

# "PEOPLE ARE EITHER TOO FAKE OR TOO REAL"

## OPPORTUNITIES & CHALLENGES IN TIE-BASED ANONYMITY

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IT UNIVERSITY OF COPENHAGEN



@infoxiao



# GOSSIP GIRL 🤗

MASQUERADE BALL, EVERYBODY!





# ANONYMOUS WITH FRIENDS





# GRAD SCHOOL



secret

# ANONYMOUS SOCIAL APP: SECRET

Founded

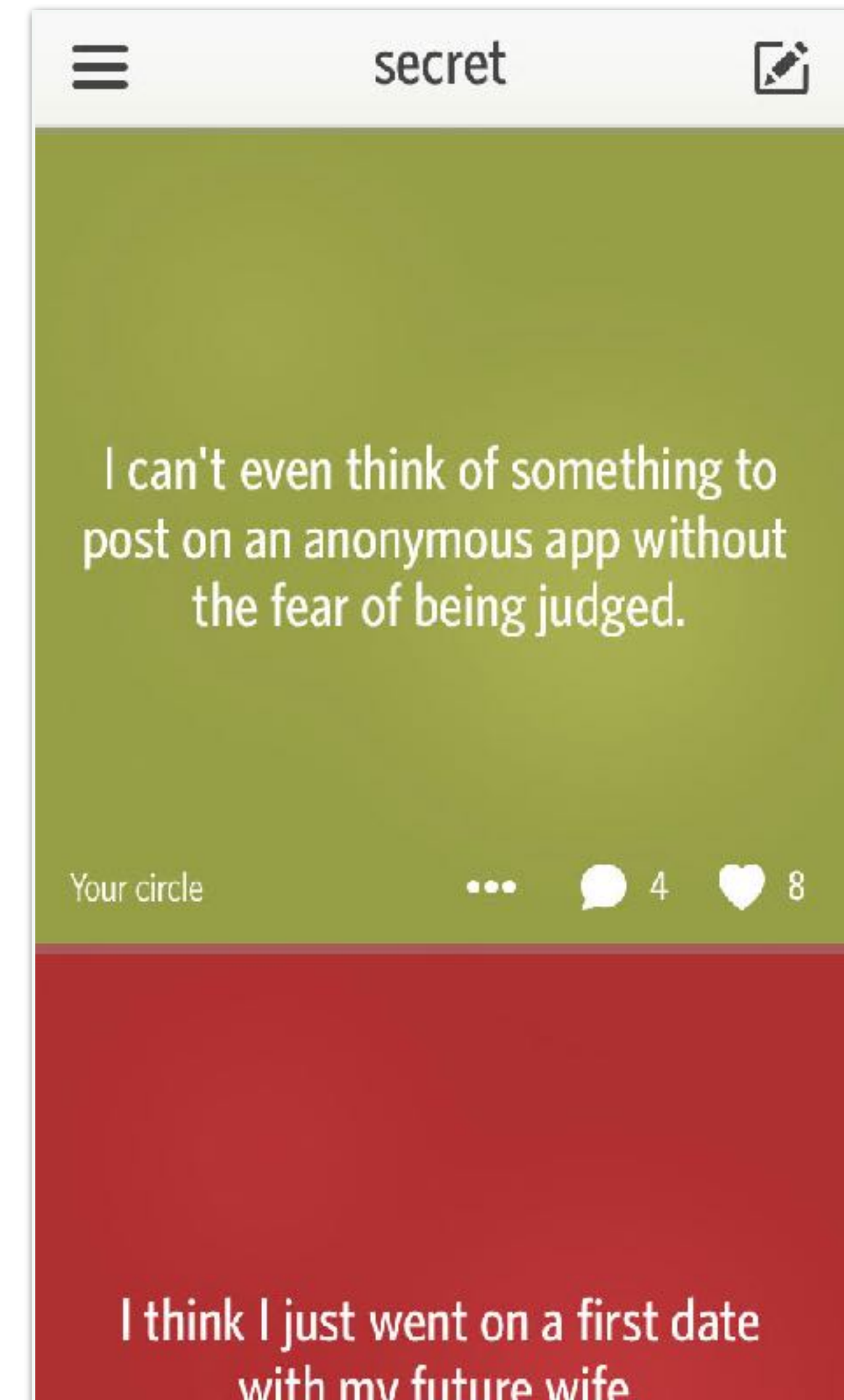
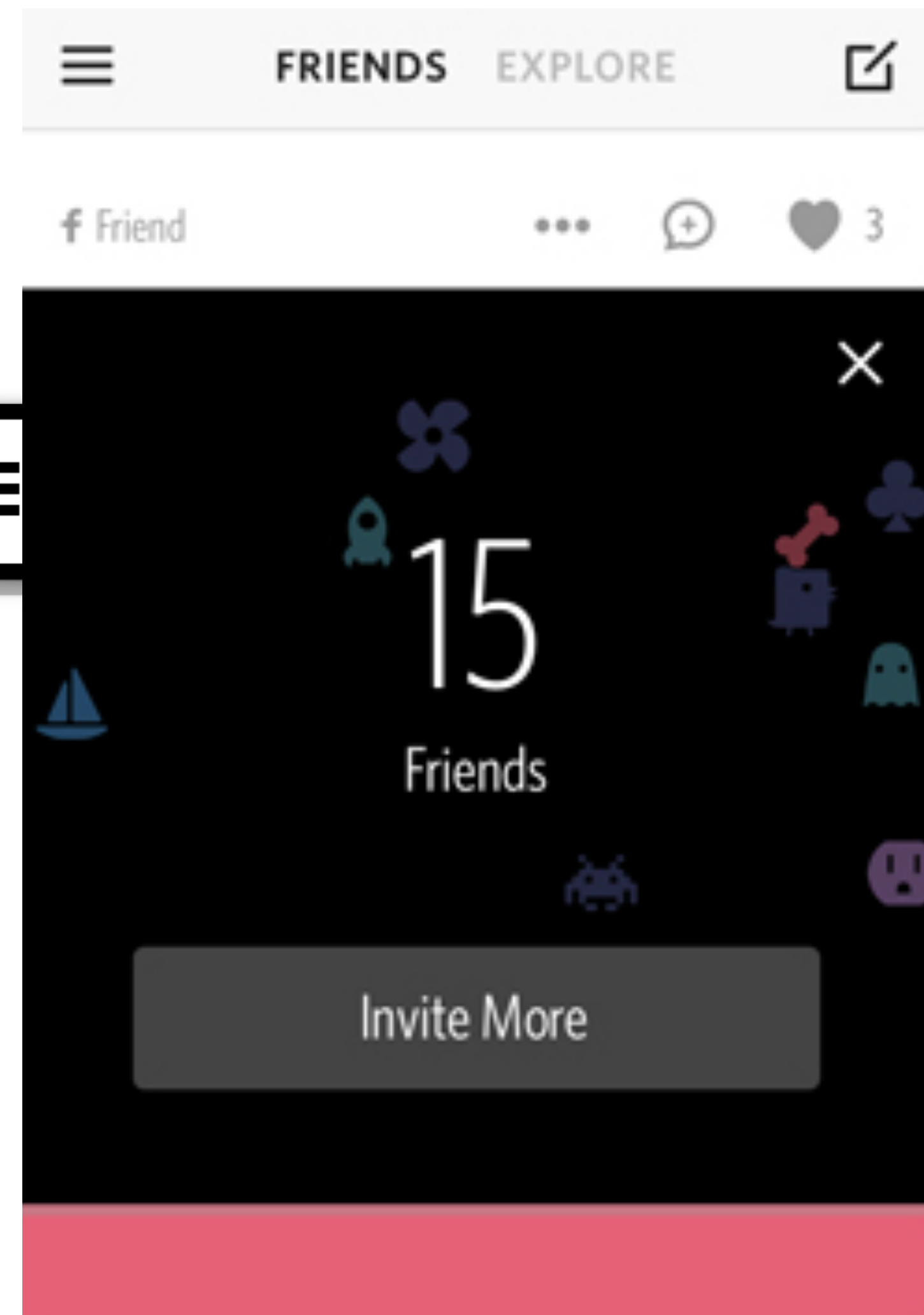
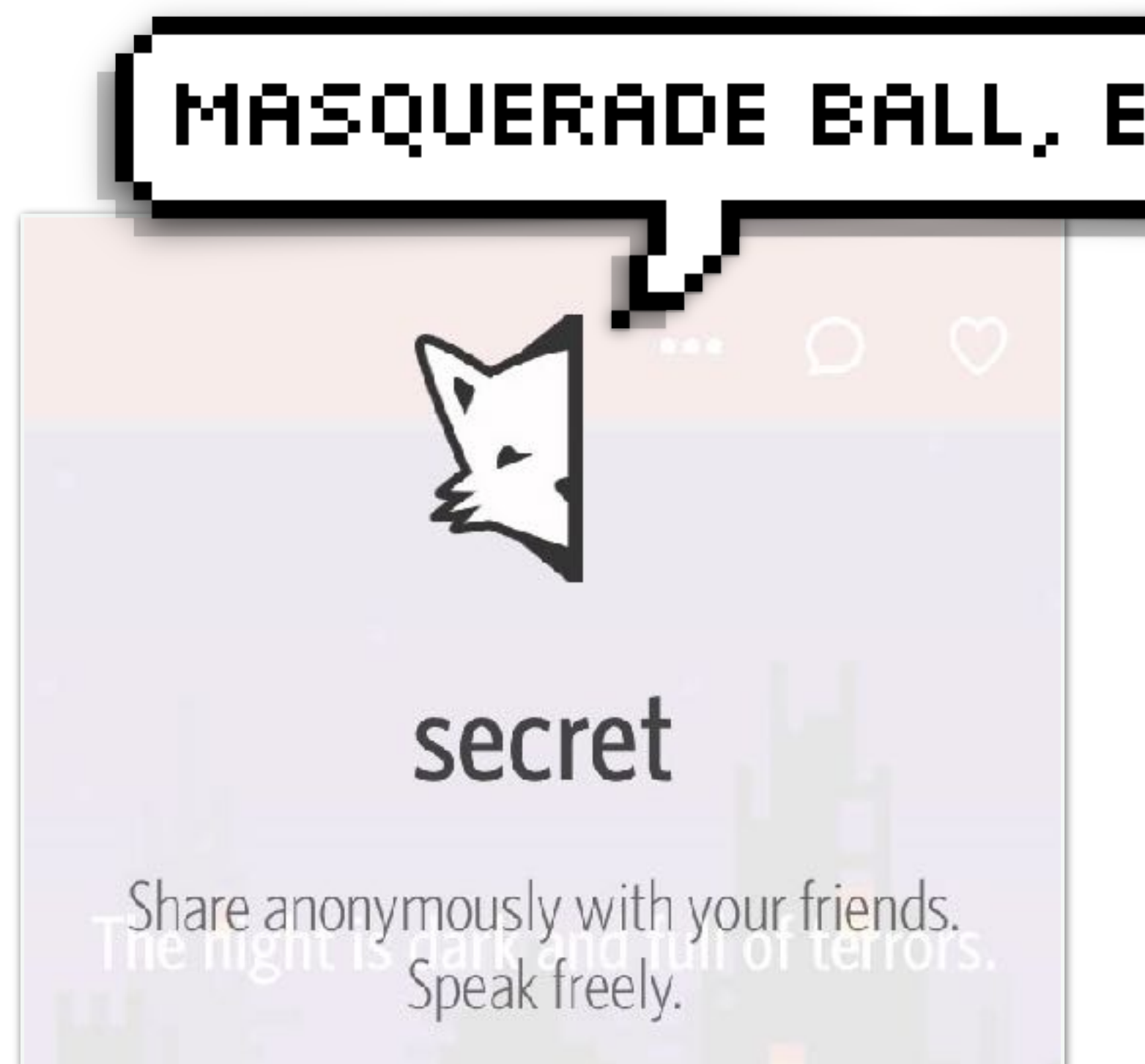
Oct 2013

Peaked

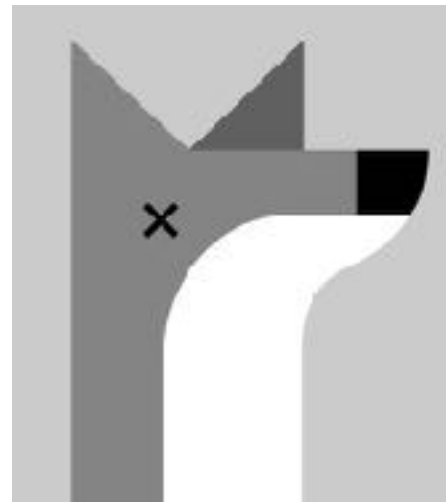
Aug 2014

Closed

Apr 2015



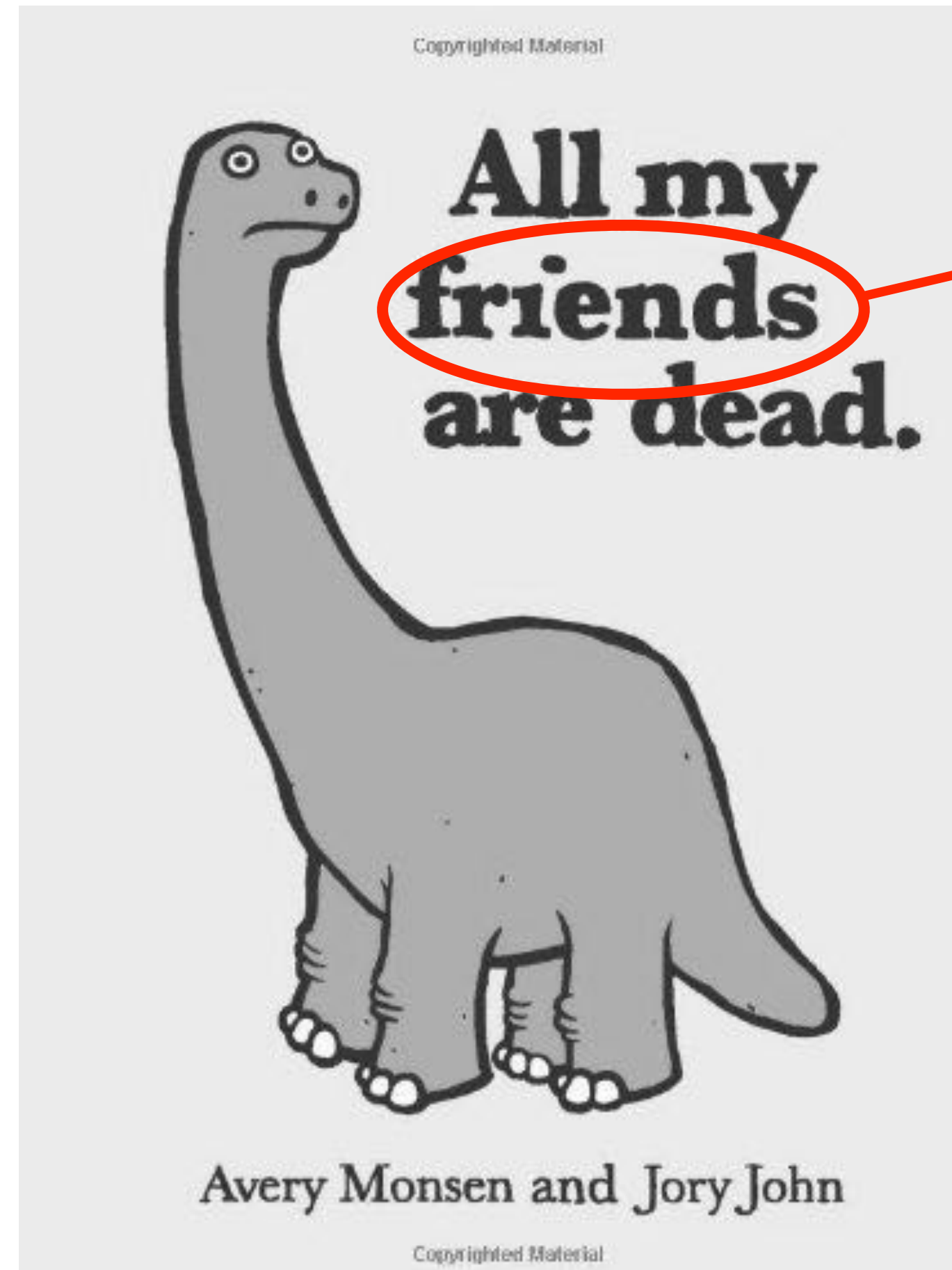
# THE LIFE AND DEATH OF (GREAT) ANONYMOUS SOCIAL APPS



Secret

Closed

Apr 2015



Yik Yak



Whisper



# SPEAK FREELY?



Secret

Be yourself.

Secret is a space to openly share what you're thinking and feeling with your friends. Speak freely, share anything.



Yik Yak

FIND YOUR HERD

Yik Yak helps you feel at home within your local community.



Whisper

Express yourself  
openly and **honestly**

ADWEEK

BRAND MARKETING

## Anonymous Apps Like Whisper and Secret Have a Dark Side

Abusive language and bullying have brands proceeding with caution

By David Gianatasio | September 15, 2014

The Telegraph

HOME » TECHNOLOGY » TECHNOLOGY NEWS

## Yik Yak: Teen bullied on the anonymous app for attempting suicide starts petition for it to be banned

Over 80,000 people sign a petition calling for Yik Yak to change its policies or be banned from the App Store after a brave young women told her story

THE BLOG 10/03/2014 01:50 pm ET | Updated Dec 03, 2014

## Why Your College Campus Should Ban Yik Yak



By Ryan Chapin Mach

“

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FAKE OR TOO REAL.

”



# OUTLINE

## Background

## Method

## Results

## Discussion

Tie-Based Anonymity

Location-Based Anonymity

Motivation and use

Identity Management

De-Anonymization

Intimacy, Support and Encouragement

Debates, Conflicts and Bullying

Revisiting: Persistence of Use

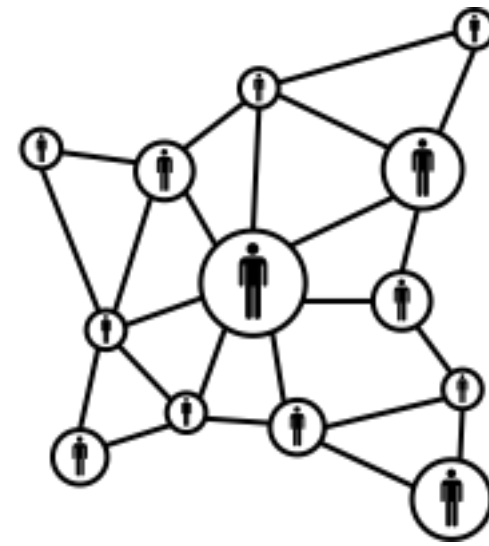
Opportunities

Challenges

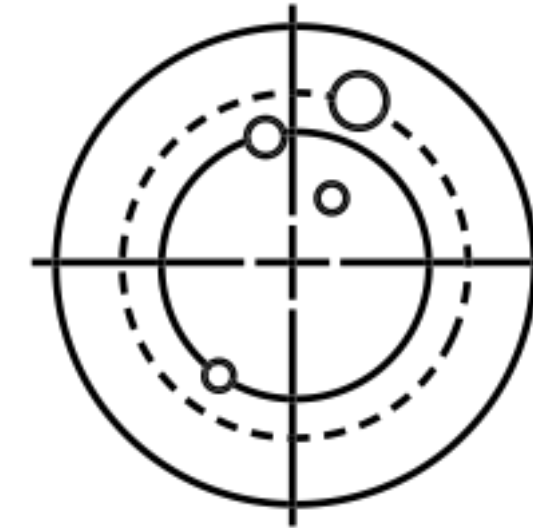
Design Implications



# BACKGROUND: TIE-BASED / LOCATION-BASED ANONYMITY



Secret

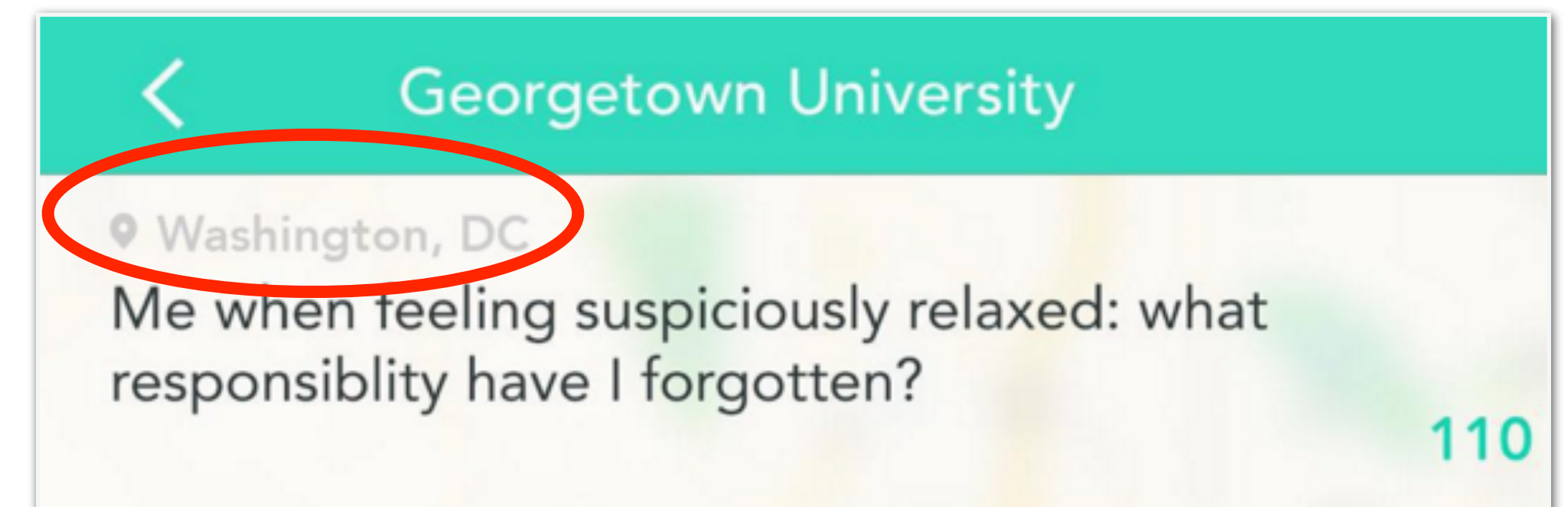
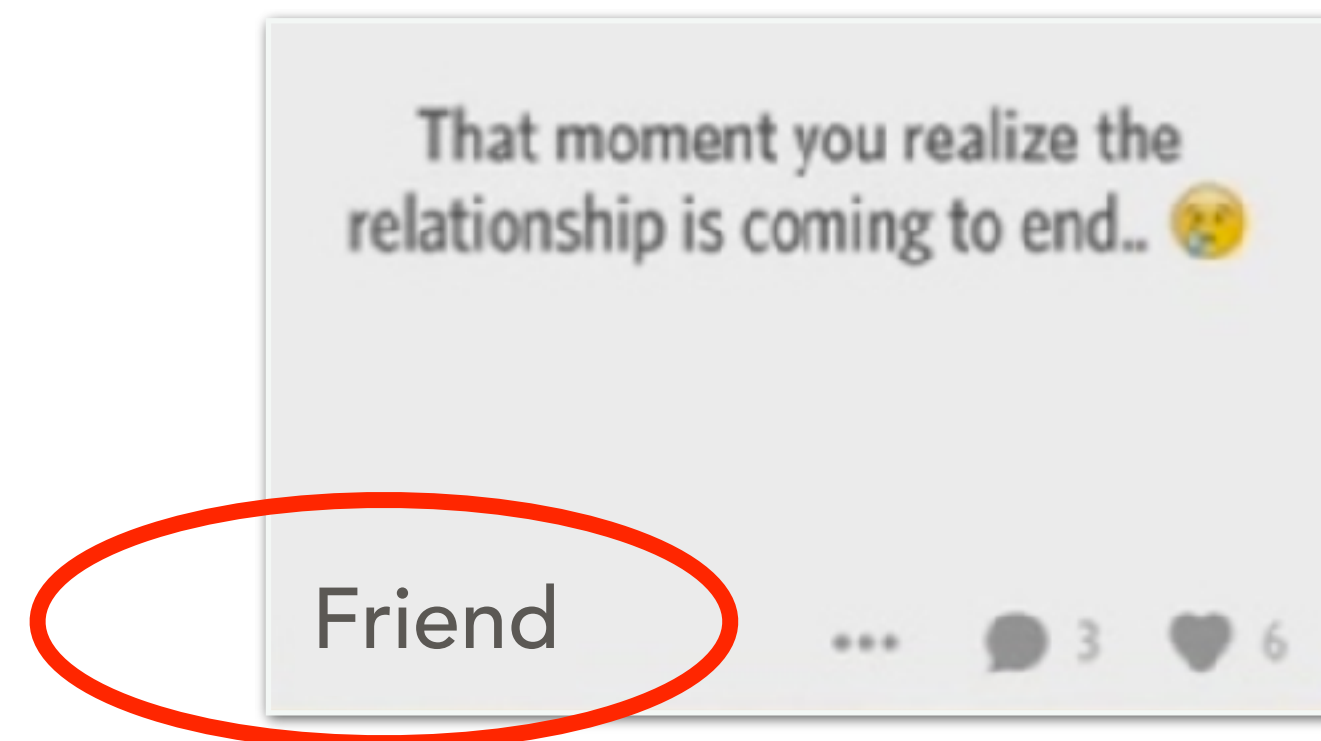


Yik Yak

Posts are identified by

Tie-Based Anonymity:  
Social ties

Location-Based Anonymity:  
Location





# PREVIOUS WORK

	Wang et al. IMC '14	Correa et al. ICWSM '15	Kang et al. CSCW '16	Ma et al. CHI '16	This Work CHI '17
Method	Quantitative	Quantitative	Qualitative	Experiment	Qualitative
Platform				Hypothetical	
Anonymity Type	Partially Location-Based	Partially Location-Based	Mixed	Both	Tie-Based 



# RESEARCH QUESTIONS

RQ1. What **type of interactions** do tie-based anonymous social networks afford?

RQ2. What **benefits and affordances** do users of tie-based anonymous social networks experience?

RQ3. What are the **perceived drawbacks and negative experiences** by users of tie-based anonymous social networks?



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# METHOD: SEMI-STRUCTURED INTERVIEW

## 1. Two platforms

- 9 Secret users: 6 men, 3 women
- 6 Mimi user (the Chinese counterpart of Secret): 3 men, 3 women
- Age: 22 to 37 for Secret; 21 to 27 for Mimi.

## 2. Recruitment

- Convenience & Snowball sampling

## 3. Interview & Translation

- Over phone/Skype; Compensated \$20 for 30-60 min interview
- Translated from Chinese to English when necessary

## 4. Second round interview

- 7 months later; when Secret changed in functionality significantly

## 5. Analysis

- Qualitative categorization and thematic analysis



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# RESULTS: IDENTITY MANAGEMENT

1. Reduced need for identity management
2. Identity considerations persisted

“

*When I'm feeling depressed [. . . ] I don't want people to know who I am, so I intentionally hide my speech habits. For [other types] I don't really care so I don't change anything in particular —F22*

”



# RESULTS: DE-ANONYMIZATION

## 1. “Hard-hacking”

## 2. “Soft-hacking”

- (1) Contact list
- (2) Share screenshots with friends
- (3) Comparing and triangulating

# RESULTS: INTIMACY, SUPPORT AND ENCOURAGEMENT

1. Post more intimate things

2. Most participants found support (67%)

“

*I think most of them were friends, and they said something encouraging along the lines of “it’s important for your health, and I’m really sorry that that all happened. We’re here for you if you reach out to somebody to go with you.” —F24*

”



# RESULTS: INTIMACY, SUPPORT AND ENCOURAGEMENT

1. Post more intimate things
2. Most participants found support (67%)
3. Increased social awareness

“

*I had no idea that some people in my friend network questioned their sexual orientation. And they're afraid to talk about it in person, but they're okay with talking about it in sort of this anonymous aspect. [. . . ] so I think it's great for me to understand my group of friends better as a whole and maybe next time when I'm in a social gathering, I won't make any comments about people's sexual orientation or anything like that. —M24*

”

# RESULTS: DEBATES, CONFLICTS AND BULLYING

## 1. Negativity

## 2. Conflicts and bullying

“

*It's like a train wreck. . . it's a disaster when you look because you just can't believe that people are this terrible. —F22*

”



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# DISCUSSION: OPPORTUNITIES

## 1. Self-disclosure

- Self-disclosure itself has many benefits (Derlega et al. 1997, Pennebaker 2012);.
- Anonymity with friends: different benefit / risk dynamics.
- Allows people to explore aspects of their identity.



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## 2. Extending social behavior

- Social probing within friends: testing the water (Haimson et al. CHI '15).
- Better understanding of one's group of friends by observing (unique affordance of tie-base systems).

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## 3. Anonymity at will

- Selectively engage in anonymous social interactions (Ellison et al. 2016)
- **Identity steganography: transmit sensitive information to selected audience**



# DISCUSSION: CHALLENGES

## 1. Negativity and bullying

- Anonymity removes accountability
- Anonymity makes negativity easier to catch on
- Especially hurtful when negativity comes from social ties

## 2. Rumors and gossip

- Rumors are engaging
- Rumors thrive in secret environment
- Little risk in anonymous environment to spread rumor

## 3. Critical mass

- Tie-base anonymity model requires critical mass
- Cannot make new ties in the application
- Limited connections harms user experience

# THE FUTURE OF ANONYMOUS SOCIAL APPS



Yik Yak



Whisper



Blind



# DESIGN IMPLICATIONS

## 1. Anonymity Flashes

- Integrate with Facebook
- Allow users to post one anonymous post per day

## 2. Curbing Negativity

- Flagging and deleting negative content
- Gradually losing anonymity if flagged multiple times

“

PEOPLE ARE EITHER TOO  
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# SAY HI IF YOU SEE US



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**CORNELL  
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Computing &  
Informatics

IT UNIVERSITY OF COPENHAGEN



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Lab

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