

Dr Jessica Kunert and Professor Neil Thurman

# Male, metropolitan, and mainstream

Bias in algorithmic news sourcing from Twitter

Ecrea Journalism Studies Conference 2017  
23-24 March 2017, Odense, Denmark



## For journalists, social media can be...

- A channel for dissemination of own material
- A pointer for news and trends  
(Broersma/Graham 2013: 448f.)  
➔ timely, sometimes obscure news
- Source for “ambient” news with the audience as both a receiver and a sender (Hermida 2010)



## Problems and challenges (Craig 2014: 106)

- Multitude of accounts
  - ➔ Bots: content polluters, valuable content aggregators!?(Kyumin/Eoff/Caverlee 2011; Lokot/Diakopoulos 2015; Larsson/Moe 2015)
- Large frequency of messages
- Speed with which information is spread
  - ➔ “how to keep up?”

## Problems and challenges (cont.)

- What's news and what's not?
  - ➔ lots of clutter (41% on Twitter „pointless babble“ in 2009 – “eating sandwich”; Pear Analytics 2009)
  - ➔ wrong/hijacked hashtags
- Verification of information
  - ➔ “s/he has a gun!”
- Who to listen to? Elites or nonelites or both (Henderson/Miller 2014)?



**HARRY LOVER** ❤️ @HarryLover4E · 1h

**Eating** a peanut butter and pickle **sandwich**. OmNomNomNoms. Don't knock it 'til you try it. It's delish.

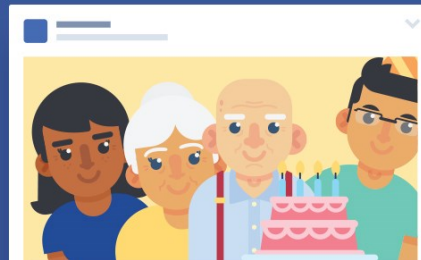


1



## Welcome to News Feed

Our goal with News Feed is to show you the stories that matter most to you every time you visit Facebook.



“The stories that show in your News Feed are **influenced by your connections and activity** on Facebook. This helps you to see more stories that interest you **from friends you interact with the most**. The **number of comments and likes** a post receives and **what kind of story it is** (ex: photo, video, status update) can also make it more likely to appear in your News Feed.”  
(Facebook Help Center)

## Challenges arising with algorithms choosing content:

- Not everyone sees the same
- Algorithmic accountability  
(Diakopoulos 2014; Mittelstadt 2016)
  - ➔ How do the algorithms work?
  - ➔ “Why do we see what we see?”
- Privacy issues (who is tracked and how?)

**How are the social media posts chosen that journalists see?**

**How can algorithmic news sourcing help journalists?**

“With the proliferation of smartphones and social media, it means that there are lot more witnesses to a lot more events. We can’t be at everything. Our tool helps shift some of the burden of witnessing and lets journalists do much more of the high value-added work.”

(Reg Chua, Executive editor of data and innovation, Reuters)

Source: <http://www.niemanlab.org/2016/11/reuters-built-its-own-algorithmic-prediction-tool-to-help-it-spot-and-verify-breaking-news-on-twitter/>

## Why Twitter?

- Twitter is open to everyone: corporate, general public...
- Twitter as an especially timely source for breaking news events



**Janis Krums** ✓  
@jkrums

 Folgen

<http://twitpic.com/135xa> - There's a plane in the Hudson. I'm on the ferry going to pick up the people. Crazy.

 Original (Englisch) übersetzen

RETWEETS  
250

GEFÄLLT  
906



21:36 - 15. Jan. 2009

 28  250  906



**Polizei München** @PolizeiMuenchen

1h

Unconfirmed reports of more violence and possible #gunfire in the City Center. Situation is unclear. Please avoid public Areas. #munich #oez



 4.417

 1.109



**Polizei München** @PolizeiMuenchen

1h

S'il vous plait éviter le public pour le Moment à Munich. #München, #oez, #schießerei



 879

 451

 Als Antwort an Polizei München



**Polizei München** @PolizeiMuenchen

13h

(5/5) Saldırganlar halen yakalanamadi, lütfen evlerinizi terk etmeyin. Kalabalik yerlerden uzak durunuz

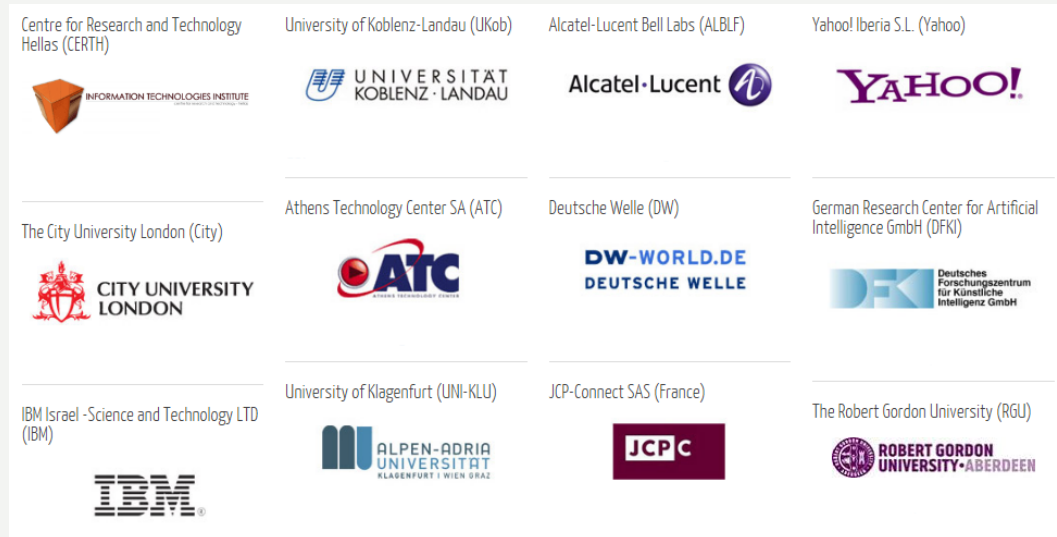


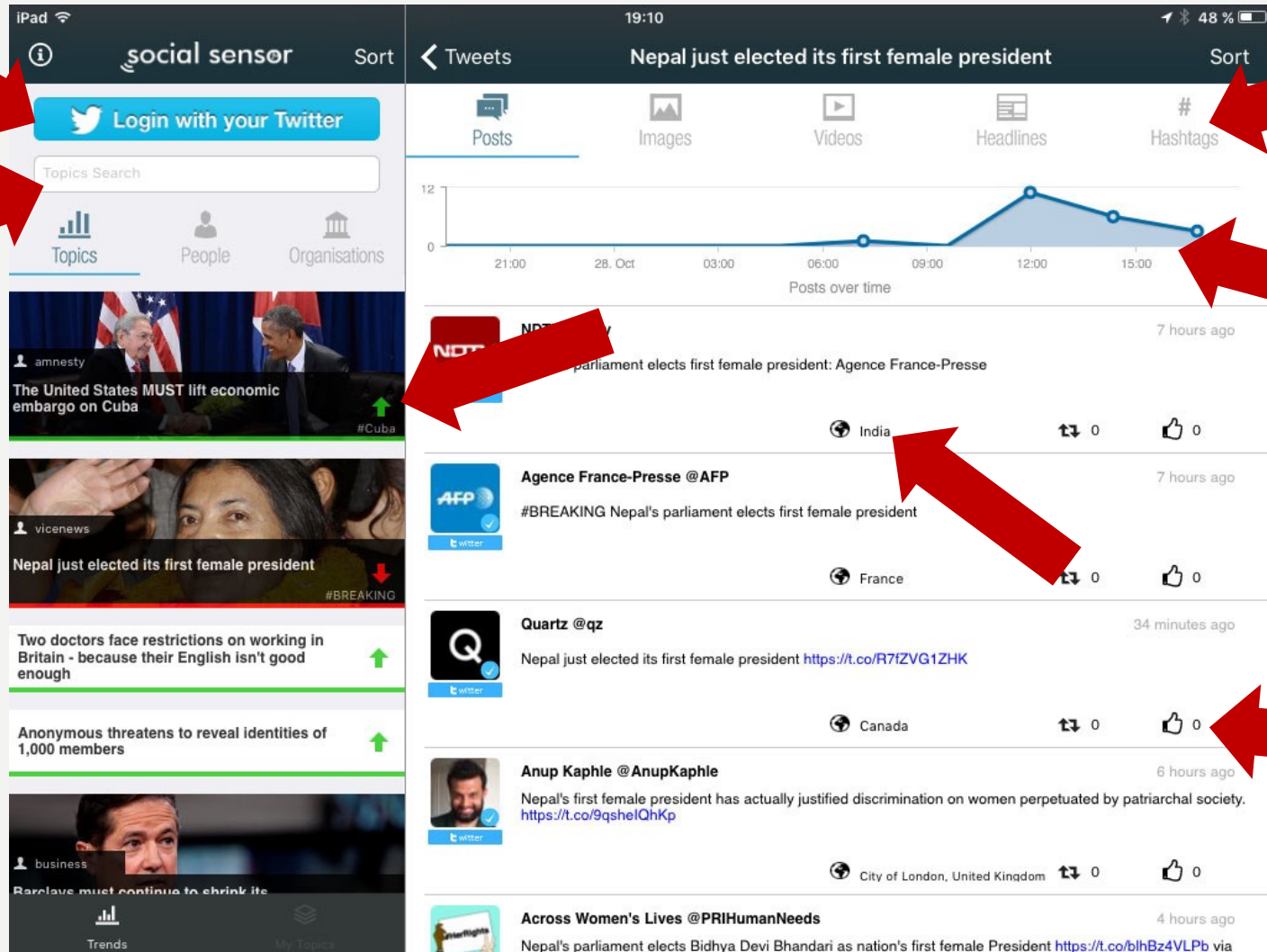
 585

 380

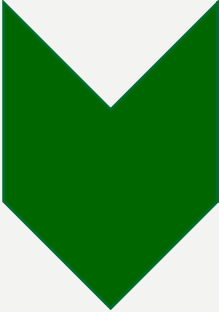


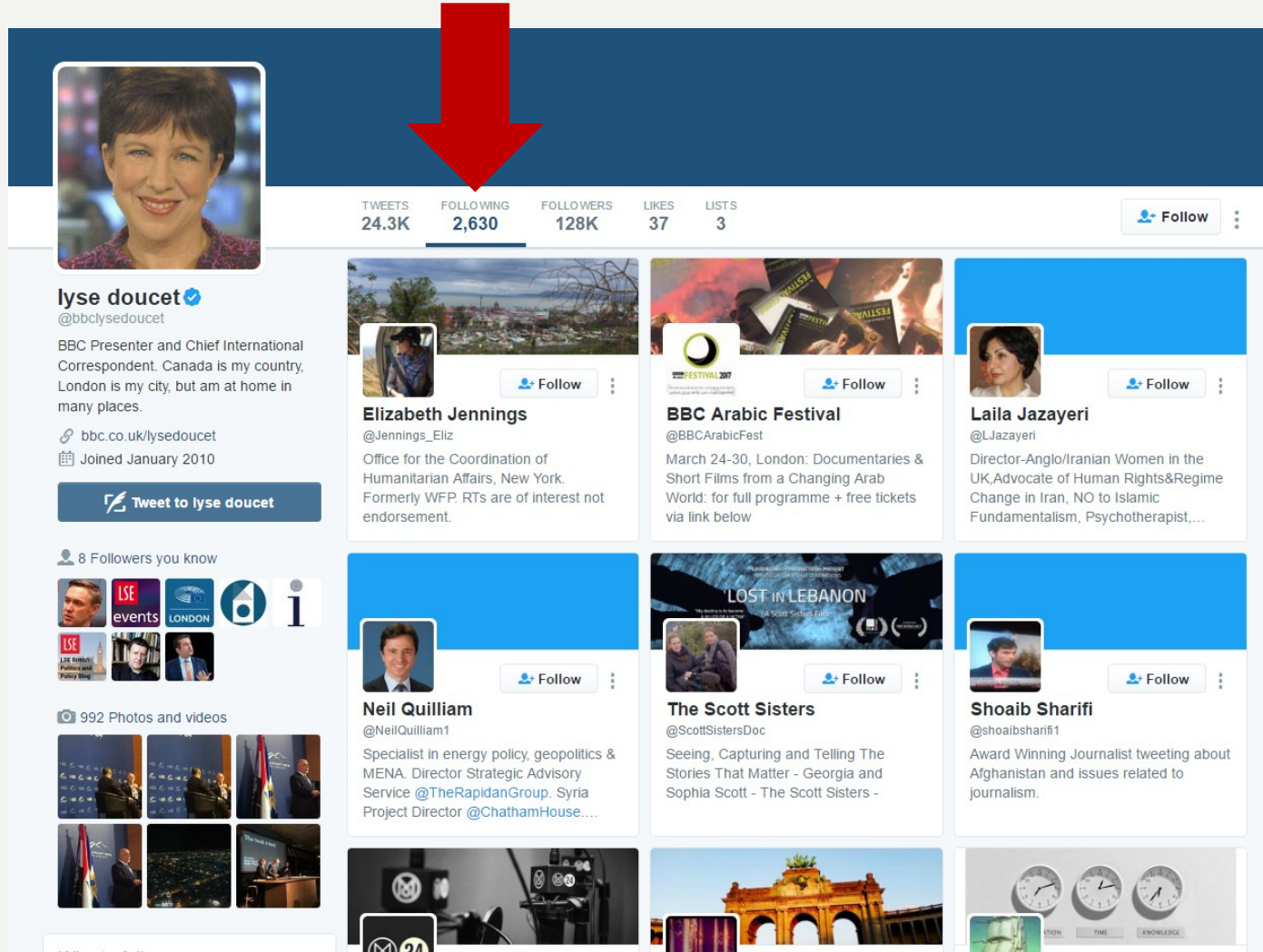
- Interdisciplinary project with researchers, media companies, corporate
- ➔ Goal: application for autonomous detection, clustering, prioritising of news and infotainment from social media
- Works in real time
- Diverse material: text, images, audio and video






## Twitter: Monitoring accounts via ,newshounds‘


- 
- Possible newshounds are selected (initial seed: 500 journalists, then people they followed)



**lyse doucet**   
@bbclysedoucet

BBC Presenter and Chief International Correspondent. Canada is my country, London is my city, but am at home in many places.

[bbc.co.uk/lysedoucet](http://bbc.co.uk/lysedoucet)  
Joined January 2010

 Tweet to lyse doucet

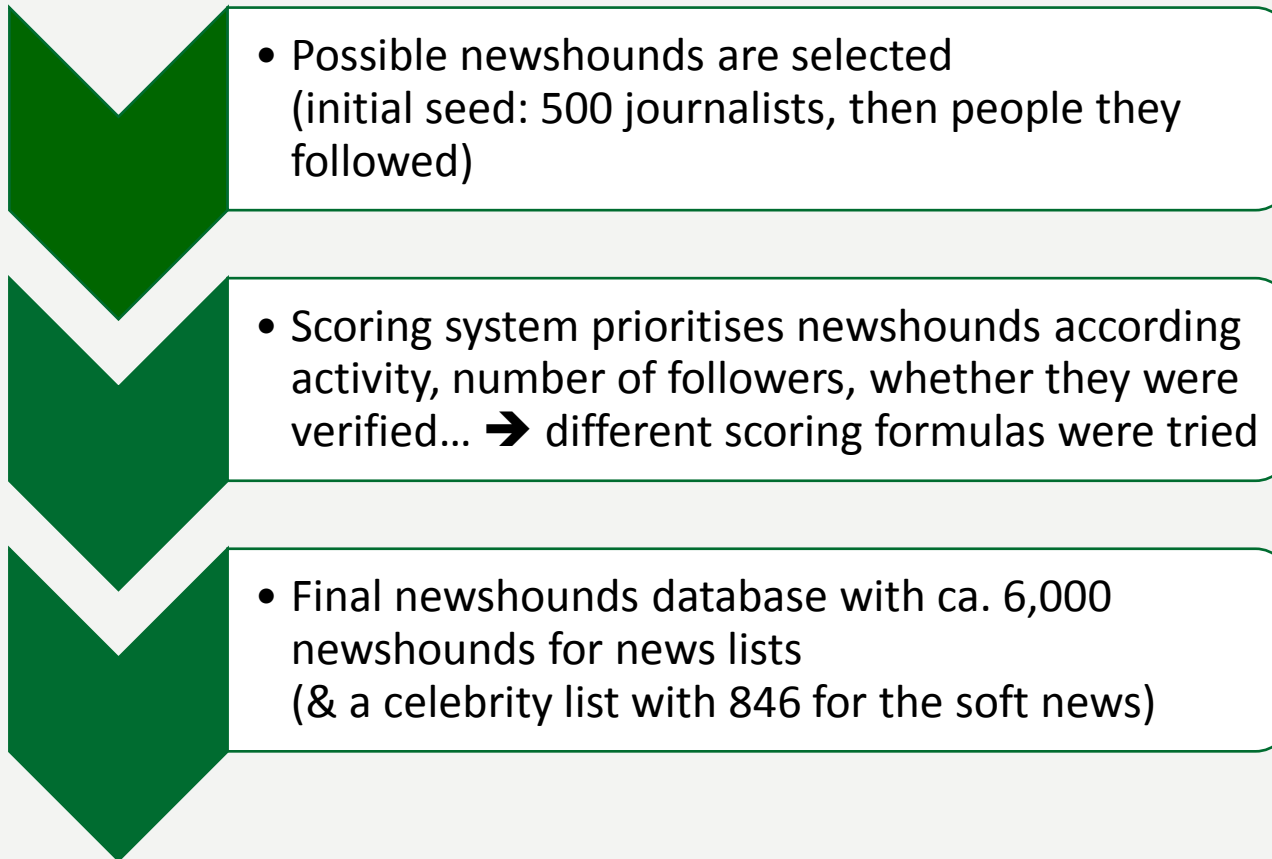
8 Followers you know

992 Photos and videos

**Following:**

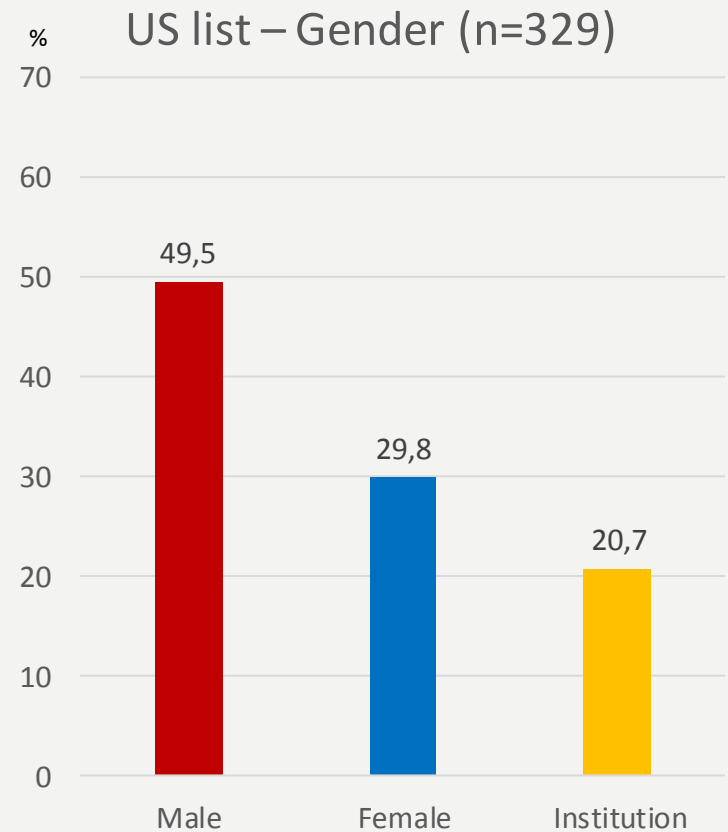
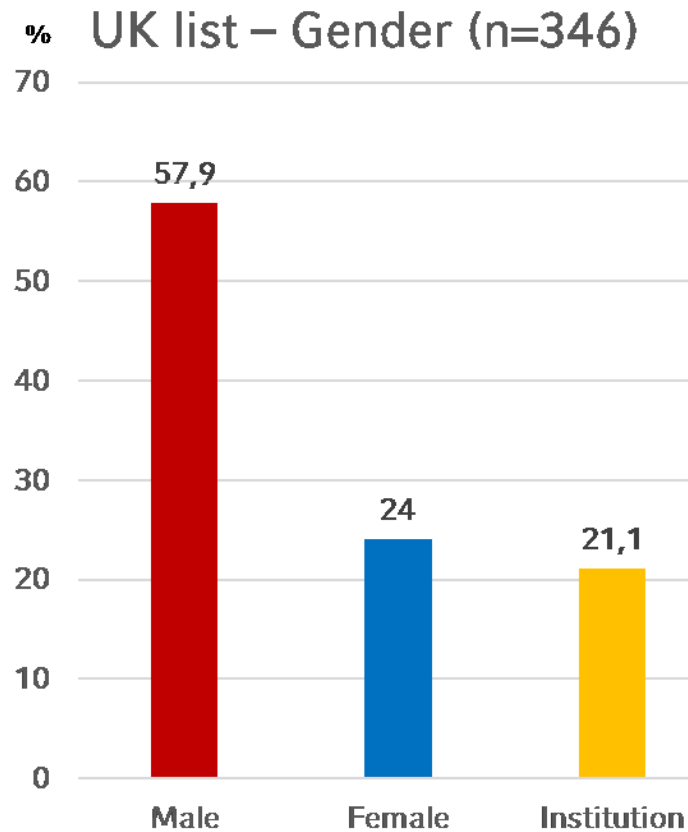
- Elizabeth Jennings** (@Jennings\_Eliz)  
Office for the Coordination of Humanitarian Affairs, New York. Formerly WFP. RTs are of interest not endorsement.
- BBC Arabic Festival** (@BBCArabicFest)  
March 24-30, London: Documentaries & Short Films from a Changing Arab World: for full programme + free tickets via link below
- Laila Jazayeri** (@LJazayeri)  
Director-Anglo/Iranian Women in the UK, Advocate of Human Rights & Regime Change in Iran, NO to Islamic Fundamentalism, Psychotherapist,...
- Neil Quilliam** (@NeilQuilliam1)  
Specialist in energy policy, geopolitics & MENA. Director Strategic Advisory Service @TheRapidanGroup. Syria Project Director @ChathamHouse....
- The Scott Sisters** (@ScottSistersDoc)  
Seeing, Capturing and Telling The Stories That Matter - Georgia and Sophia Scott - The Scott Sisters -
- Shoaib Sharifi** (@shoaibsharifi1)  
Award Winning Journalist tweeting about Afghanistan and issues related to journalism.

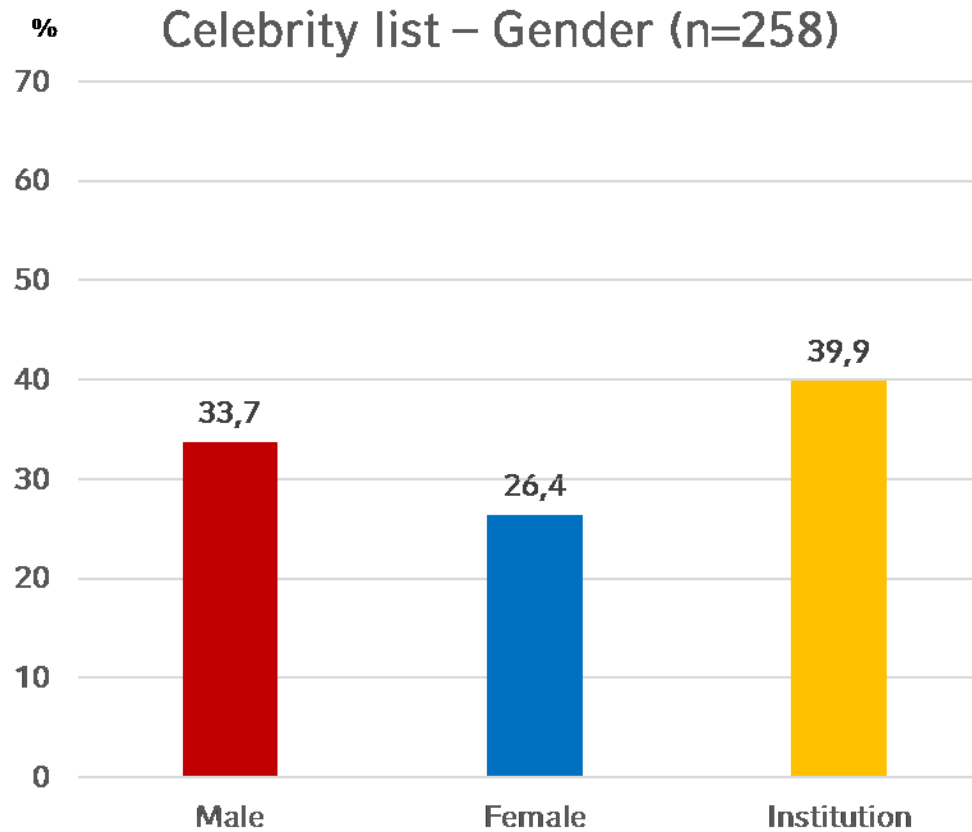
## Monitoring accounts via ‚newshounds‘



- **Sample** (random sample, 95 % CI, 5 % MOE)
  - UK news (n=346),
  - US news (n=333)
  - ... & Celebrity list (n=260)  
(Moon/Hadley 2014: 300: Twitter is more often used as a source for soft news than for hard news by TV and newspapers)

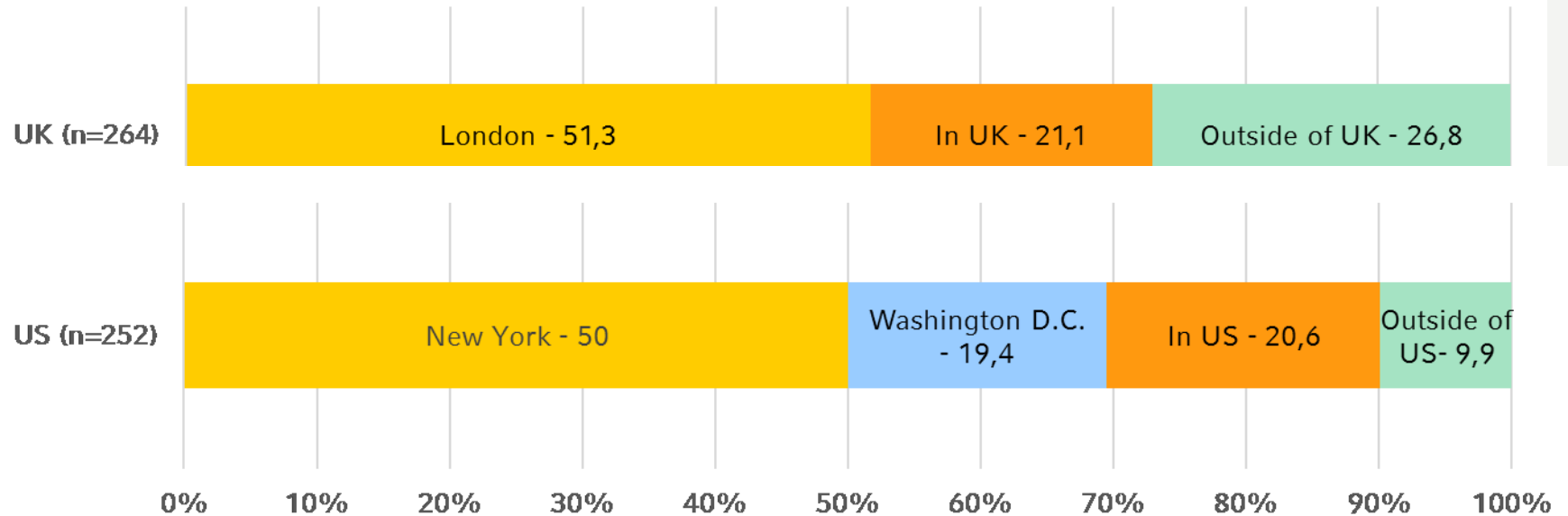
**Which characteristics do the newshounds show  
– and who are thus the sources of Social Sensor?**





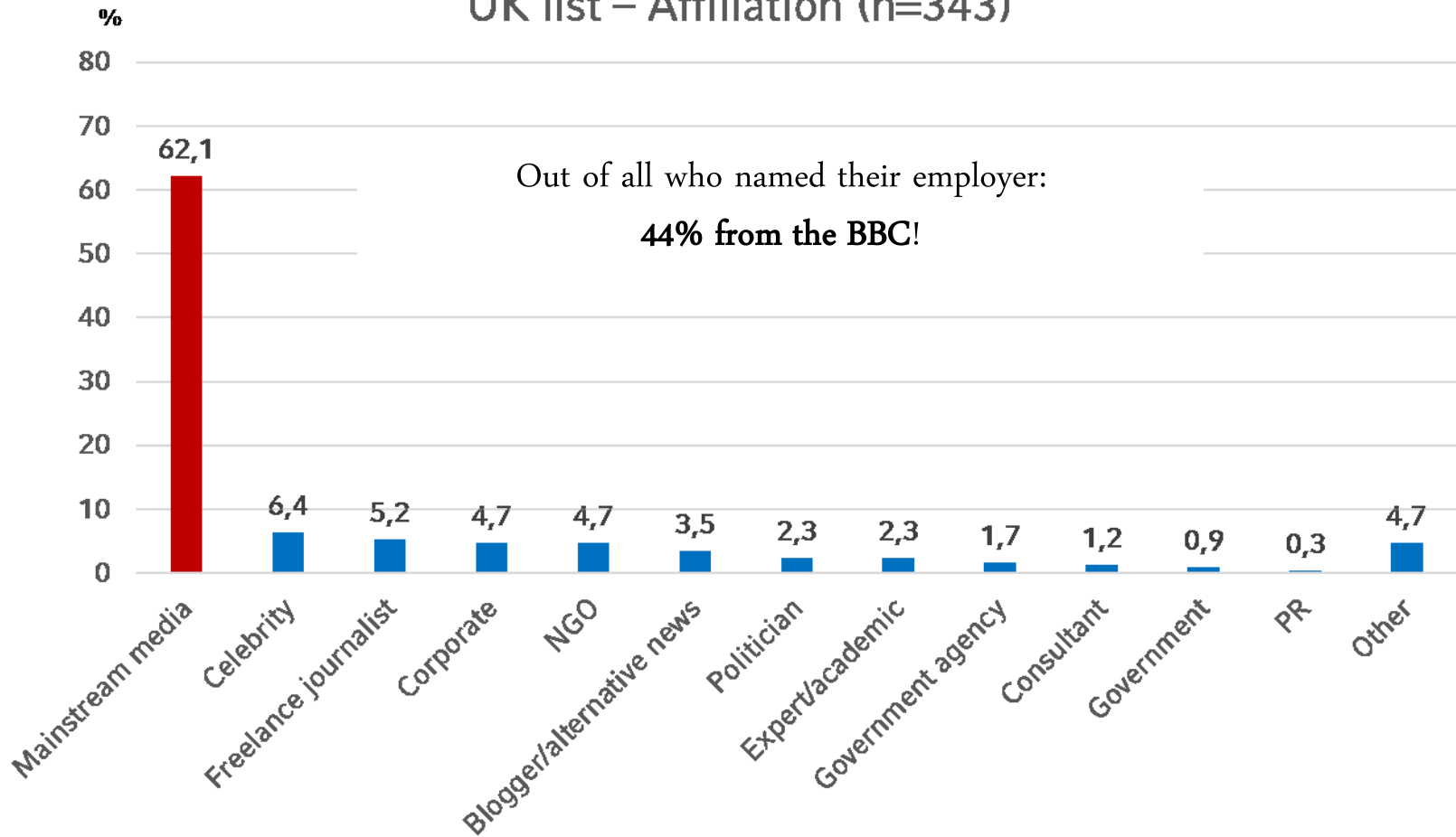


## Location



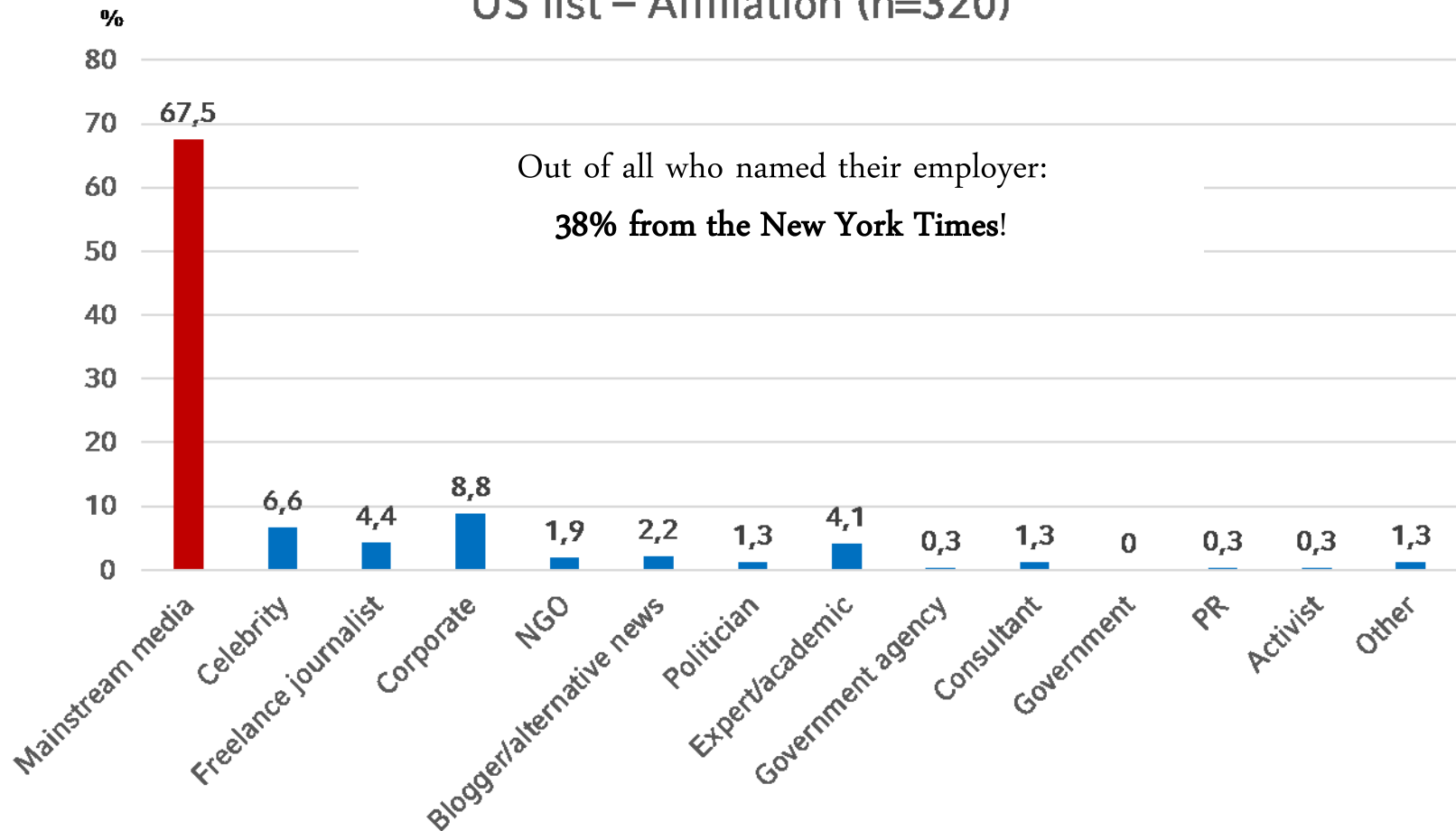
➔ Media cities with the big outlets, but...

## UK list – Affiliation (n=343)



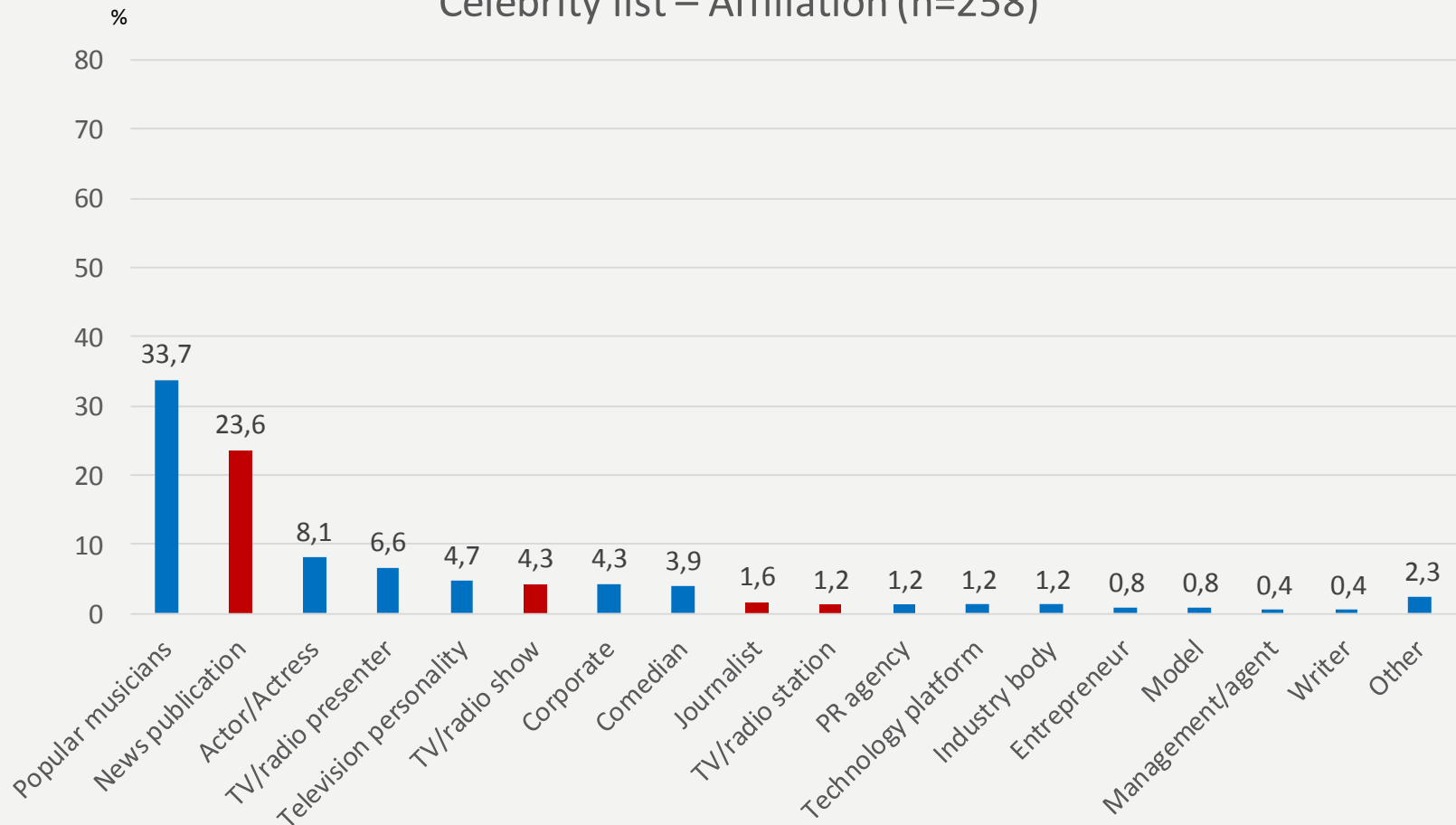
➔ Are the journalists referencing themselves?

## US list – Affiliation (n=320)



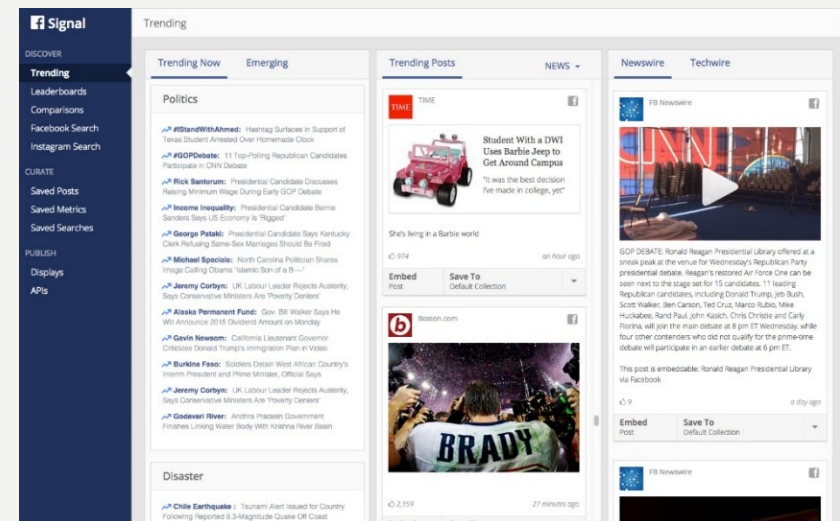
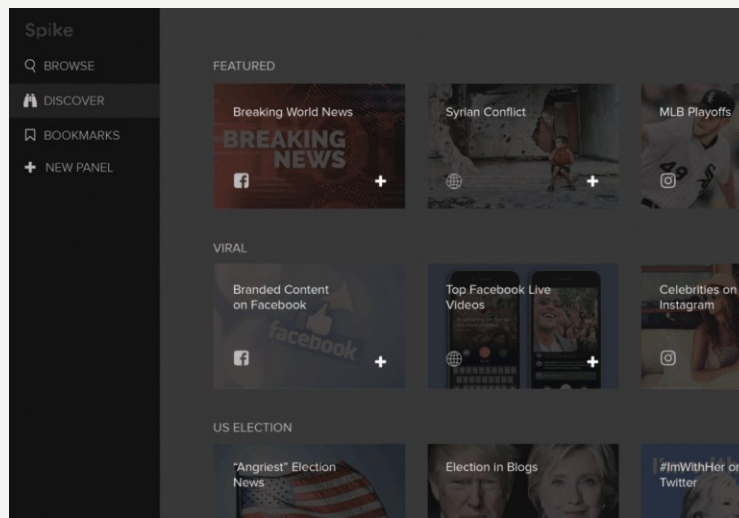
➔ Same here!

Celebrity list – Affiliation (n=258)



➔ Even here, over 30% are media outlets or journalists!

- Reuters News Tracer (Twitter)
- NewsWhip Spike (many platforms)
- Dataminr (Twitter)
- Facebook Signal (Facebook & Instagram)
- Bloomberg's initiative





## **... But: who witnesses whom and how?**

- How are the algorithms programmed?
- How to make sure that not the same few people are listened to? What about the “nonelites” (Henderson/Miller 2014)?
- What about an update of the newshound list? (inactive accounts)

# Thank you!

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