

What's In a @Name? How Name Value Biases Judgment of Microblog Authors

ADITYA PAL & SCOTT COUNTS

PROBLEM STATEMENT

How does a user's name influence perception of her and her content?

PROBLEM STATEMENT

How does a user's name influence perception of her and her content?

One week left to enter the HP-sponsored "best self-published photo book of the year" contest. Top prize: \$25,000.

<http://bit.ly/9J4DeN>

Still just an idea, but such a good one: laptops powered by your typing! <http://bit.ly/iH8lpV>

GAAH!! Took me an ENTIRE DAY to figure out why stupid TweetDeck was suddenly completely blank. Solution was here:

<http://bit.ly/k4YHN>

PROBLEM STATEMENT

How does a user's name influence perception of her and her content?

Pogue David Pogue

One week left to enter the HP-sponsored "best self-published photo book of the year" contest. Top prize: \$25,000.

<http://bit.ly/9J4DeN>

Pogue David Pogue

Still just an idea, but such a good one: laptops powered by your typing! <http://bit.ly/iH8lpV>

Pogue David Pogue

GAAH!! Took me an ENTIRE DAY to figure out why stupid TweetDeck was suddenly completely blank. Solution was here:

<http://bit.ly/k4YHN>

PROBLEM MOTIVATION

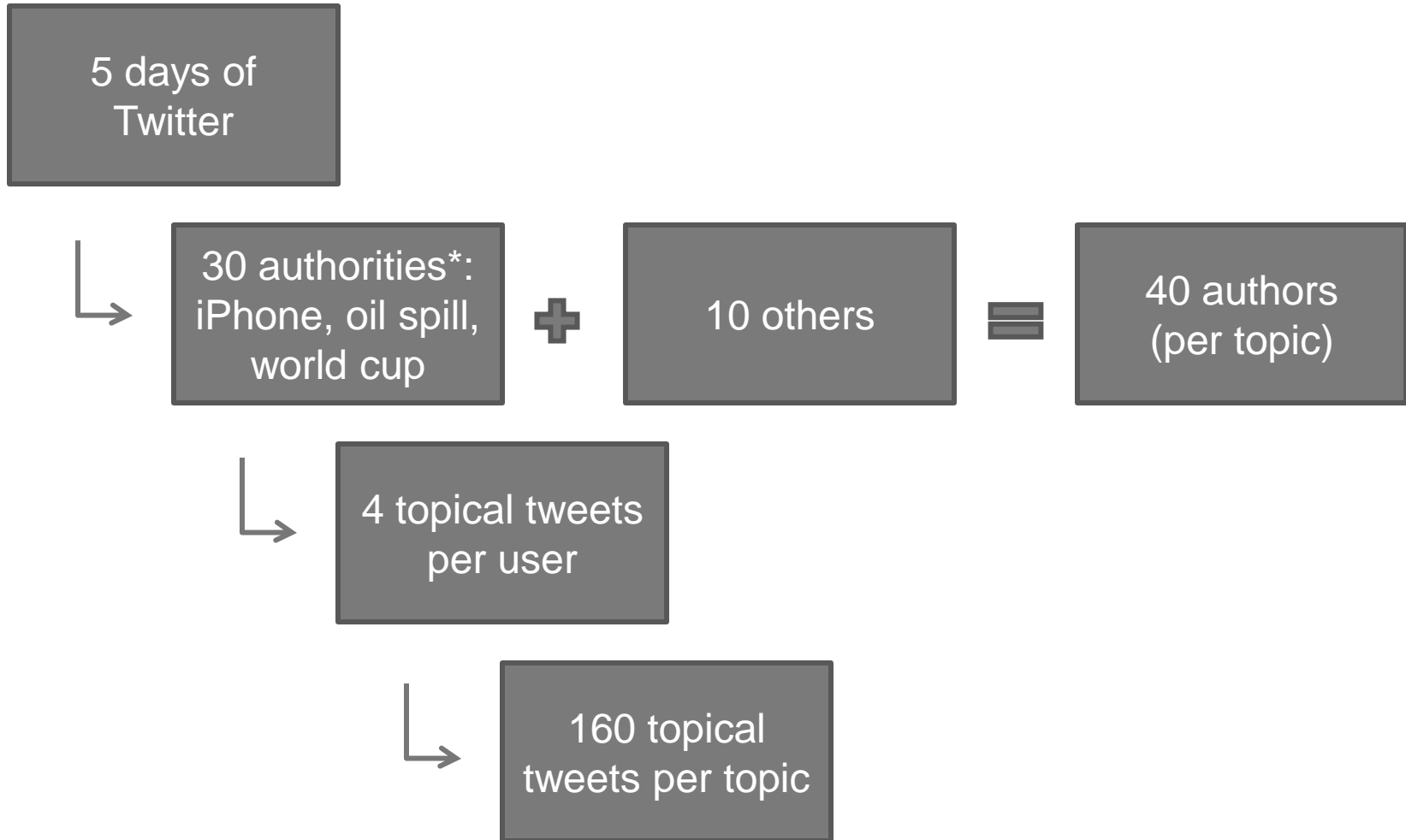
Social science:

- Anyone can participate, but how are perceptions of them and their content influenced by “insignificant” factors like user name?
- How much value is there in name value?

Recommendation and social search:

- Bias-free author assessments can lead to better/more egalitarian social search results and friend recommendations.

DATASET



METHODOLOGY

Participants familiar with Twitter were asked to rate users and their tweets on two dimensions:

- Interestingness of the tweets
- Authoritativeness of the authors

Participant were randomly assigned a topic and all 40 authors in that topic were presented in a random order.

- Half of them were presented with their names shown
- Half without their names shown

ANONYMOUS SURVEY SCREEN

Step 1: Please read the following tweets on the topic **iphone**:

- iOS 4: 100 new features: multitasking done right, folders: organize apps, Mail: unified inbox, threading #iPhone #wwdc
- FaceTime - why you'll buy an iPhone 4! #wwdc
- iPhone tip: To find out your AT&T eligibility for iPhone 4, dial *639#
- iPhone 4: retina display = 4x pixel density so it's super sharp text: 326 pixels per inch, 300 is limit that the eye can detect! #wwdc

Step 2: Evaluation

How interesting do you find these tweets ?

1 2 3 4 5 6 7

How authoritative do you find the user to be ?

1 2 3 4 5 6 7

Next

NON-ANONYMOUS SURVEY SCREEN

Step 1: Please read the following tweets on the topic **iphone:**

username tweets:

- 5 Fun DIY iPhone Cases [PICS] - <http://bit.ly/961WB7>
- New iPhone Release Date Announced at WWDC 2010 - <http://bit.ly/9pmOs6>
- The iPhone 4 Is Here - <http://bit.ly/bsGy7X>
- iPhone Gets iMovie for HD Video Recording and Editing - <http://bit.ly/bbwd3e>

Step 2: Evaluation

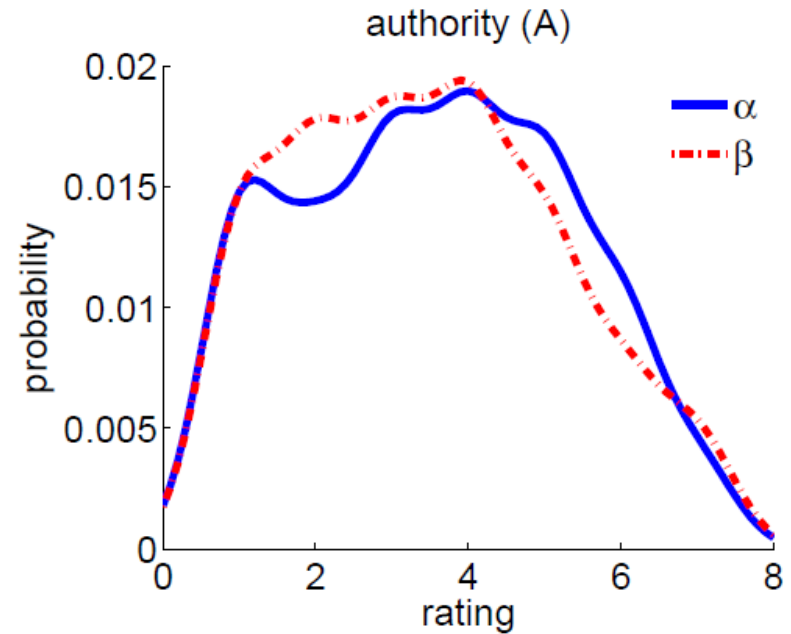
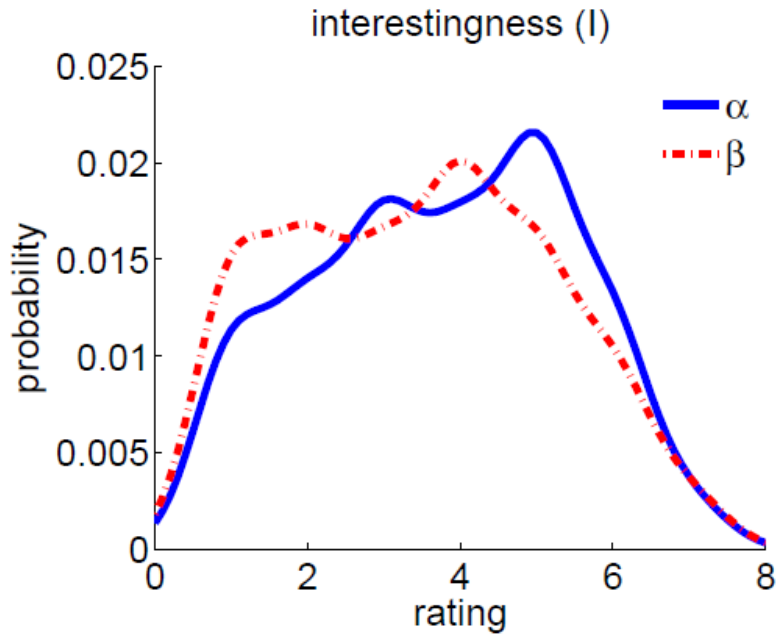
How interesting do you find these tweets ?

1 2 3 4 5 6 7

How authoritative do you find the user to be ?

1 2 3 4 5 6 7

RESULTS – AUTHOR RATINGS

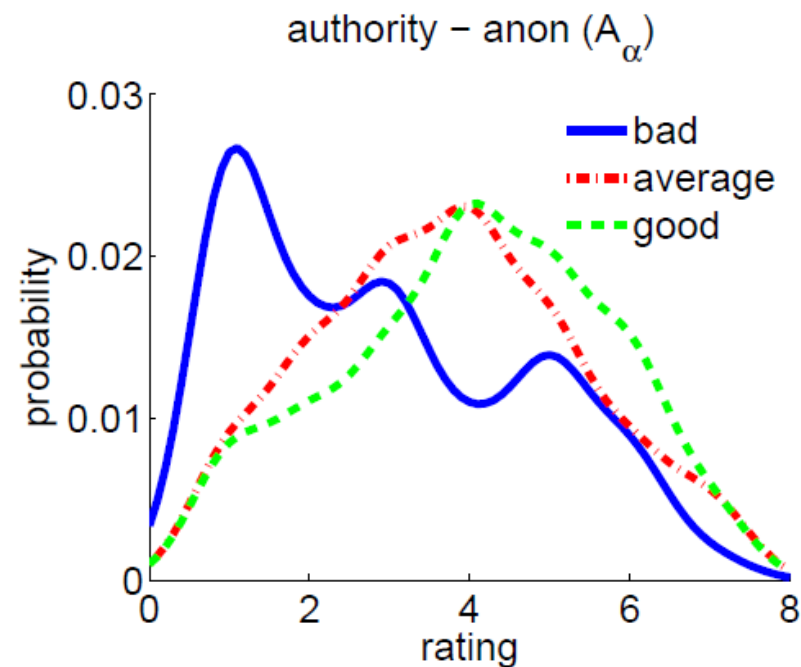
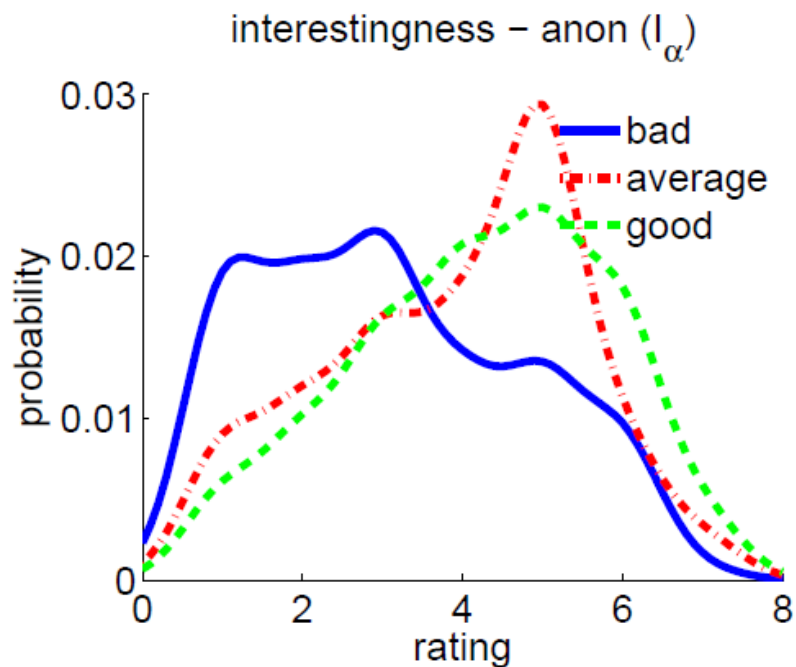


Fairly bimodal distributions

Downward shift in ratings when non-anonymous

\bar{I}_α	\bar{I}_β	\bar{A}_α	\bar{A}_β
3.72	3.44	3.55	3.42

RESULTS – RATING DISTRIBUTION



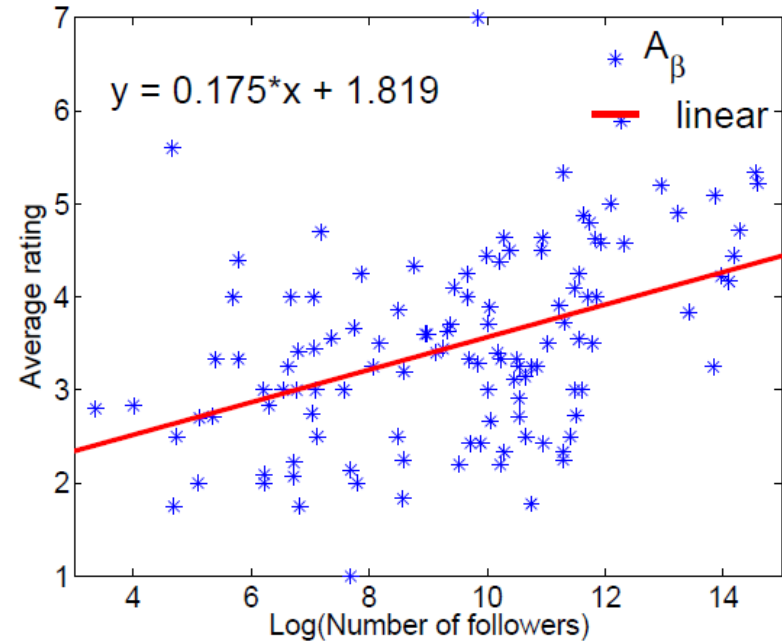
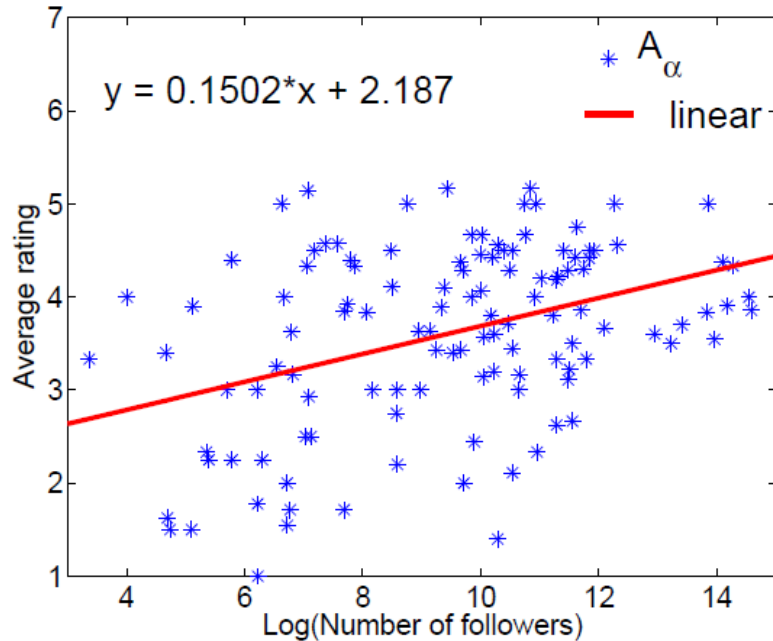
Good author get *higher* ratings when non-anon.

Bad authors hurt most by names

Average authors similar to good (KL div = .02) but hurt by name (KL div = .23; $p < .001$)

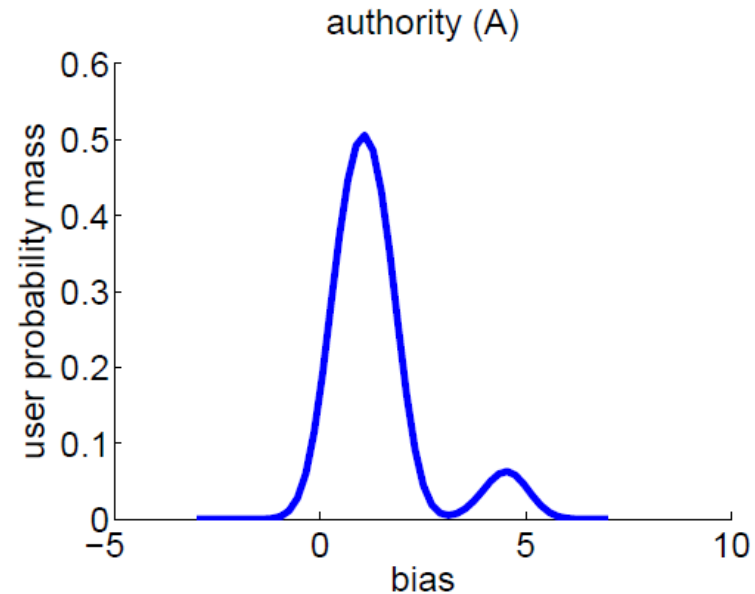
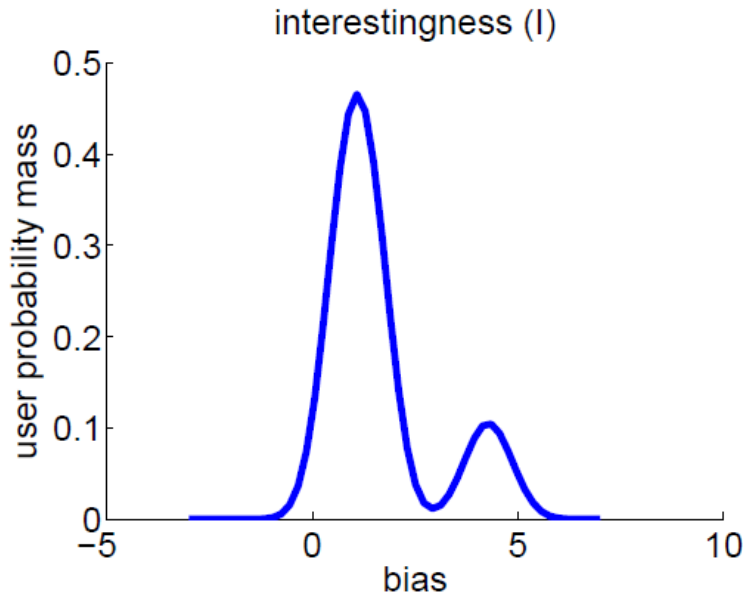
cluster	% authors	\bar{I}_α	\bar{I}_β	\bar{A}_α	\bar{A}_β
<i>bad</i>	34	3.14	2.49	2.97	2.60
<i>average</i>	28	3.93	3.55	3.74	3.52
<i>good</i>	38	4.21	4.34	4.04	4.21

RESULTS – RATINGS & FOLLOWER COUNT



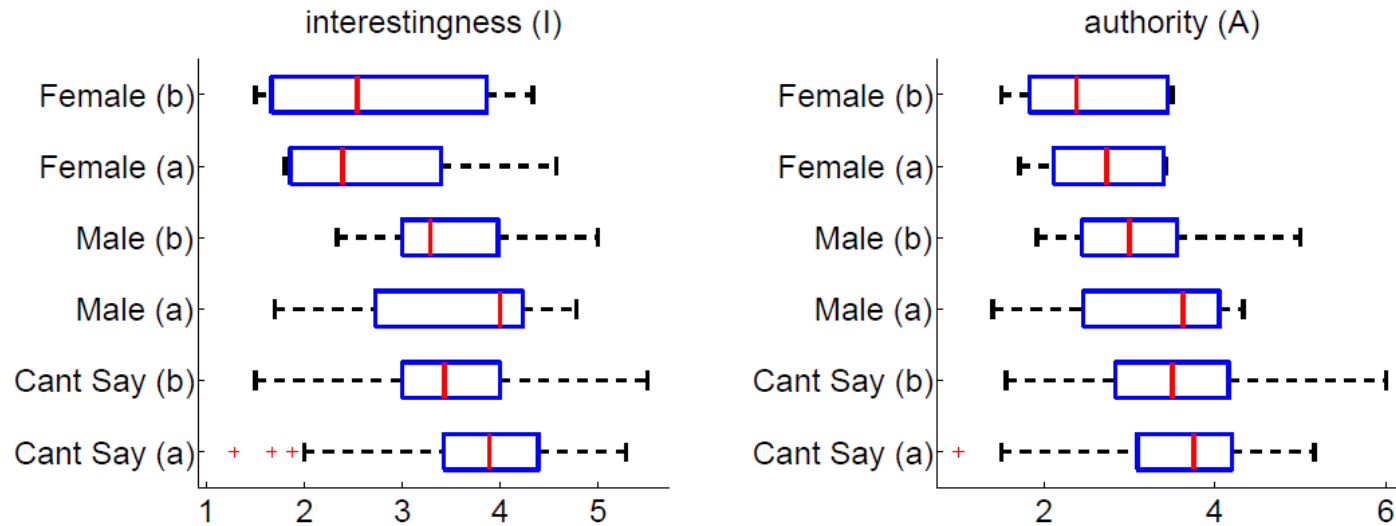
Results tighten up with names: $R^2 = .16 \rightarrow .21$
High follower count people get biggest boost
Middle group hurt

RESULTS – PARTICIPANT BIAS



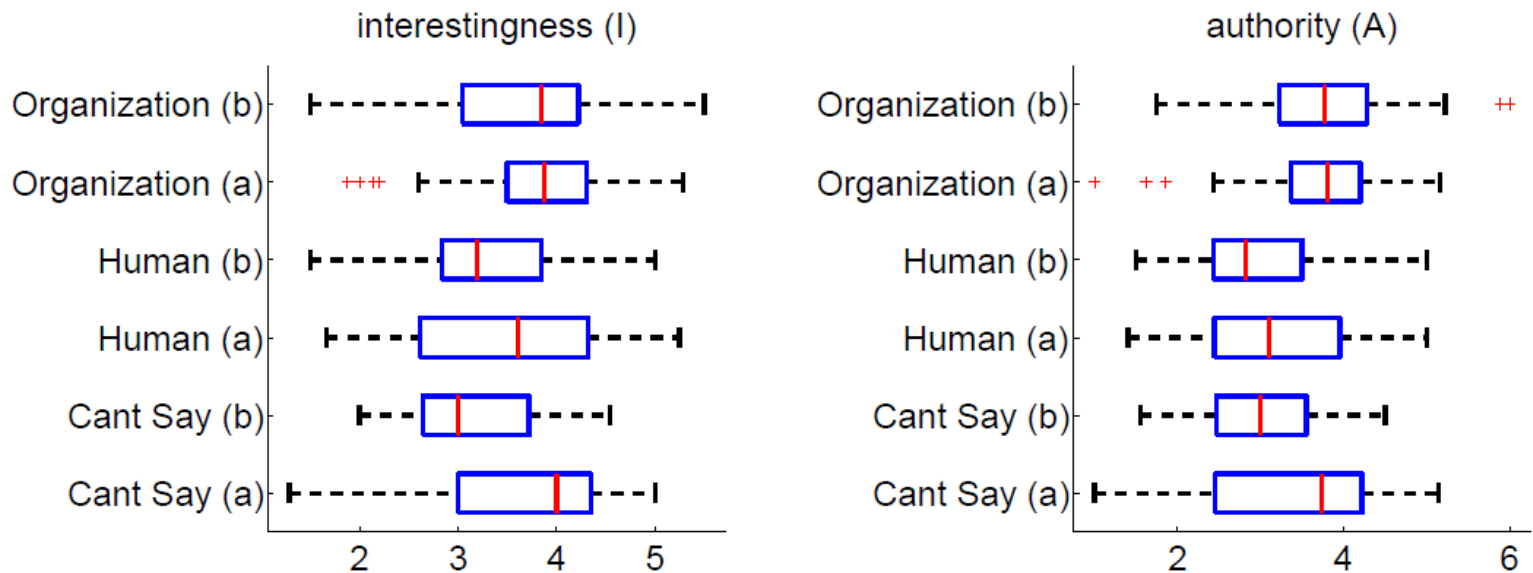
Most people slightly biased (KL-div = 1), some very biased (KL-div = 4.5)
More bias on interestingness (avg KL-div = 2.6) than authority (1.5)

RESULTS – FACTORS FOR BIAS: GENDER



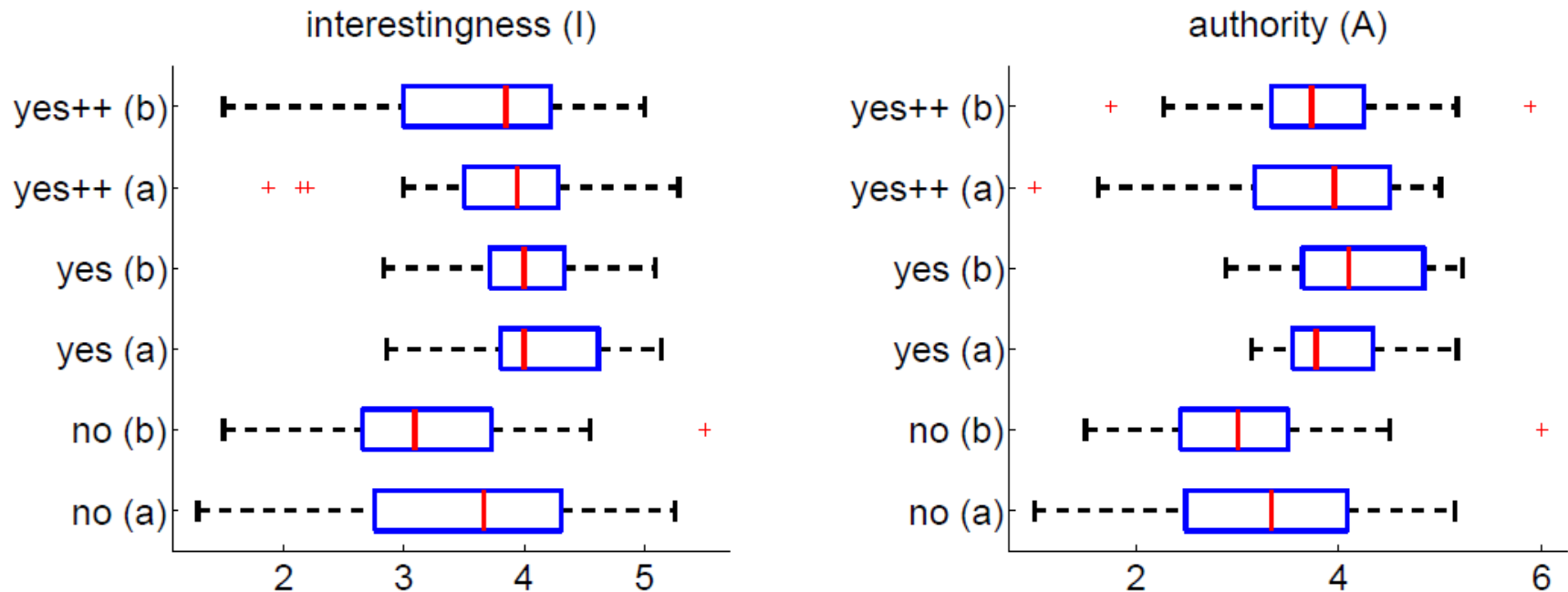
Most top authors are gender neutral (e.g., Time, Mashable)
Men higher than women when anonymous, but drop more when names shown
Women get slight bump when names shown

RESULTS – FACTORS FOR BIAS: TYPE



Organizations generally fare better, no drop when name shown
Humans and Can't Say see significant drop with names ($p < .01$)

RESULTS – FACTORS FOR BIAS: TOPICAL



Highly topical names no better than moderately topical
Moderately topical and not topical see significant increases/decreases when names are shown ($p=.02$)

TAKE-AWAYS

On average, authors are actually hurt by the presence of their name.

TAKE-AWAYS

On average, authors are actually hurt by the presence of their name.

“Average” and “Bad” authors are particularly hurt by the presence of their name, despite authoring content that is of roughly comparable quality to “Good” authors.

TAKE-AWAYS

On average, authors are actually hurt by the presence of their name.

“Average” and “Bad” authors are particularly hurt by the presence of their name, despite authoring content that is of roughly comparable quality to “Good” authors.

Authors with high follower counts reap the most benefit from their names being shown.

TAKE-AWAYS

On average, authors are actually hurt by the presence of their name.

“Average” and “Bad” authors are particularly hurt by the presence of their name, despite authoring content that is of roughly comparable quality to “Good” authors.

Authors with high follower counts reap the most benefit from their names being shown.

Properties of names:

- Female names consistently rated lower

- Organizations and moderately topical names see most positive shift

- Off-topic, not clearly human or organization most negative shift

What's In a @Name? How Name Value Biases Judgment of Microblog Authors

ADITYA PAL & SCOTT COUNTS