

Lived Surveillance in NYC

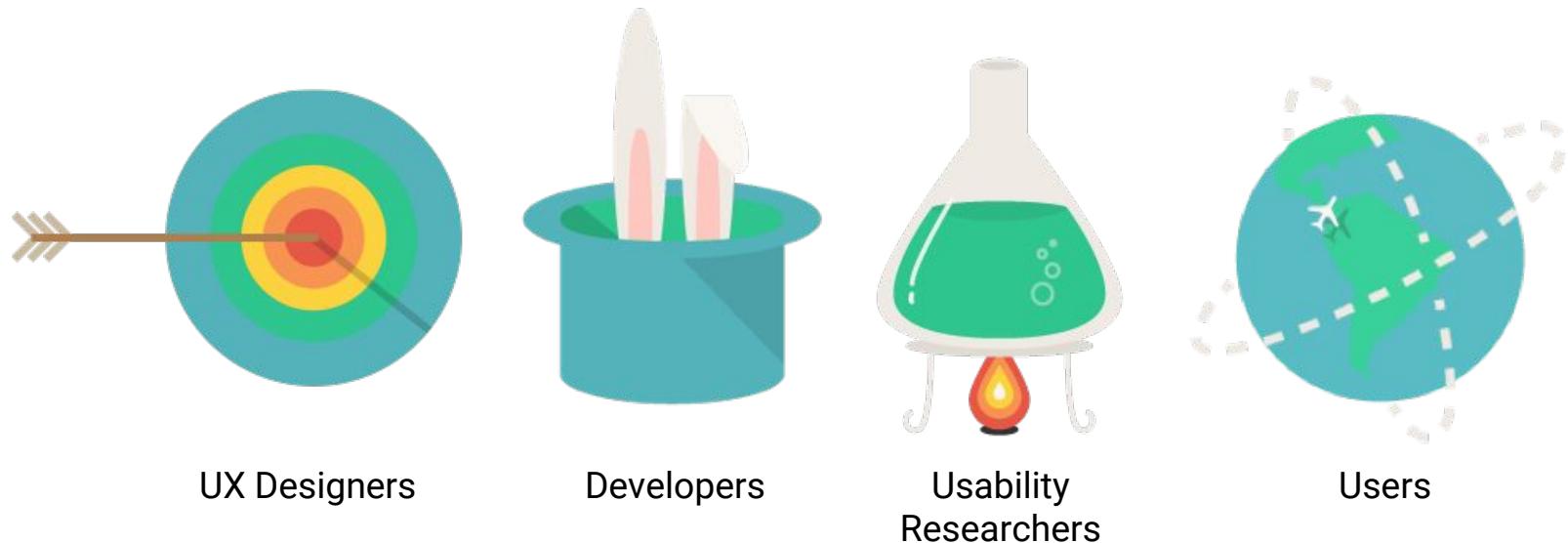
Design Implications for Mobile Messaging

Hello, I'm Ame



@ameellio
@simplysecureorg

Background: Simply Secure



Goals

- Foster the community of UX professionals involved in security & privacy
- Collaborate directly with technologists to improve software
- Create and distribute free, open resources

Ultimately:

- Privacy-preserving software is usable, useful – and *delightful* for everyone.



Qualitative Fieldwork

Informing design through observations and conversations

Study Design

Participants

- 12 African-American New Yorkers from Brownsville and Harlem
- All had smart phones and were enthusiastic messagers

Activities

- 1 focus group of 4 young men
 - 90 minutes
- 4 in-context interviews in homes, restaurants, and libraries with families (mothers and daughters, cousins)
 - 60 minutes

Semi-Structured Interviews

- Ice-breaker, rapport builder
- Current messaging practices, apps used, and why
- Thoughts on privacy
- Feedback on app store descriptions of secure messaging app

Motivation: Why Mobile Messaging?

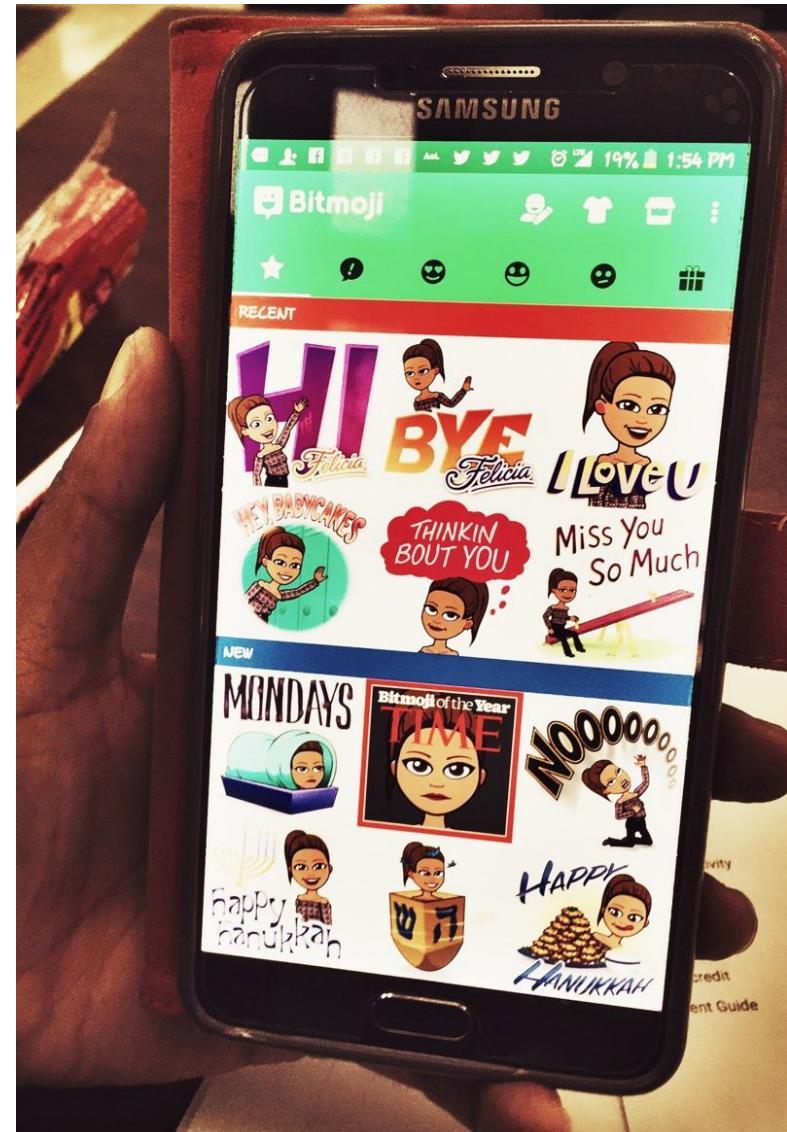
Cuts across personal and professional use cases

68% of American adults own smartphones

- Ownerships cuts across races and incomes (Pew Internet Survey)

Essential communication technology both in the US and internationally

- Next billion online are mobile-first and will not consider the desktop experience the default



Goals and Outcomes

Insights into privacy needs of low-income people of color

- What's similar/different from other populations?
 - Pew Internet study of Americans' attitudes to privacy and surveillance
 - Needs of privacy-aware InfoSec OSS contributors

Better understand end-user needs for secure messaging

- Spoiler: key problem actually upstream, with the value proposition

Identify concrete advice for developers to make their tools more appealing

Building open-source library of “study in a box” assets for teams without UX or user researcher expertise

- Recruiting screener, consent forms, interview guide, etc.



Human-Centered Design

Building empathy for people's experiences to build products that better serve them.



In-Context Interviews

Honoring participants' expertise through dialogue in semi-structured interviews.

Insights Illustrated



Surveillance is inevitable and privacy is impossible

If you're poor and Black and work at Chipotle or Best Buy, everything you do is suspect.
You're always on camera and that's the only way to prove your innocence.



Renters' Mindset

You're in a relationship with Cricket, or Metro PCS, and they're trying to get more money from you. They own your device and content and there's no way to hide from them.



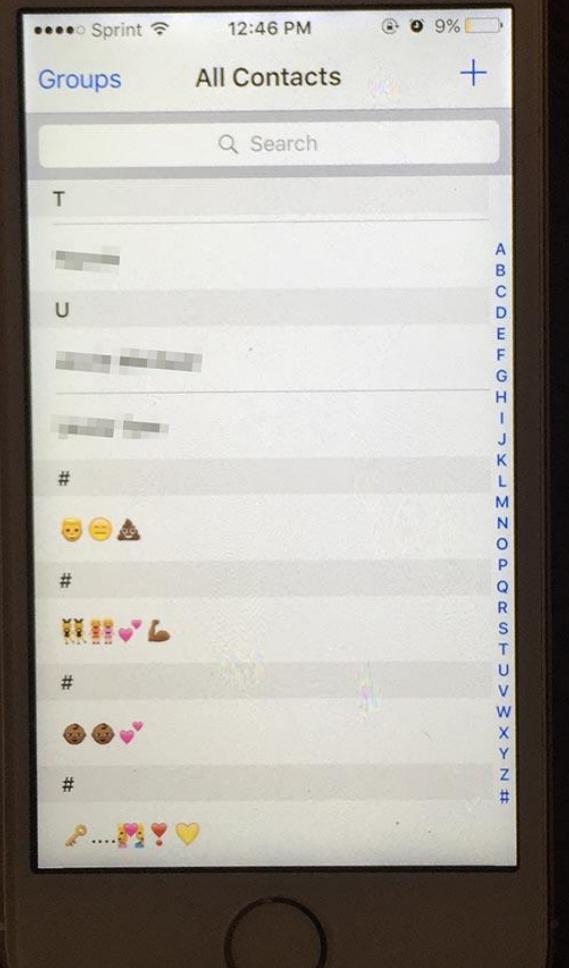
Storage space, glitches, and crashes

New apps must earn their way on since something has to come off to make space. New apps can make your phone glitch, so rush to delete before your phone crashes forever.



Family plans save money, and let crazy people hurt you
Estranged partners track you via your phone, impersonate you to the phone company to get all your text messages, and turn off your phone just to mess with you.

Enter Passcode



Physical security

Putting a password on your phone is important to prevent snooping. Emoji instead of names in a contact list make snooping at a glance harder.

Perceptions of Privacy



"People are stupid. They post something on Facebook and then the NSA kicks down their door."



“I’ve been pulled out of my car by a cop for racial profiling. Like how the feds read all the messages to see if something’s up. That’s just how it is.”



“Don’t talk about sensitive stuff on the phone. Like if someone’s illegal. You don’t know who’s listening in. Tell me about your Dominican situation in person.”



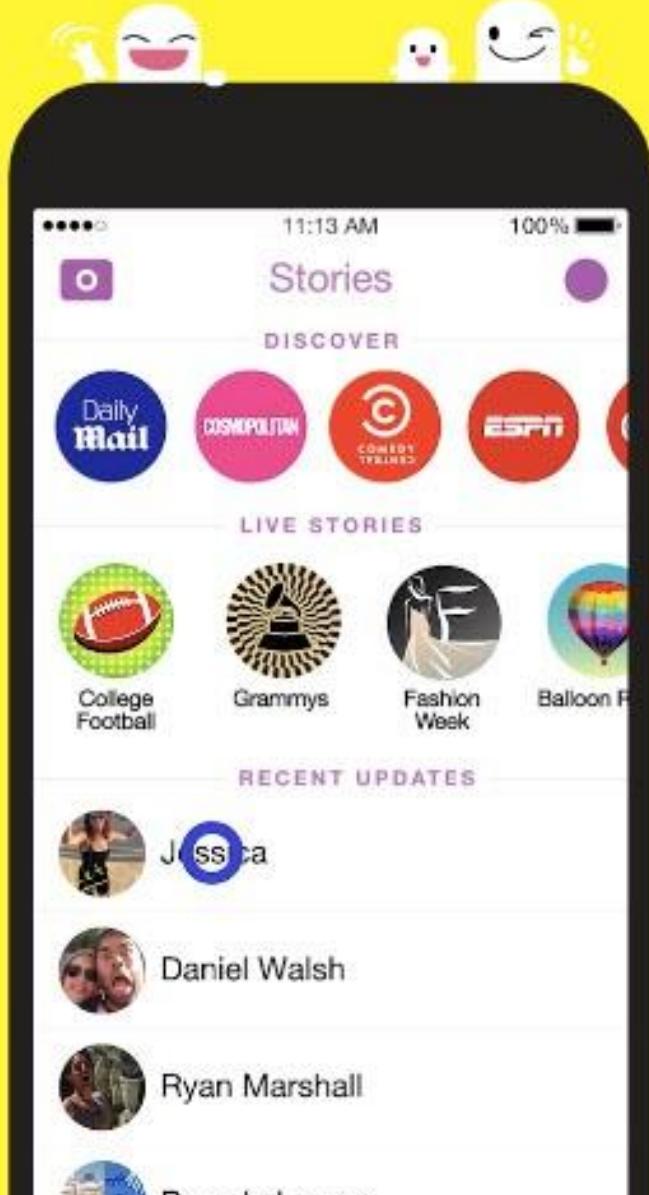
“Cops are catfishing people on Facebook. If you click on the wrong link – BAM they got you. They take over your account and get your friends.”

Initial Design Directions



Blocking is well-understood

Many people had pages of numbers they'd blocked or block lists in messaging apps. Can the metaphor be extended to talking about blocking carriers or governments?



Download now.



Time-limited messages are seen as secure

SnapChat was the participants' model for security. Secure messaging apps showing persistent messages were confusing since the messages were saved locally.

Conclusions

Summary of Findings

Surveillance is accepted as inevitable (in person, online)

“Renters’ mindset” of phone belonging to phone company

- Phone company has your number, it’s really their number
- Phone company can access all your messages
- Phone company messes with your phone to try to get you to upgrade
 - Glitchy apps and limited storage space are ongoing battles

Physical device security viewed as the key to privacy (screen lock, etc)

What Users Value

These participants take privacy violations for granted.

Their reaction to current secure-messaging apps in the Play Store?

- “Meh.”

More than any particular features, we need to understand how to communicate **value** to these users.

Or, more fundamentally: understand **what these users value**, and make sure that we are creating tools that match their wants and needs.

It's easy in security to say “you should want this”. We need to instead listen when people say “this is what I need”.

Next Steps for Secure Messaging

Design Opportunities

- Explore “blocked” as language for concealing content
 - Term used by participants to describe how they concealed content from others
- Review Snapchat’s functionality and description
 - Exploding or time-limited messages are seen as the standard for security
 - Makes sense if physical security is the priority

Write alternate copy for app store entries

- Highlight the value proposition
- Focus on users values and language

Provide specific guidance for tool developers to make secure communications accessible to this audience

- Work is ongoing
 - We’ve identified some “what not to do” items
 - What’s needed next is “do this instead”

Questions for Product Teams

Are you hammering nails, or looking for them?

- Who are your users?
- What do your users want, and how do you know that?

Are you designing for diverse users, or for people who look / think / value like you?

Countless privacy tools have shown that technical correctness is not enough.

- Are you content for this to be a niche tool, or do you want broad appeal?
- What are you doing to make sure your tool is useful to non-expert users?

Where are you in your human-centered design process?

- Empathize ↔ Define ↔ Ideate ↔ Prototype ↔ Test

To learn more about tech, surveillance, and the Black community

People:

Idalin Bobe i.l.bobe@gmail.com @idalinBobe
Bridget Sheerin bsheerin@thoughtworks.com

Groups:

Hands Up United

Malcolm X Grassroots Project:

Center for Urban Pedagogy

For more information about this presentation, contact

Ame Elliott
Design Director
ame@simplysecure.org
[@ameellio](https://twitter.com/ameellio)

Sara Sinclair Brody
Executive Director
scout@simplysecure.org
[@scouttle](https://twitter.com/scouttle)

Simply Secure