

Behavioral Responses to Fact-Checking Interventions in Online Social Networks

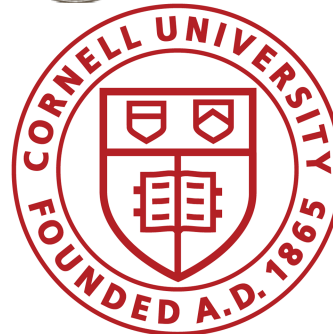
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Sunbelt XXXIV
St. Pete, Florida
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Motivation

- Prevalence of misinformation in online conversations
- Ideal of fact-checking sources preventing misinformation from spreading
- Fact-checking is not actually that effective

Facebook Closure

Claim: Facebook will be closing down for good on 15 May 2013.

 **FALSE**

Examples:

 *[Weekly World News, October 2012]*

Mark Zuckerberg announced that Facebook will be shut down in May. Managing the site has become too stressful.

"Facebook has gotten out of control," said Zuckerberg in a press conference outside his Palo Alto office, "and the stress of managing this company has ruined my life. I need to put an end to all the madness."

Terminology



Dr Veronica Anderson @DrVeronicaEyeMD · 20 Dec 2012

If the facts don't fit the theory, change the facts.
Albert Einstein

Details

Reply Retweet Favorite More

Snopee



Chuck Pell @ChuckPellCAP · 20 Dec 2012

@DrVeronicaEyeMD Sorry, he didn't say that. No scientist ever would. Data rules, failed hypotheses drool.

Details

Reply Retweet Favorite More

Snooper



Chuck Pell @ChuckPellCAP · 20 Dec 2012

@DrVeronicaEyeMD The wooly, poorly researched sites have all kinds of things Einstein supposedly said. Its an old trick
snopes.com/quotes/einstei...

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Reply Retweet Favorite More



Dr Veronica Anderson @DrVeronicaEyeMD · 20 Dec 2012

@ChuckPellCAP Oh well. You can feel good being right. Do you have a scientific method for proving it though?

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Background – Ineffectiveness of fact-checking

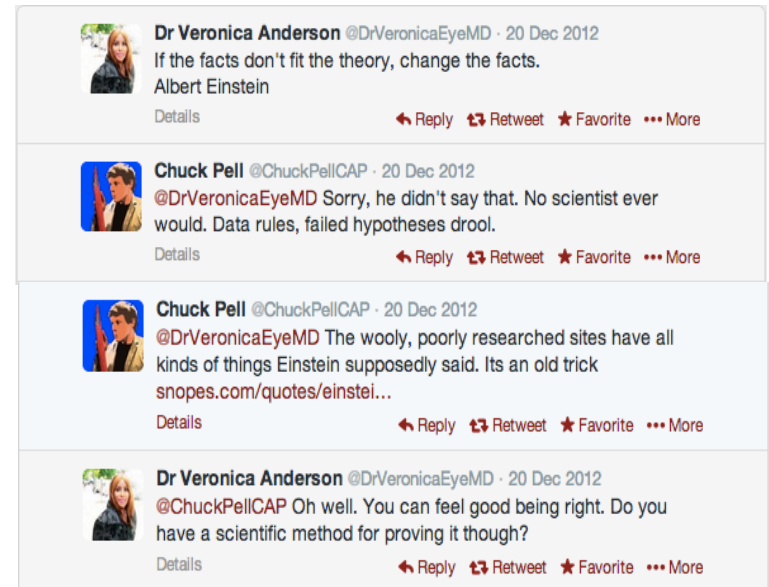
- Presentation of “correct” information has limited effects in change in individual attitudes (Nyhan & Reifler, 2010; Garrett, 2011)
- Difficulty of dislodging “stick” misinformation arises from consistency with attitudes, beliefs, and worldviews (Ecker, Lewandowsky, & Tang, 2010)
- Friends more likely to share worldviews, thus fact-checks from friends more likely to be worthy of consideration than from strangers (Garrett, Nisbet, & Lynch, 2013)

Research Questions

1. Who snopes whom?
 - What is the relative status of snopers & snopees?
2. Do snopes matter?
 - Do people respond to being snoped?
3. Where do snopes happen?
 - Do these occur within or between subcommunities?

Data

- Tweets between January 2012 and August 2013
- Conversational
- Link to a fact-checking website
- History of snopers and snopees
- ~1600 fact-checking events
- Post-hoc (January 2014) crawl of followers' networks



The screenshot shows a Twitter thread with four tweets. The first tweet is from Dr. Veronica Anderson (@DrVeronicaEyeMD) on Dec 20, 2012, stating: "If the facts don't fit the theory, change the facts. Albert Einstein". The second tweet is from Chuck Pell (@ChuckPellCAP) on Dec 20, 2012, replying: "@DrVeronicaEyeMD Sorry, he didn't say that. No scientist ever would. Data rules, failed hypotheses drool.". The third tweet is also from Chuck Pell (@ChuckPellCAP) on Dec 20, 2012, replying: "@DrVeronicaEyeMD The wooly, poorly researched sites have all kinds of things Einstein supposedly said. Its an old trick snopes.com/quotes/einstei...". The fourth tweet is from Dr. Veronica Anderson (@DrVeronicaEyeMD) on Dec 20, 2012, replying to Chuck Pell: "@ChuckPellCAP Oh well. You can feel good being right. Do you have a scientific method for proving it though?". Each tweet includes a profile picture, name, handle, date, text, and interaction buttons (Reply, Retweet, Favorite, More).

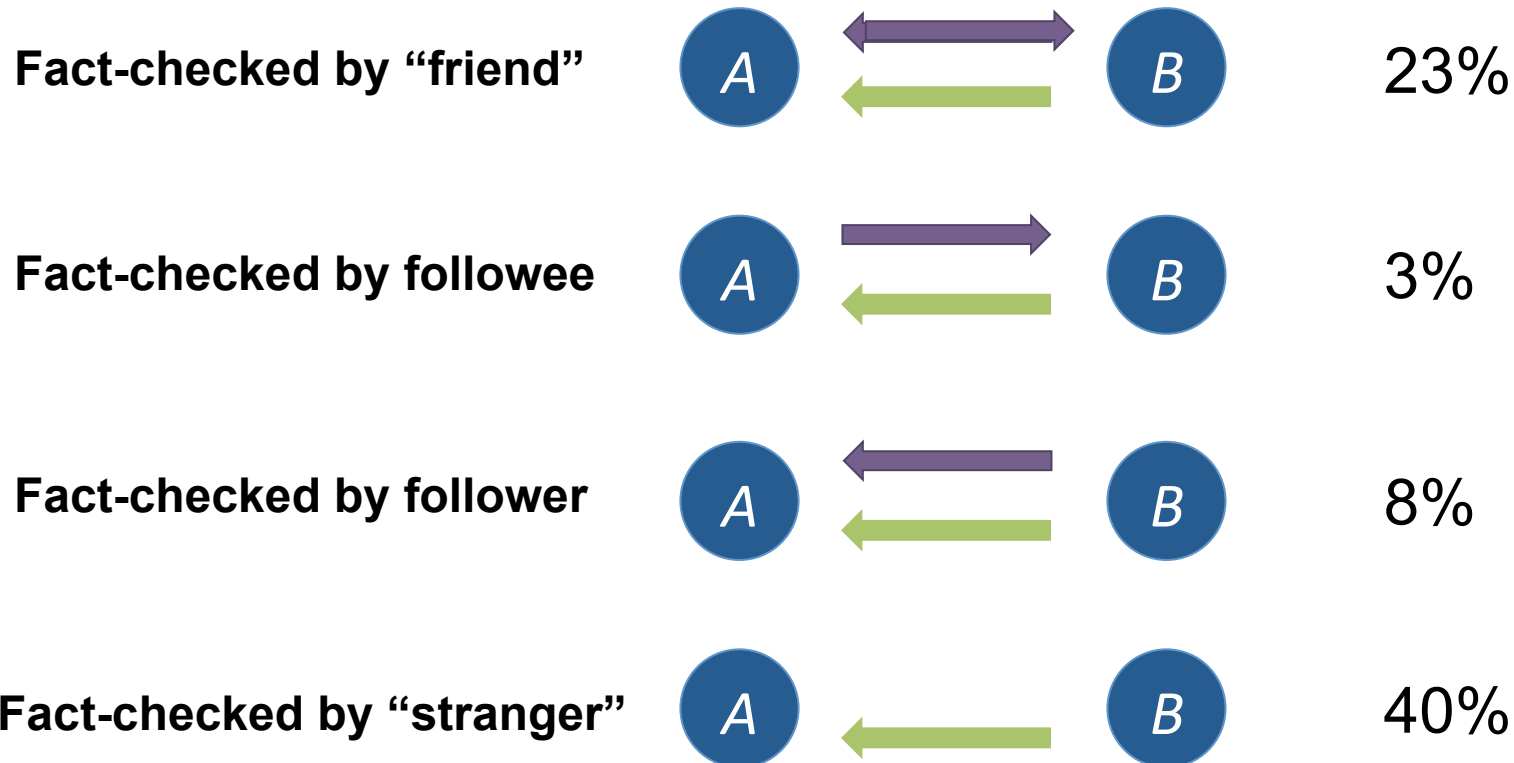
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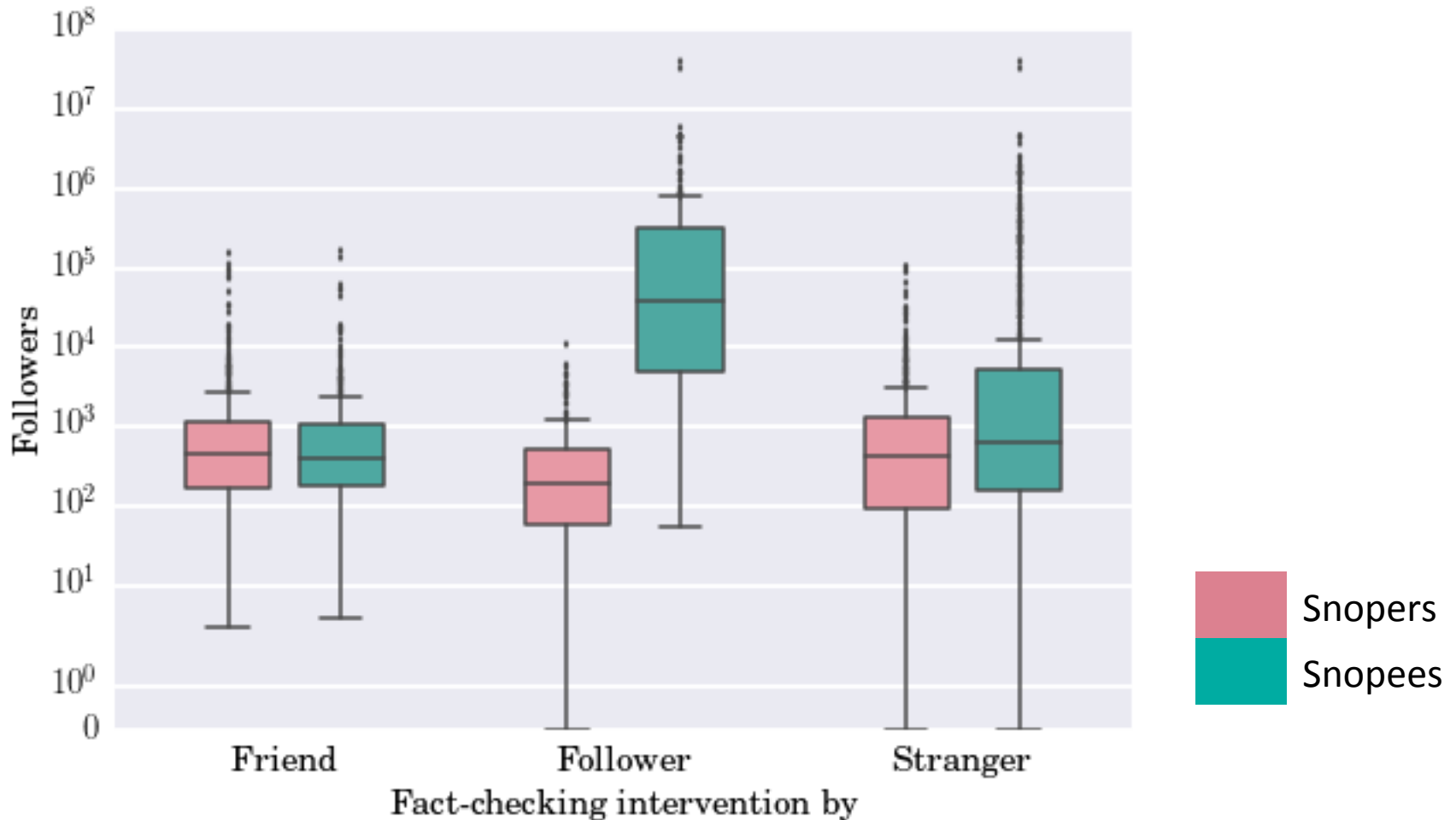
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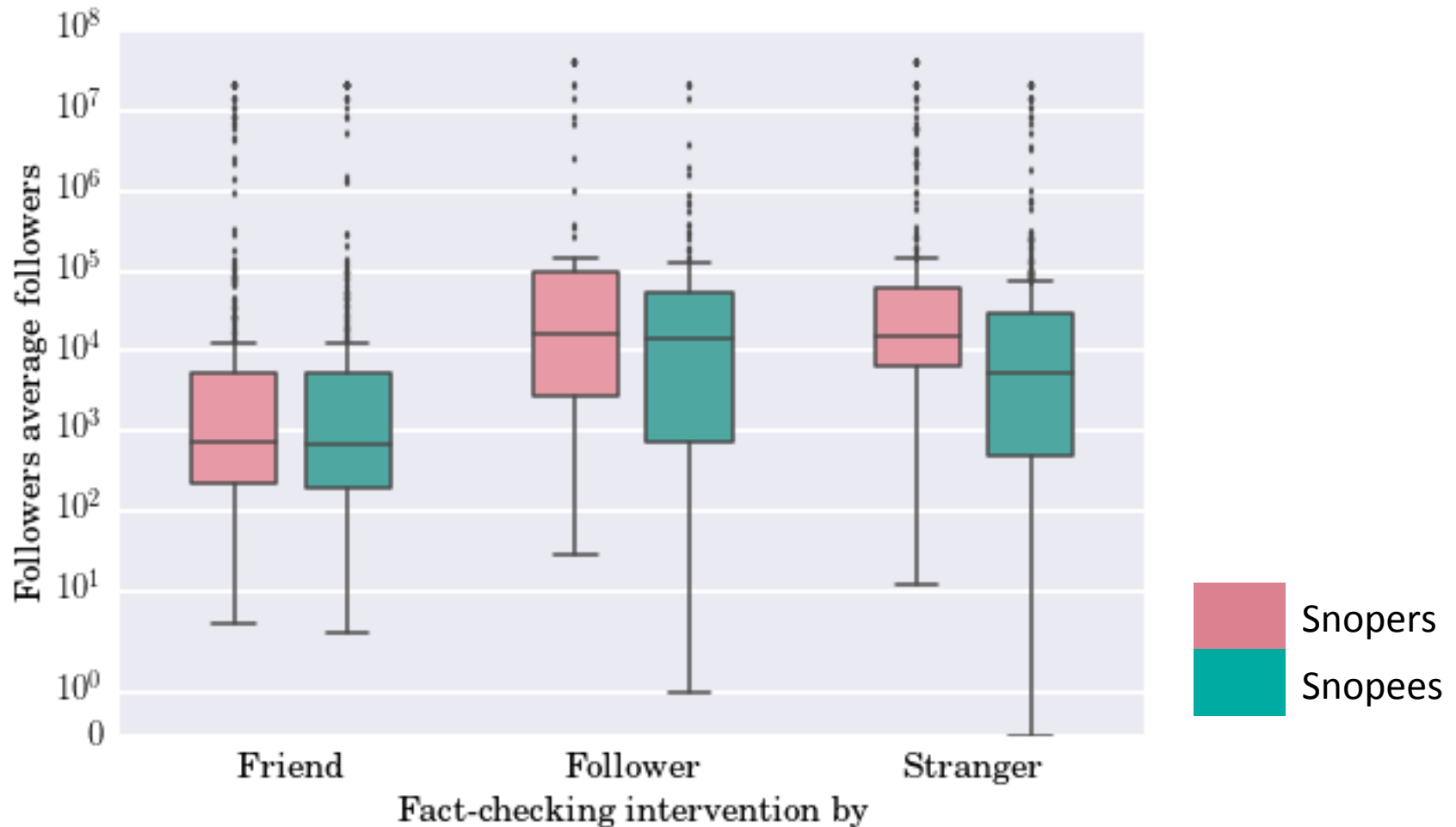
Snoping types



Differences in structural position



Differences in structural position



Recognition of snoping events

- @-mentions before and after snoping
- Conversational vs Out-of-the-blue snopes
- Most snoping events are out-of-the-blue

	Followee	Follower	Friend	Stranger
Acknowledged	4%	4.9%	12.3%	3.9%
Not ack.	96%	95%	88%	96%

In out-of-the-blue snoping events the snoper is more likely to be acknowledged among friends

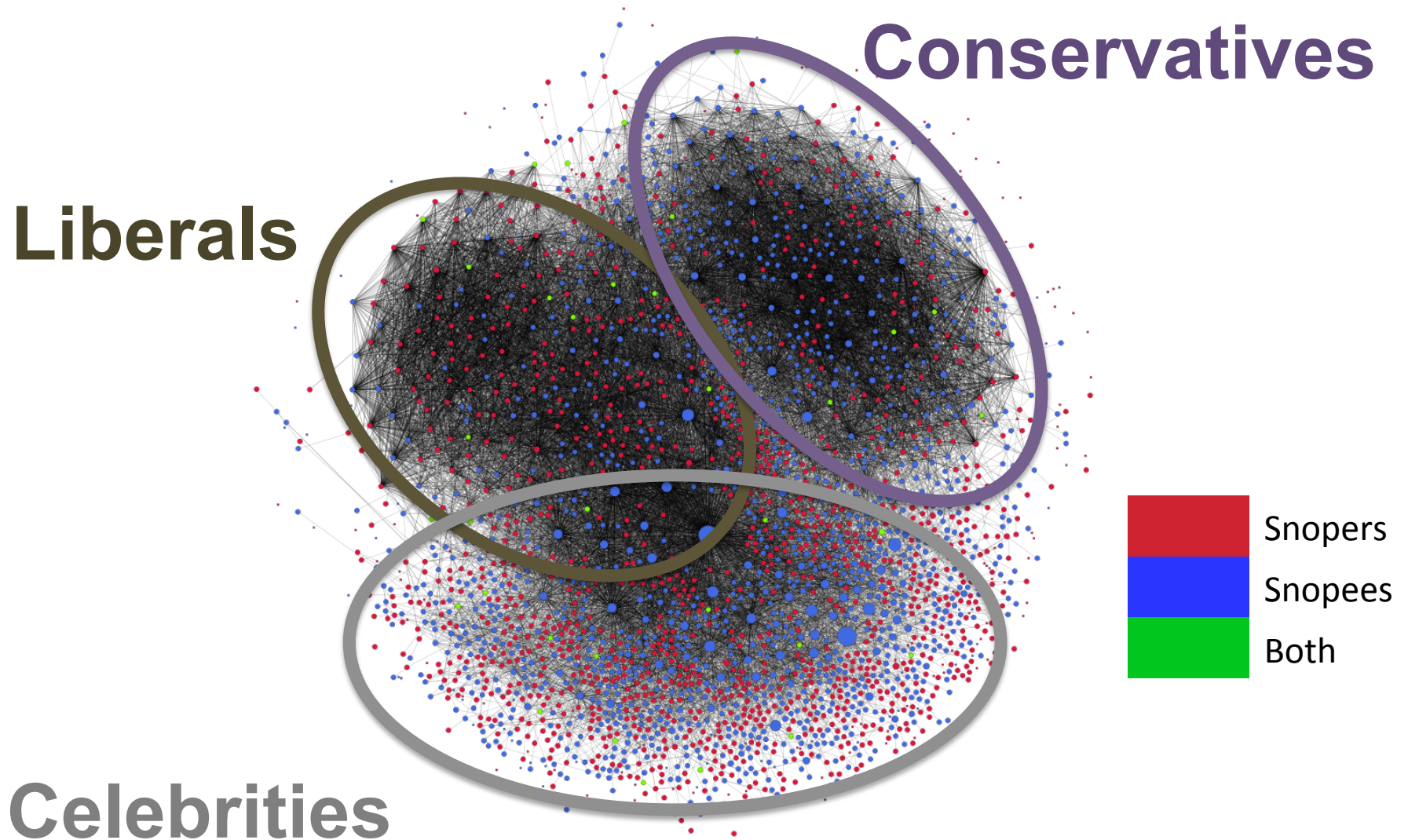
Challenging Snopes

Challenge: Snoper contradicting the snopee

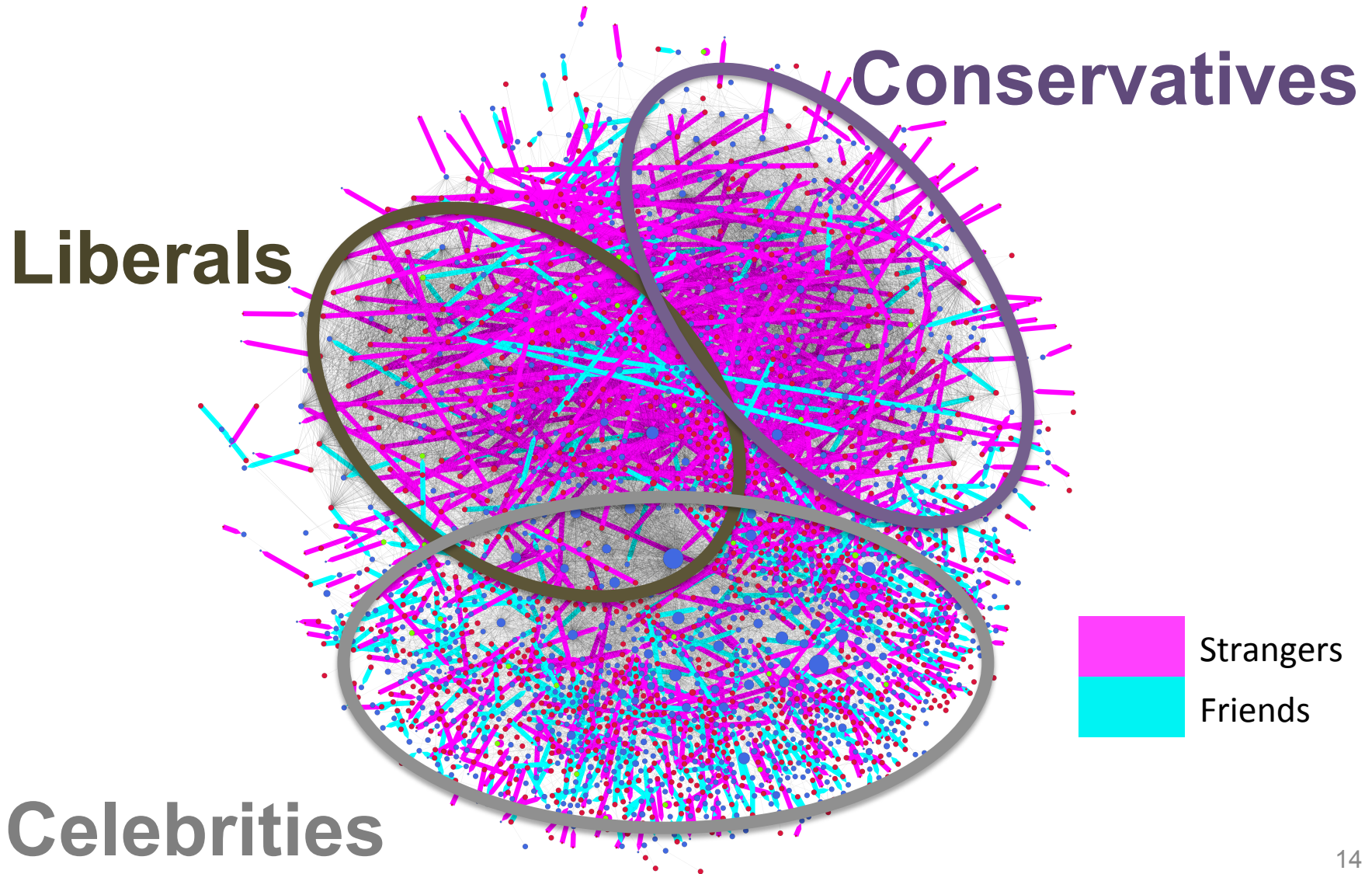
Hand coding tweet pairs where snoper acknowledged snopee

- Challenges are less likely between friends
- Challenges are more likely to be accepted by friends

LCC of follower graph



Snoping edges



Discussion and future work

- Social contexts of snopes are important for understanding their intent and impact
- Snopes by friends 3x more likely to promote discussion
- Snoping activity on Twitter is largely “sniping” between political activists in different camps rather than policing claims made by fellow group members

- Clustering algorithm on network
- Focus on politics
- Baseline dataset of simple replies

Thank you!