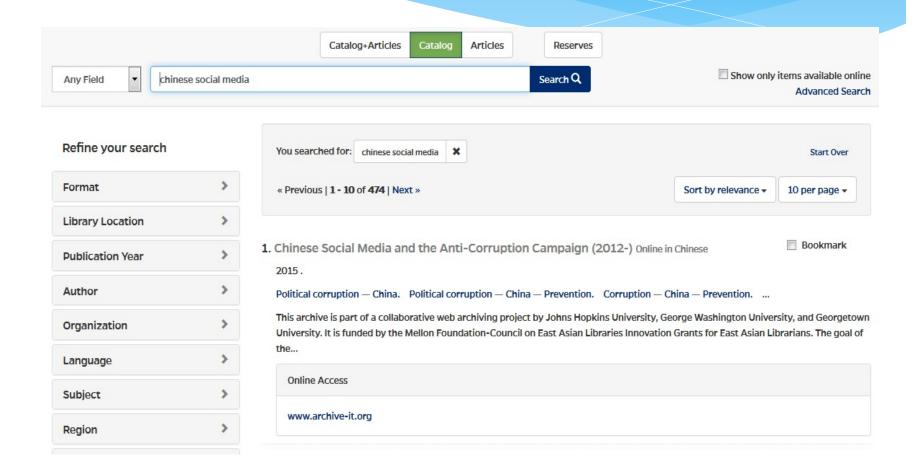
Sort By: Title (A-Z) | Title (Z-A) | URL (A-Z) | URL (Z-A)

Title: 原河南省副省长吕德彬生命的最后18天/ The last 18 days of former Henan province vice governor Lv Debin.

URL: http://bbs.tianya.cn/post-no06-136171-1.shtml

**Description:** This article discloses the secret life of the former vice governor of Henan province Lv Debin.

## Discovery tool(1): Catalog Record



## Discovery Tool (2): LibGuide page

Home

**Find Articles** 

**Find Books** 

**East Asian Sources** 

**Primary Sources in English** 

English/Translated Journals from Asia

Student Research Help

**Faculty Research Help** 

**Local Digital Collections** 

Chinese Social Media and Anti-corruption Campaign (2012-)

#### The Project

This project is a joint effort and collaborations by John Hopkins University libraries, the George Washington University libraries, and Georgetown University libraries. It is funded by a Mellon innovation grant administrated by the Council on East Asian Libraries to use and adapt web archiving tools - Social Feed Manager, and Archive It to build two collections of Microblogs (Sino Weibo) and blogs respectively. The content is focused on reaction to and commentary about the current Chinese government's anti-corruption campaign from within China.

#### The Chinese Blog Collection at JHU

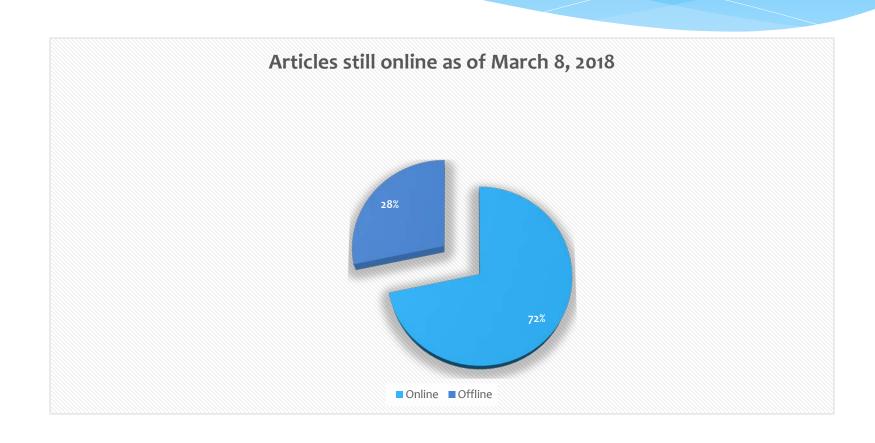
Scope: Using <u>Archive It</u>, a web arching tool from <u>Internet Archive</u>, we collected 13,00 blog posts covering from 1991 to 2017. The blog posts came from both national and regional blogging sites, addressing corruption cases and issues regarding various government branches and industries, including different levels of government administrations, military, energy, education and so on.

Access: Users can find the link to the collection via the <u>JHU online catalog</u>, or go to the <u>Archive It</u> site. For any questions or assistance, please contact Mr. Yunshan Ye at yye@jhu.edu.

#### The Chinese Weibo Collection at GW

Scope: Dynamic social media sites such as Weibo requires more specialized software tools. Social Feed Manager (SFM), open-source software developed by the George Washington University Libraries with the support of grants from the Institute for Museum and Library Services and the National Historical

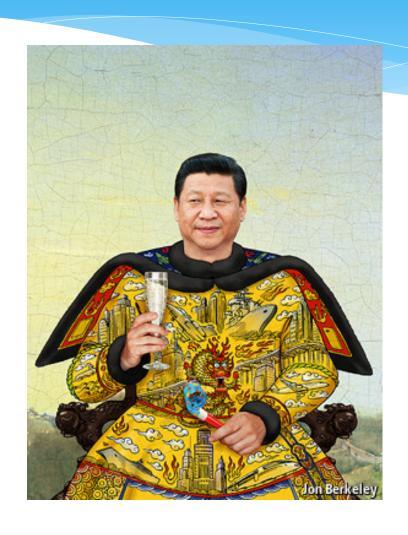
## Significance (1): Why Social Media



# Significance (2): Why Anti-corruption campaign

- \* Anti-corruption campaign (2012-): So far
  - \* **1.53 million** CCP members disciplined
  - \* 278,000 prosecuted, including 440 ministerial or provincial officials, 43 Central Committee members (about 11.4% of that body)
  - \* 13,000 military officers dismissed; more than 50 generals imprisoned for corruption

## Significance (cont.): consequently



## Web Archiving at GW

- Archiving Weibo via API
- Social Feed Manager (SFM)
- \* The anti-corruption campaign collection

### A Weibo



#### 西安国际港务区 🗸 🍿

今天 15:43 来自 搜狗高速浏览器

#民生服务#【中央机关公开遴选选调360名公务员】2017年中央机关公开遴选和公开选调公务员工作今日开始报名。此次公开遴选和公开选调共有56个中央机关参加,计划选拔360名公务员。 ₩报名时间截止5月22日18:00。 ₩笔试时间为2017年6月25日, ₩考试地点设在北京、上海、西安、兰州等17个城市。详情 ...

#### 展开全文 >



☆ 收藏

☑ 转发

<u>- 1</u>

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### A Weibo retrieved from the API

```
"created_at": "Thu May 11 15:43:13 +0800 2017",
  "id": 4106245138832598,
  "text": "#民生服务# 【中央机关公开遴选选调360名公务员】2017年中央机关公开遴选和公
开选调公务员工作今日开始报名。此次公开遴选和公开选调共有56个中央机关参加,计划选拔360名
公务员。[心]报名时间截止5月22日18:00。[心]笔试时间为2017年6月25日,[心]考试地点设在北
京、上海、西安、兰州等17个城市。详情",
  "source": "<a href=\"http://app.weibo.com/t/feed/6qhA0p\"
rel=\"nofollow\">搜狗高速浏览器</a>",
  "user": {
     "screen_name": "西安国际港务区",
     "name": "西安国际港务区",
     "location": "陕西",
     "followers count": 22224,
     "created at": "Mon Mar 24 13:42:11 +0800 2014"
  "comments_count": 1,
```

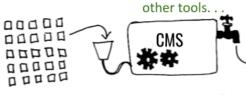
Full Weibo: https://gist.github.com/justinlittman/dbo280402a2ded54cc3d539a798c16e0

### API

#### **APIs & Web data**

That data is combined with presentation information, using a Content Management System (CMS), API, and/or

Behind most websites is content description of the public.



Publicly accessible

... to produce a website, which combines content data with presentation information.

That data--or a subset or version of it--can be directly queried if the platform has a public API.

Often, people use \( \sum \sqrt{1} \sqrt{1} \sqrt{1} \cdot \cdot \cdot \text{to get web content as pure, structured data.} \)

application--possibly a third party tool--to interact with the API.

Harvest

. .

### Affordances of the Weibo API

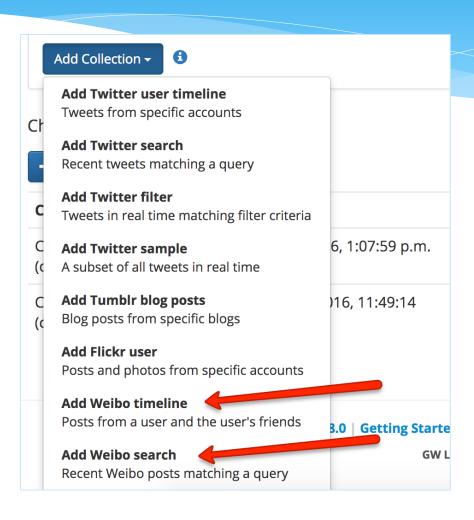
- \* "friends timeline" method
  - \* Returns last 150 weibos of the user and user's friends.
  - Part of basic API
- \* "topic search" method
  - \* Returns most recent 200 weibos matching a topic, e.g., "#keyword#" or "#你好#"
  - Part of advanced API

## Social Feed Manager

- Open source software developed by George Washington University Libraries
- \* Supports Twitter, Tumblr, Flickr & Sina Weibo.
- \* For researchers, faculty, students, and archivists.
- \* Lower the barriers to collecting social media data:
  - User-friendly website to create, manage & export collections
  - Handles technical aspects of working with APIs

http://go.gwu.edu/sfm

### SFM: Create collection



### SFM: Describe collection

Add Weibo timeline	
* indicates a required field.	
Collection name*	
Description	
	10
Credential*	
CNWeibo's weibo credential	<b>\$</b>
Image sizes	
☐ Thumbnail	
☐ Medium	
Large	
For harvesting images, select the image sizes.	
Incremental harvest	
Only collect new items since the last data retrieval.	

### SFM: Harvesting

### Weibo\_Anti-Corruption\_Followers





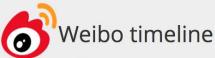
Harvests (20,980)

Туре	Requested	Updated/Completed	Status	Stats	Messages
Weibo timeline	May 12, 2017, 10:23:51 a.m. EDT	May 12, 2017, 10:24:00 a.m. EDT	Success	24 weibos	
Weibo timeline	May 12, 2017, 9:23:51 a.m. EDT	May 12, 2017, 9:24:00 a.m. EDT	Success	27 weibos	
Weibo timeline	May 12, 2017, 8:23:51 a.m. EDT	May 12, 2017, 8:24:00 a.m. EDT	Success	23 weibos	
Weibo timeline	May 12, 2017, 7:23:51 a.m. EDT	May 12, 2017, 7:24:00 a.m. EDT	Success	25 weibos	
Weibo timeline	May 12, 2017, 6:23:51 a.m. EDT	May 12, 2017, 6:24:00 a.m. EDT	Success	51 weibos	

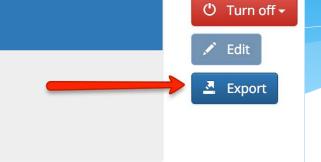
View all 20,980 harvests

## SFM: Export



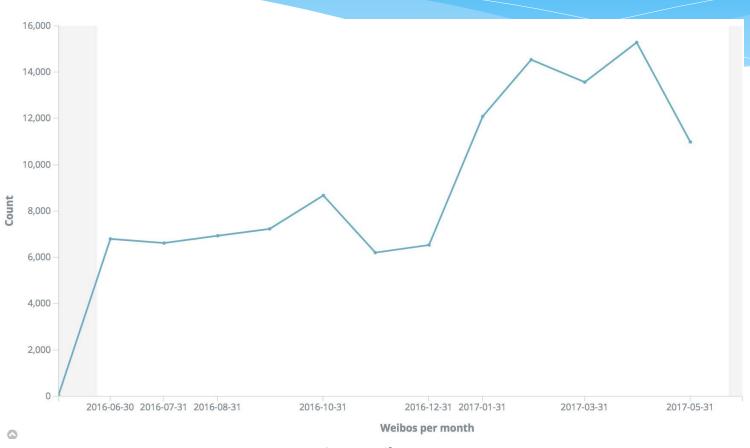


Collection is active. Turn off to edit.



	Α	В	С	D	Е	F	G	Н	1	J	K	L	М	N	0	Р	Q	R	S
1	created_at	weibo_id	screen_nar	followers_c	friends_cou	reposts_co	topics	in_reply_te	weibo_url	text	url1	url2	retweeted	retweeted	retweeted	_url2			
2	2016-07-05	399402098	人民网	31512740	5000	11			http://m.w	【今晚,到	数敬这位男:	篮老将】今	晚,北京奥	体中心,期	f坦科维奇棒	不赛前,现场	<b>る举行了王</b>	治郅国家队	退役化
3	2016-07-05	399401771	人民日报	45903532	1853	613			http://m.w	【微议录	: 致敬,愿	平安!】@	【致敬!技	亢洪抢险中,	那些无所	畏惧、最可	爱的人】大	、雨滂沱,何	也们来
4	2016-07-05	399401621	人民网	31512740	5000	268			http://m.w	【最常见的	內工伤:胖	![衰]】因》	为忙, 乱吃」	早餐成虚胖	;因为忙,	久坐电脑大	:腿粗;因为	讨忙,应酬	多啤酒
5	2016-07-05	399401242	人民网	31512740	5000	50			http://m.w	【母女蹲	http://t.cn	/R5ugBqD							
6	2016-07-05	399401125	人民日报	45903532	1853	247			http://m.w	【人民微i	平:太湖不	是垃圾桶】	【震惊!」	http://t.cn	/R5u6DZp				
7	2016-07-05	399400865	人民网	31512740	5000	229			http://m.w	#随手转发	,宝贝回家	₹#【[话筒]忿	急转寻人!i	了宁13岁女	孩走失已2	天】胡若彤,	女,13岁	。7月3日9日	讨许,
8	2016-07-05	399400487	人民网	31512740	5000	197			http://m.w	【浙江丽	http://t.cn	/R5uDtrA							
9	2016-07-05	399400425	人民日报	45903532	1853	1222			http://m.w	【注意!》	http://t.cn	/R5n0n19							
10	2016-07-05	399399984	人民网	31512740	5000	374			http://m.w	【武警救技	http://t.cn	http://t.cn	/R5uWVoo						
11	2016-07-05	399399950	南方都市技	8430938	449	879	喜感新闻		http://m.w	#喜感新闻	# 昆明一男	子为追女孩	3,开着兰博	基尼拖了-	一卡车牛奶	生大学校园:	公然求爱,	据说表白的	」对象
12	2016-07-05	399399574	人民日报	45903532	1853	666			http://m.w	【[话筒]急	转寻人!コ	辽宁13岁女	亥走失已2天	】胡若彤,	女,13岁。	7月3日9时	许,从辽气	中朝阳市双:	塔区文
13	2016-07-05	399399481	人民网	31512740	5000	85			http://m.w	【80岁"最	http://t.cn	/R53yKGk							
14	2016-07-05	399399463	红色稽恶る	4532	2168	0			http://m.w	继续转发!			多么漂亮,	http://t.cn	/R53z9sr				
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### Anti-corruption collection by date



June 29, 2016 - May 10, 2017: 91,584 weibos

## Anti-corruption collection by topic

Topic	Count
纪检监察	545
反腐倡廉	457
2017两会	417
2017看两会	402
北电学生举报教授	401
央视新闻微直播	380
关注里约奥运	373
微博看两会	294
北电学生实名举报女教授	264
一起看奥运	245

## Challenges of the Weibo API

- \* Few methods available for collecting weibos.
- \* Poor documentation
- \* Difficult to get credentials, especially for Advanced API.
- \* For security reasons, some parts of Sina Weibo website are blocked.

Special thanks to Victor Tan.

### Thanks!

- \* Yunshan Ye (Johns Hopkins University) yye@jhu.edu
- \* Justin Littman (George Washington University) justinlittman@gwu.edu; @justin\_littman.