

What Happens in happn?

The Warranting Power of Location History

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THE METROPOLIS AND MENTAL LIFE

“

The mental attitude of the people of the metropolis to one another may be designated formally as one of reserve.

— Georg Simmel (1903)

”

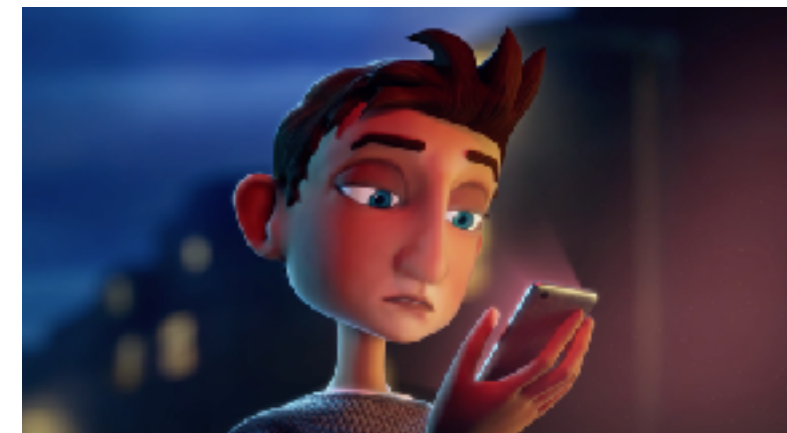
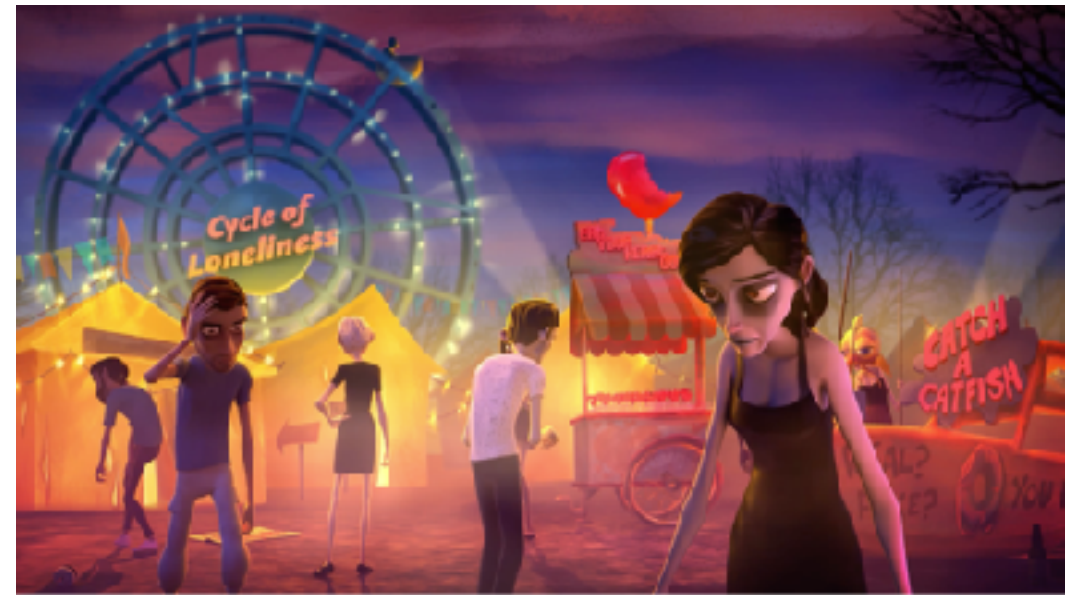
URBAN ALIENATION

URBAN ALIENATION



The Subway. George Tooker (1950)
Whitney Museum of American Art, New York.

URBAN ALIENATION — THE CASE OF DATING



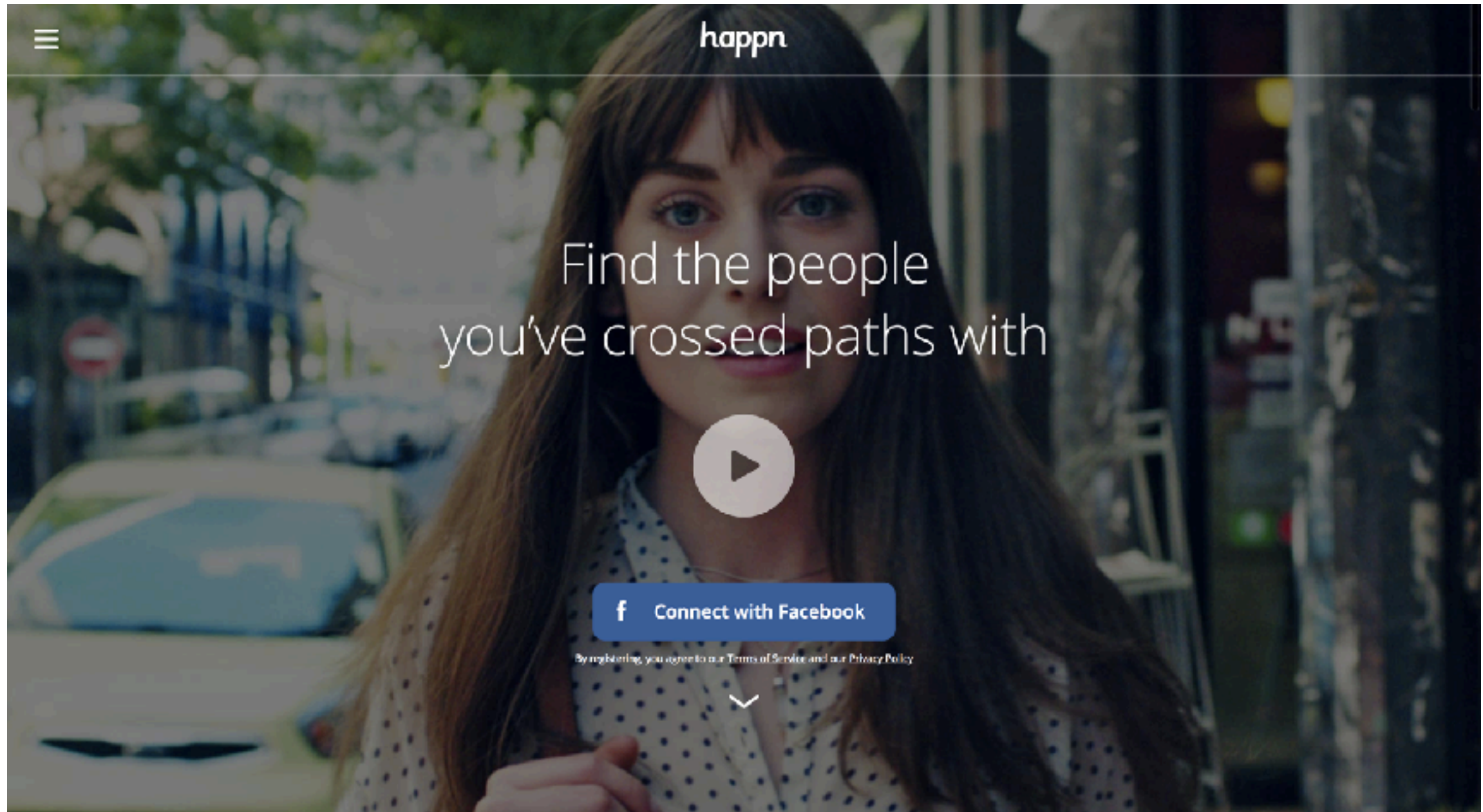
<https://thedatingapocalypse.com/> (2016)

CAN WE DO BETTER?

CAN TECHNOLOGY HELP US MAKE MORE MEANINGFUL CONNECTIONS?

e.g., *dating*, or connecting with neighbors, co-workers,
school mates, bowling partners...

HAPPN



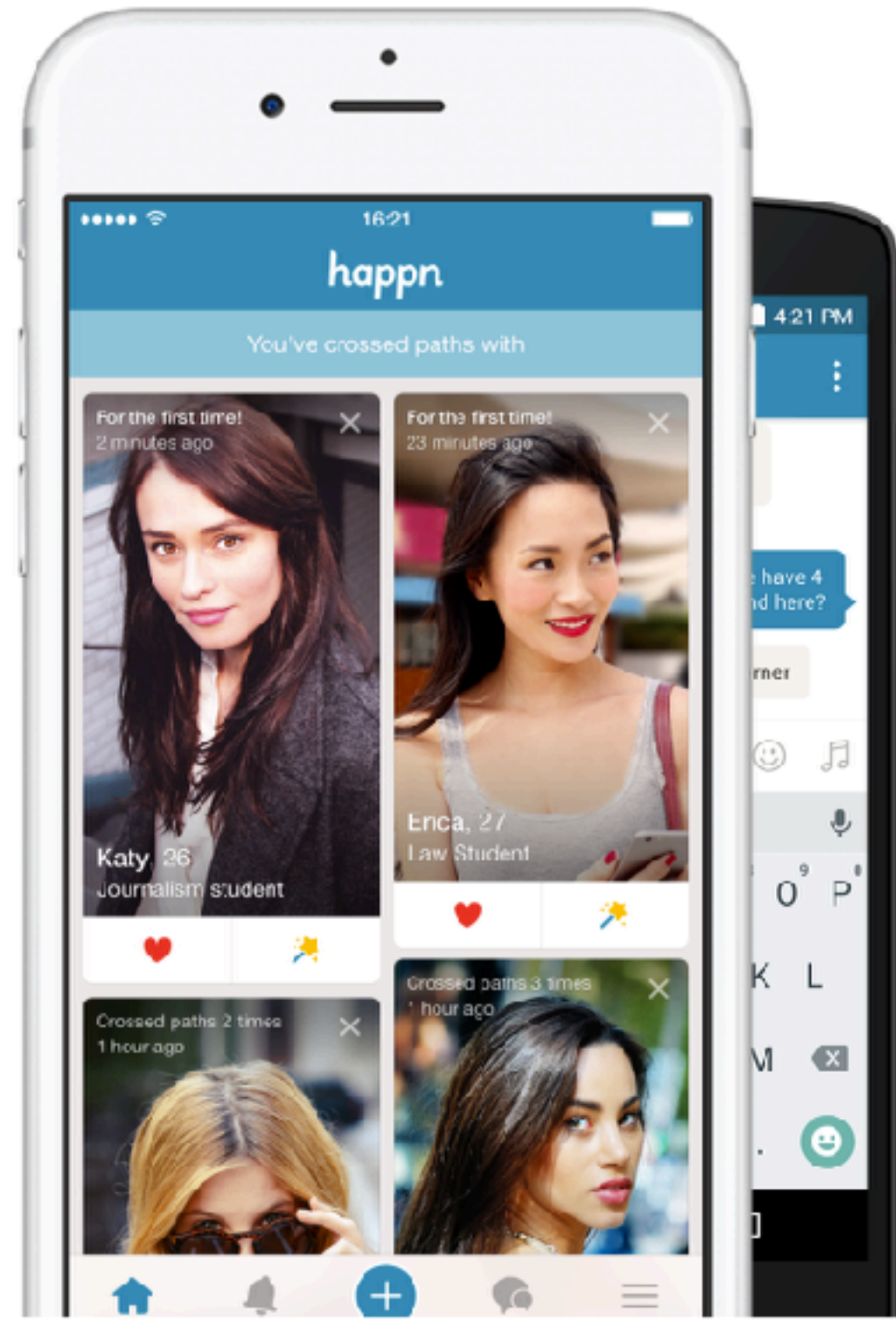
HAPPN

Allow "happn" to access your location even when you are not using the app?

We'll only use your location to find people you've crossed paths with.

Don't Allow

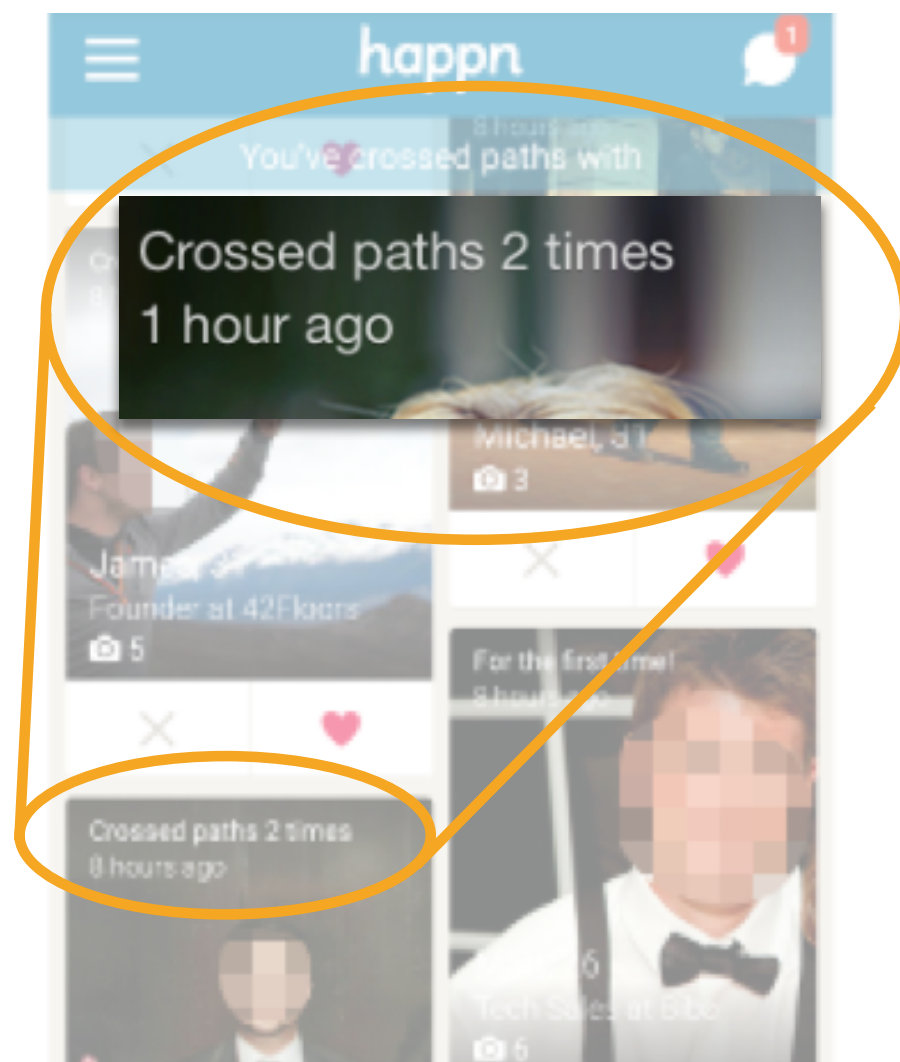
Allow



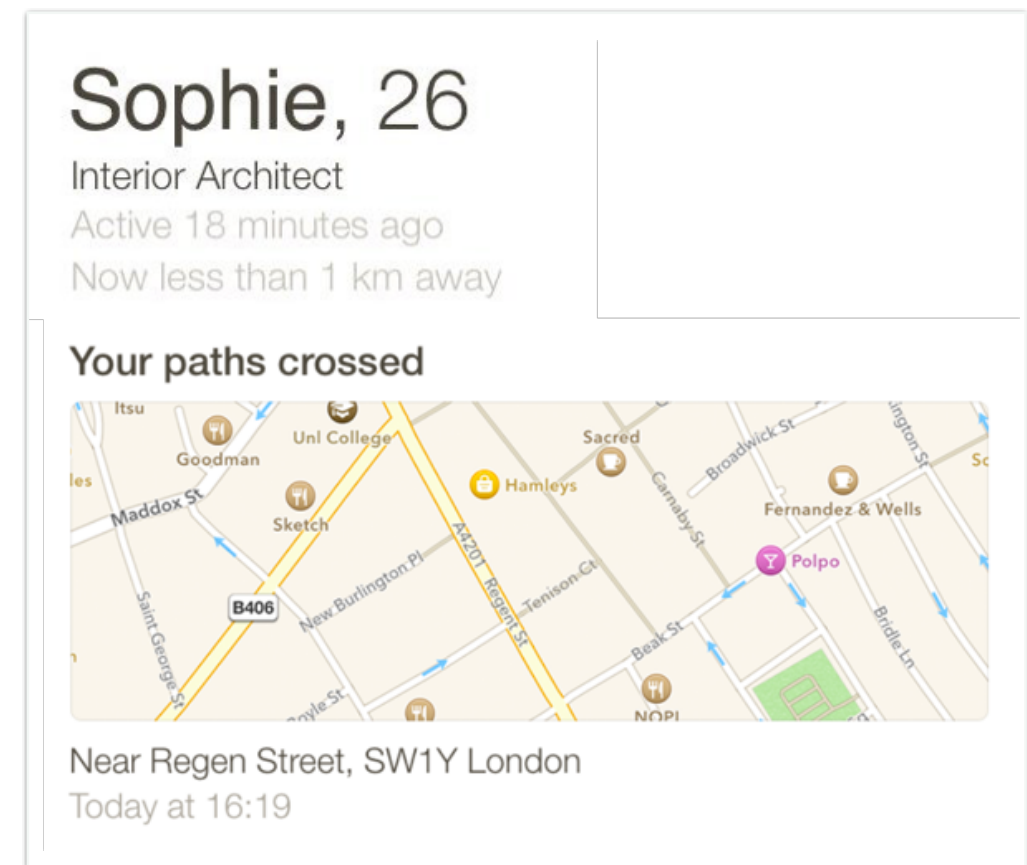
**CORNELL
TECH**

TWO TYPES OF LOCATION OVERLAP INFORMATION

1. Frequency



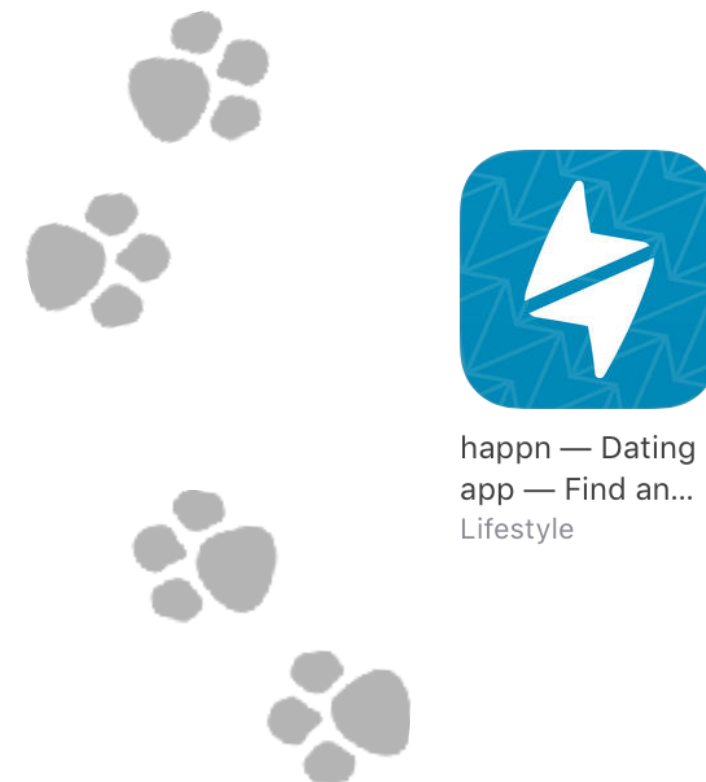
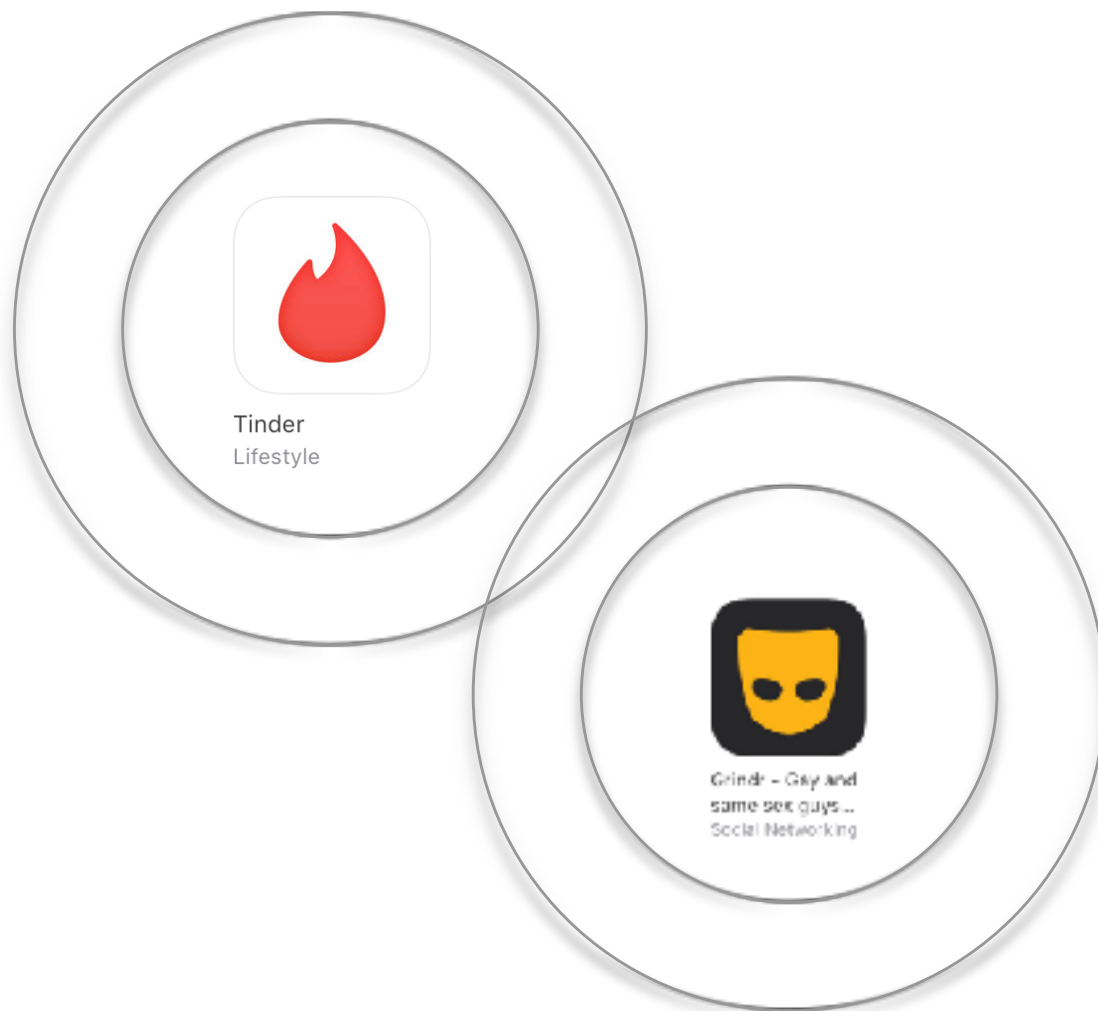
2. Most Recent Location



DIFFERENT LOCATION INFORMATION MODELS

Location-Based Real-Time
Dating (**LBRTD**)

Location-Based Post-Hoc
Dating (**LBPHD**)



RESEARCH QUESTIONS

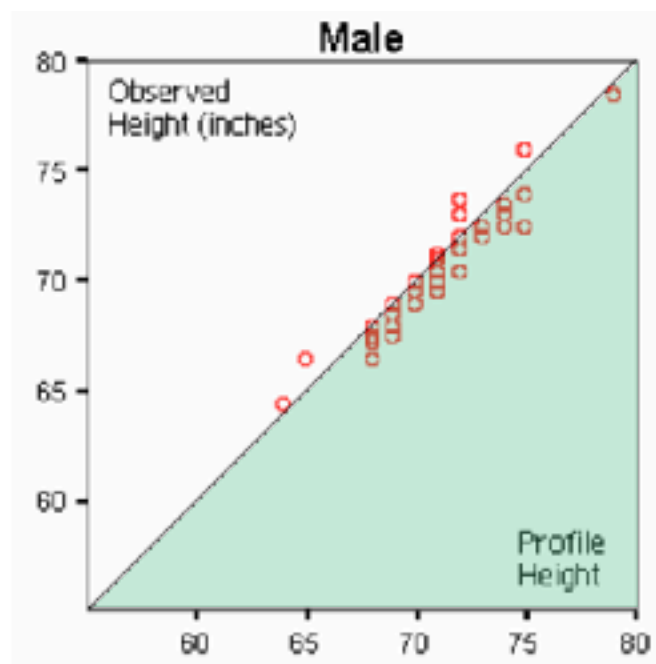
RQ1: How do people **make sense and use information** about location overlap when evaluating potential romantic partners?

RQ2: What new **benefits and drawbacks** does location overlap information offer for dating applications?

STANDING ON THE SHOULDERS OF GIANTS

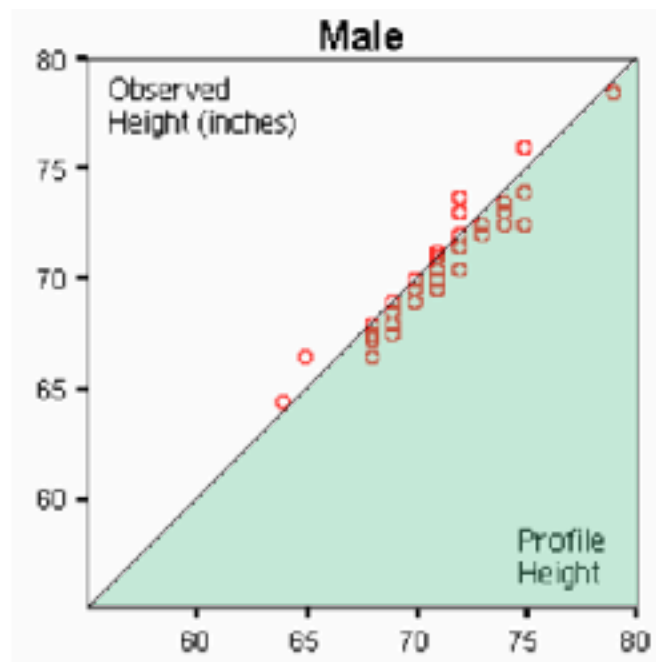


PREVIOUS WORK ON ONLINE DATING



The truth about lying in online dating profiles.
Hancock, Toma, Ellison (CHI '07)

PREVIOUS WORK ON ONLINE DATING



The truth about lying in online dating profiles. Hancock, Toma, Ellison (2007)

First comes love, then comes Google. Gibbs, Ellison, Lai. (2010)

RELEVANT THEORIES



Uncertainty reduction theory.
Berger & Calabrese (1975)



Warranting theory.
Walther & Parks (2002)

OUTLINE

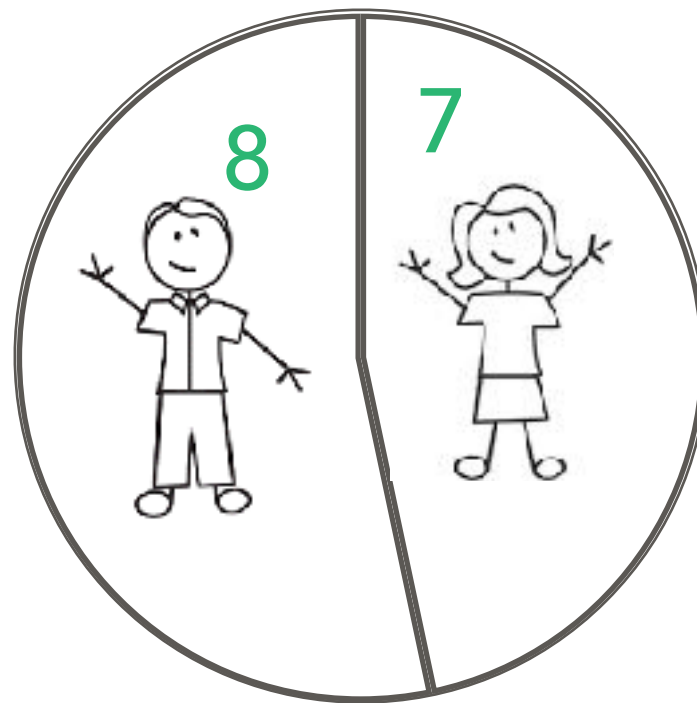
Method

Findings

Discussion

Future Work

METHOD: SEMI-STRUCTURED INTERVIEW



Age range: 22 — 42



METHOD: INTERVIEW PROTOCOL

BASICS

INTERPRETATION

INTERACTIONS

RECOGNITION

METHOD: CODING

Coder 1



Coder 2



LIMITATIONS

Generalizability: limitation of the interview method

Cultural bias: most participants from coastal U.S.

Self-report: may have missed interesting behaviors
(e.g. turning on and off location services)

FINDINGS

1. Interpretation of location overlap information

- Inferring similarity
- Meanings of different locations

2. Appropriation of location overlap

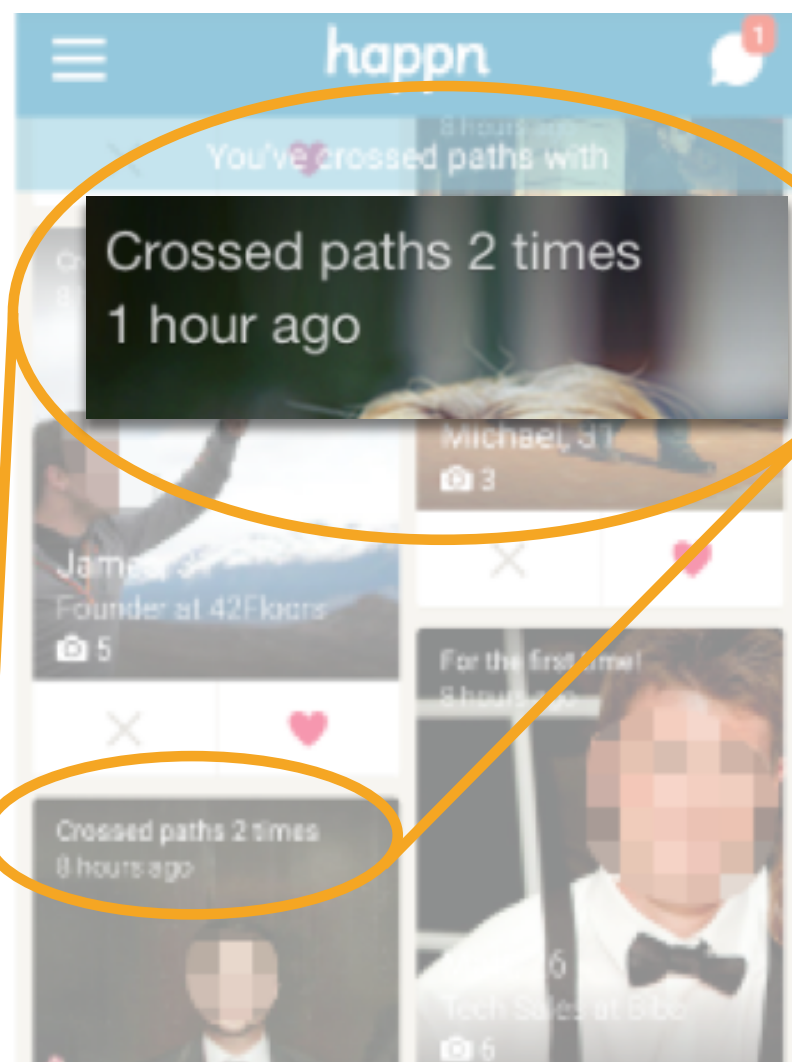
- Convenience
- Common ground

3. Interactions afforded through happen

- Recognition
- The good
- The bad; and the really bad

TWO TYPES OF LOCATION OVERLAP INFORMATION

1. Frequency



2. Most Recent Location

Sophie, 26

Interior Architect

Active 18 minutes ago

Now less than 1 km away

Your paths crossed



Near Regent Street, SW1Y London

Today at 16:19



INFERRING SIMILARITY

“

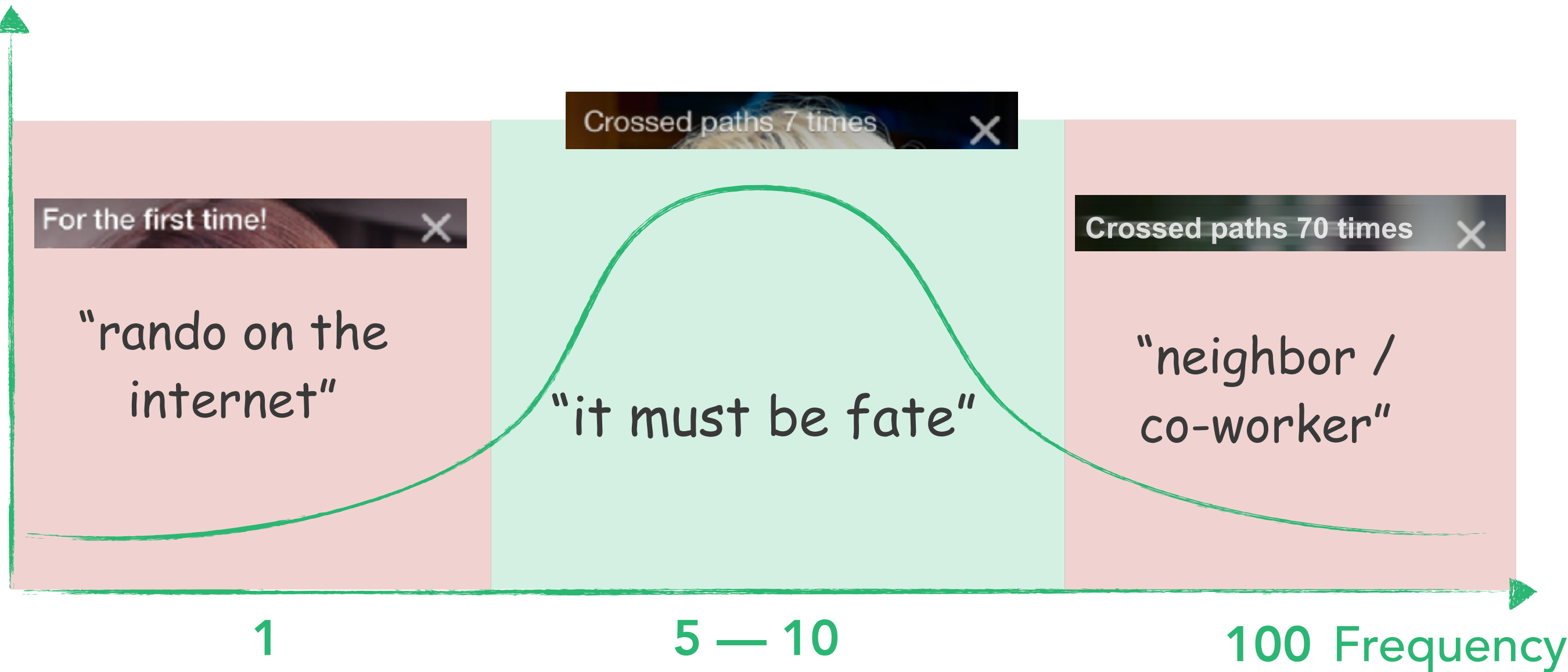
I'm much more likely to talk to a person that I crossed paths 20 times, because we are in the same place. We have similar habits and it's more likely for me to feel safe and for her, too... By the places that I go, by the place where I work at... the people who are in those places they are more likely to be alike.

— Male, 34

”

"THE GOLDEN ZONE"

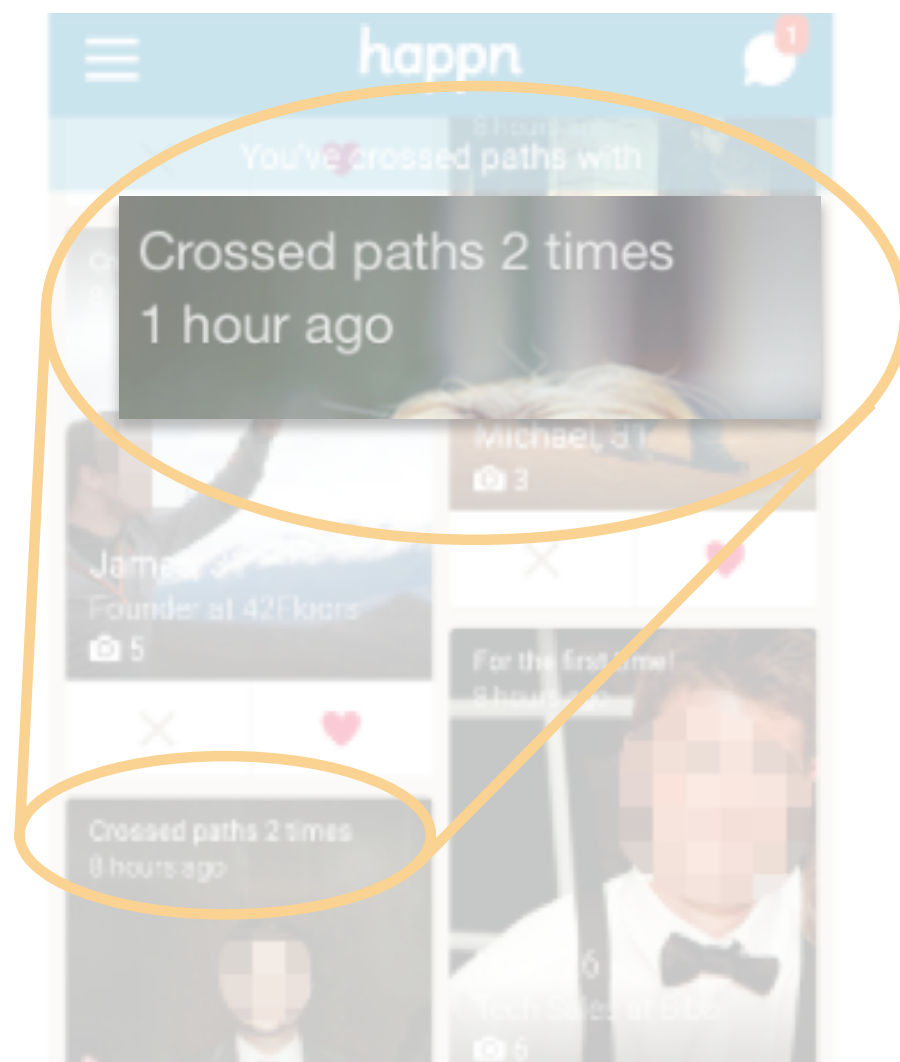
Good Match



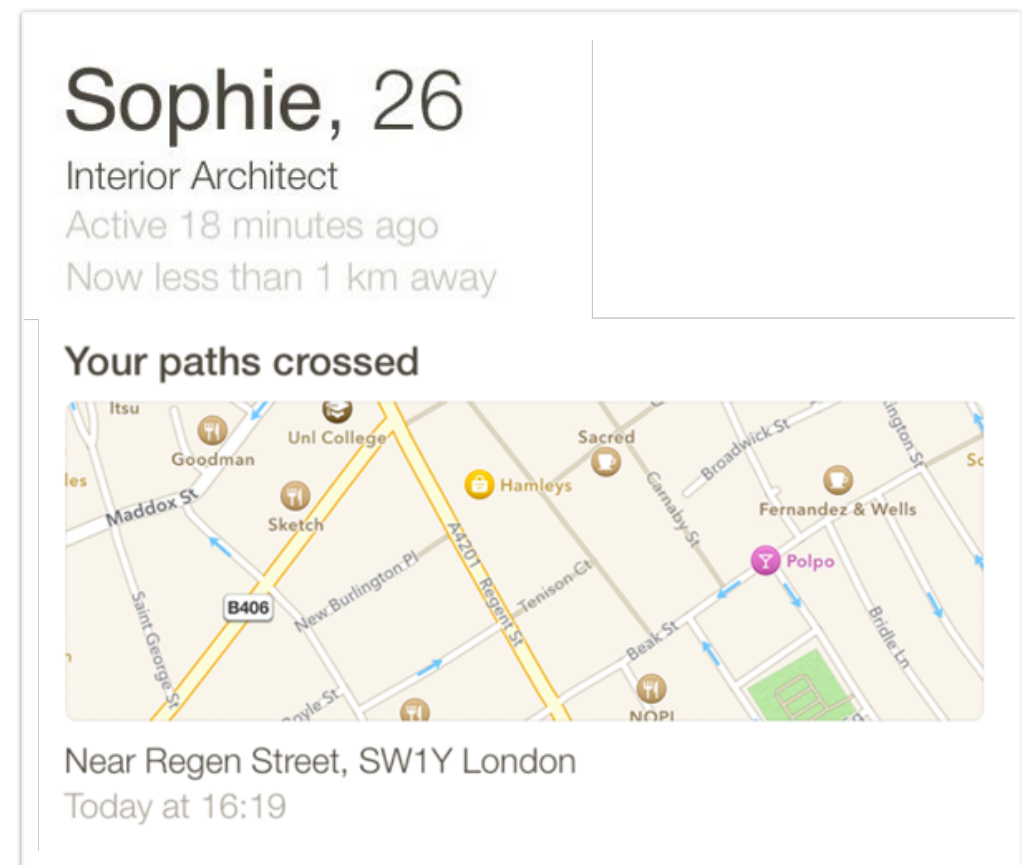
— Female, 25

TWO TYPES OF LOCATION OVERLAP INFORMATION

1. Frequency



2. Most Recent Location

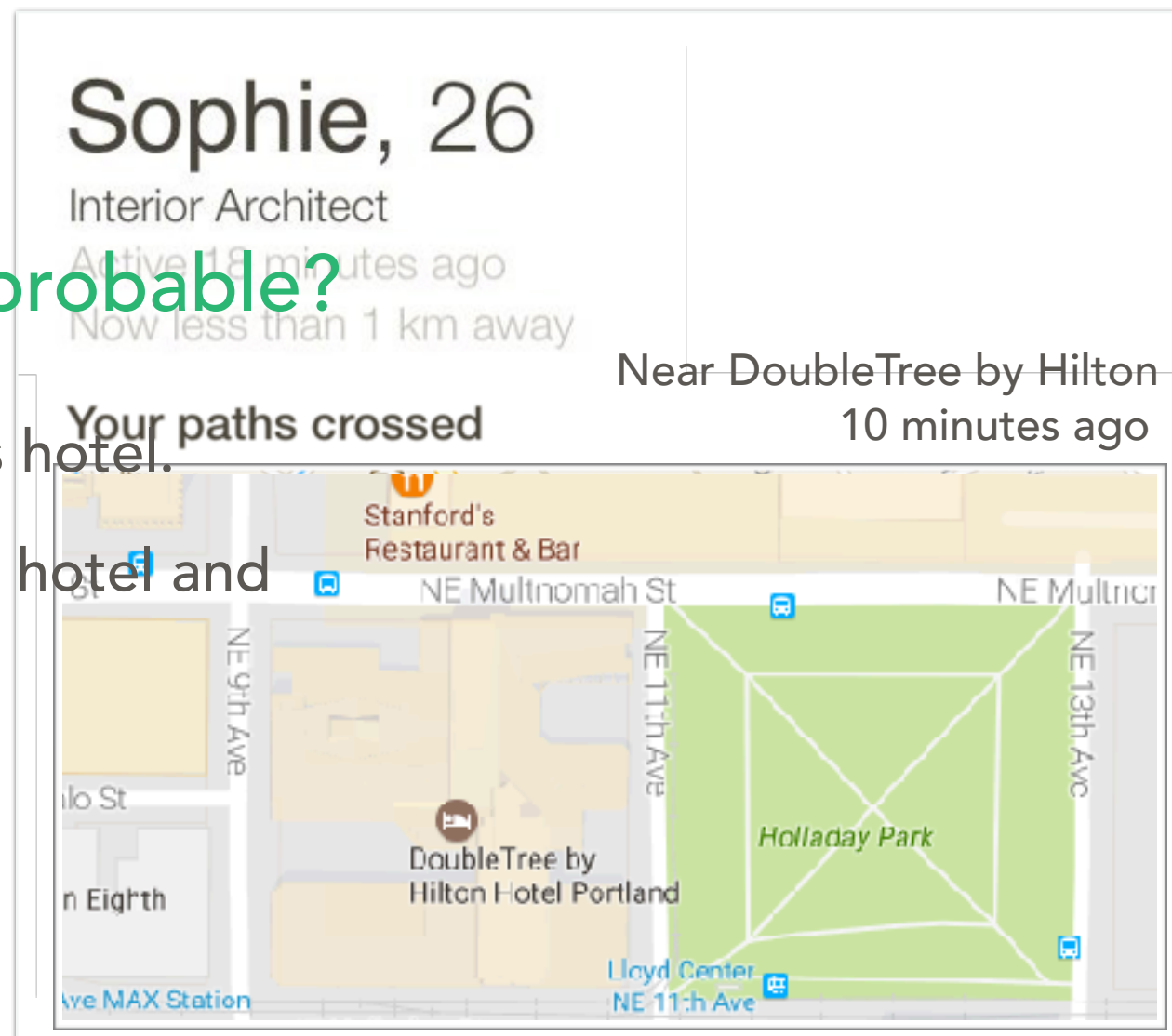


HOW DO YOU INTERPRET THIS LOCATION OVERLAP?

Which is more probable?

A. Linda stays at this hotel.

B. Linda stays at this hotel and attends CSCW.



Judgment under uncertainty. Tversky and
Kahneman (1982)

INTERPRETATION OF LOCATION OVERLAP

“

Because the climbing gym I go to is in Long Island City and, especially at night, there's not really a lot happening in that area, so if that's where our paths had crossed I'd be like, 'Oh, maybe this guy climbs'...

— Female, 34

”

INTERPRETATION OF LOCATION OVERLAP

“

I'm seeing it as the activity of Tahoe is go skiing, the activity of Napa is go wine tasting as long as you know that they went to a winery and you went to winery, you don't actually need to know that you were at the exact same winery.

— *Male, 28*

”

NOT ALL LOCATIONS ARE CREATED EQUAL

“

In a touristy area, they are probably a tourist, so I probably would never see them again. Or they work at the tourist spot.

— Female, 21

”

FINDINGS

1. Interpretation of location overlap information
 - Inferring similarity
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2. Appropriation of location overlap
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 - Common ground
3. Interactions afforded through happen
 - Recognition
 - The good
 - The bad; and the really bad

CONVENIENCE

“

When you see somebody 90 times on happn, they clearly live near you. So, that could be a good thing if you want a convenient person to date. You don't have to spend money taking a cab to go see them.

— Female, 42

”

COMMON GROUND

“

Most of the conversations have been based on the pretense of the app itself. It's like 'oh, I was just at this place. It's really interesting that we didn't bump into each other, but hey, we're on happn.' That's usually a good conversation starter because we have something in common.

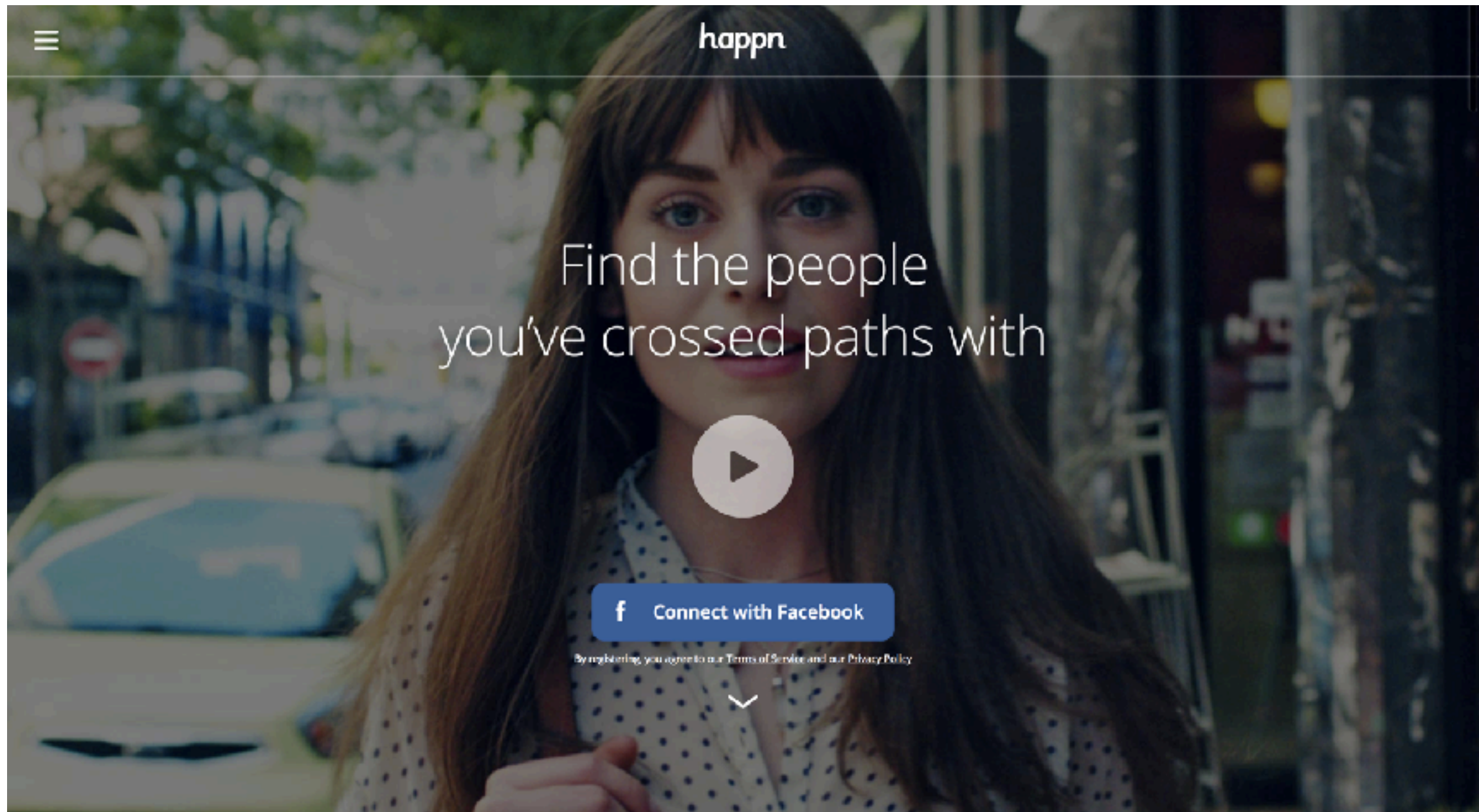
— Male, 26

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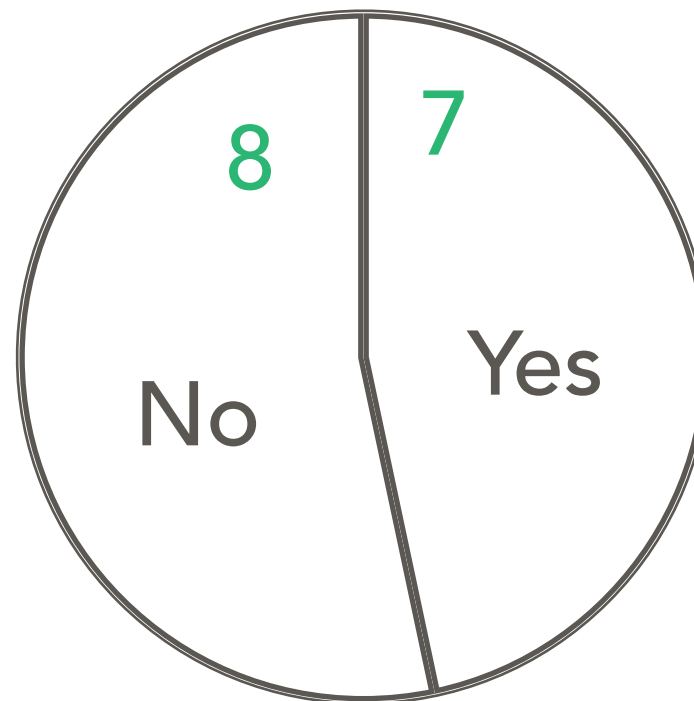
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DID THIS HAPPEN?



DID YOU RECOGNIZE SOMEONE FROM HAPPN IN REAL LIFE?



THE GOOD

“

*It was the fact that you can recognize people on the street and maybe before chatting, you already see them and it's better than the other app because it puts some more human thing in the application. **happn gives you the sensation that it can be real.***

— Male, 26

”

THE BAD

“

We actually matched on the app and got to meet on [the] first week of school. It was very weird... I looked to the side and, 'Oh I know that girl.' And she looks at me and kinda looks like, 'Okay I know that, but no I'm not gonna talk to him.'

— Male, 34

”

THE REALLY BAD: SECURITY CONCERNS

“

Say you encounter a stalker or something and the next thing you know he knows where you're eating, he knows where you shop and everything.

— Male, 38

”

OUTLINE

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UNCERTAINTY REDUCTION THEORY (URT)

When strangers meet, their primary concern is increasing predictability about the behavior of both themselves and others in the interaction.

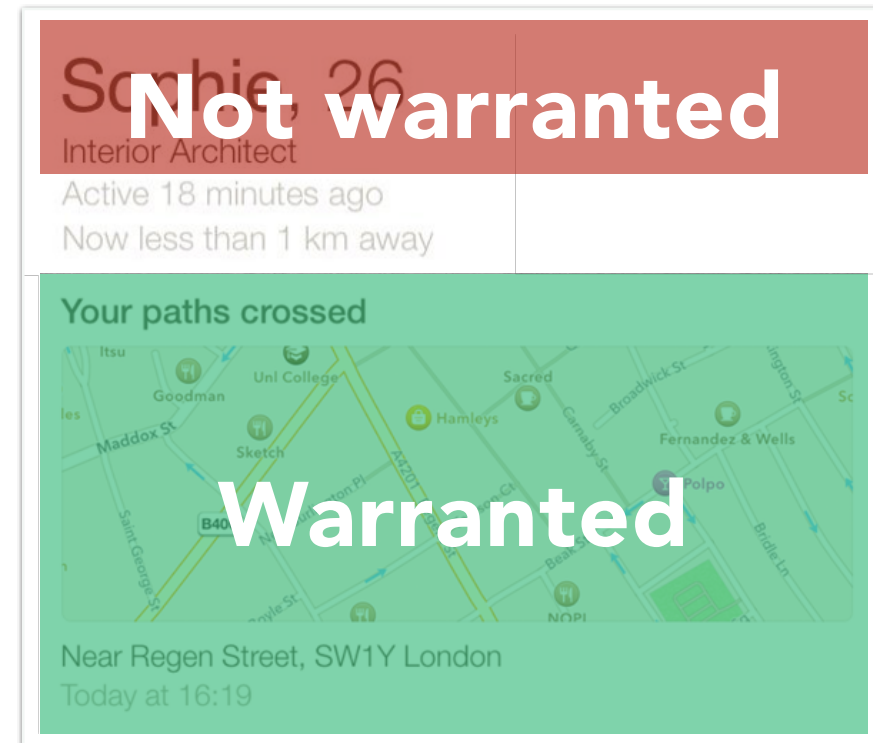
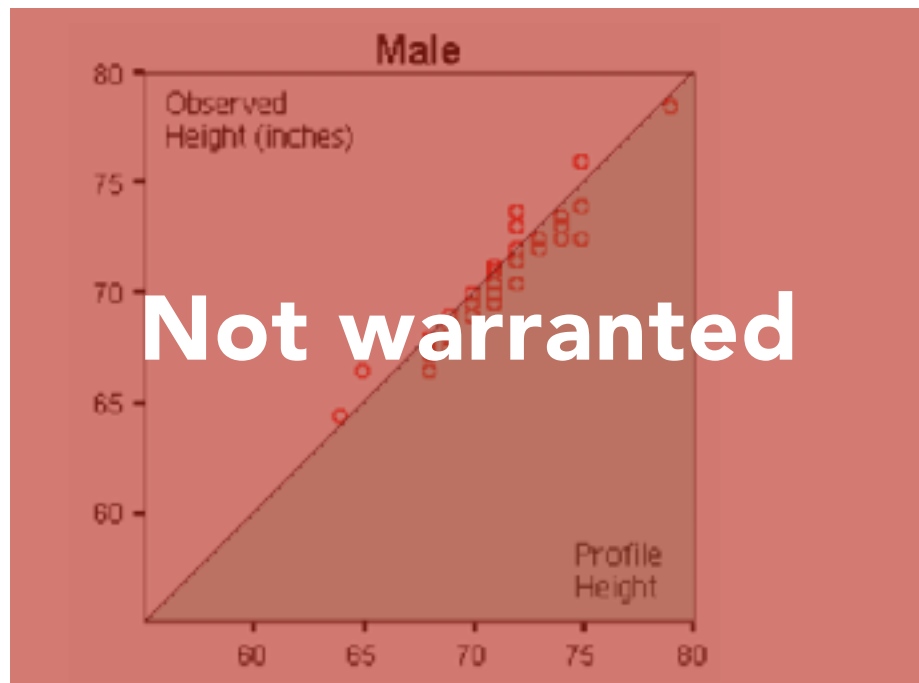
Some explorations in initial interaction and beyond.
Berger and Calabrese (1975)

WARRANTING THEORY

Warrants are perceived reliable cues that observers use to gauge how one's true identity matches that which is presented online.

Stone (1995), Walther & Parks (2002)

WARRANTING – REDUCES MISREPRESENTATION



The truth about lying in online dating profiles.
Hancock, Toma, Ellison (2007)

THE FAMILIAR STRANGER



Stanley Milgram (1972)

BEYOND DATING

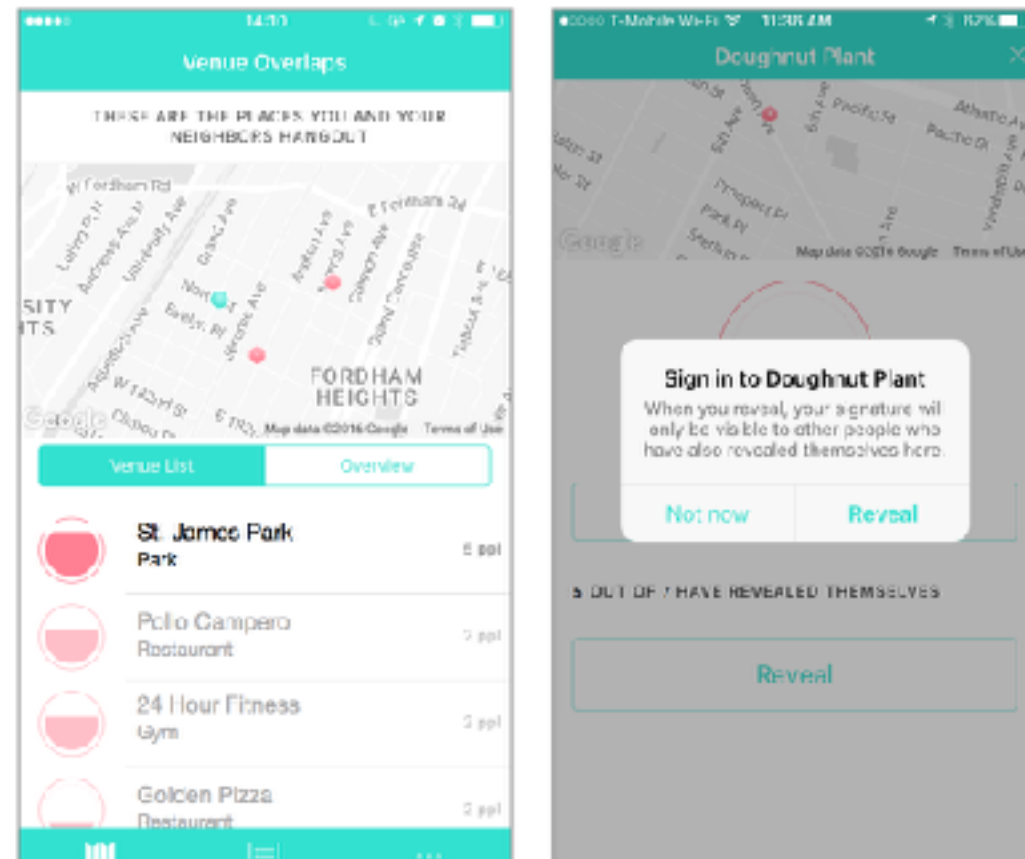
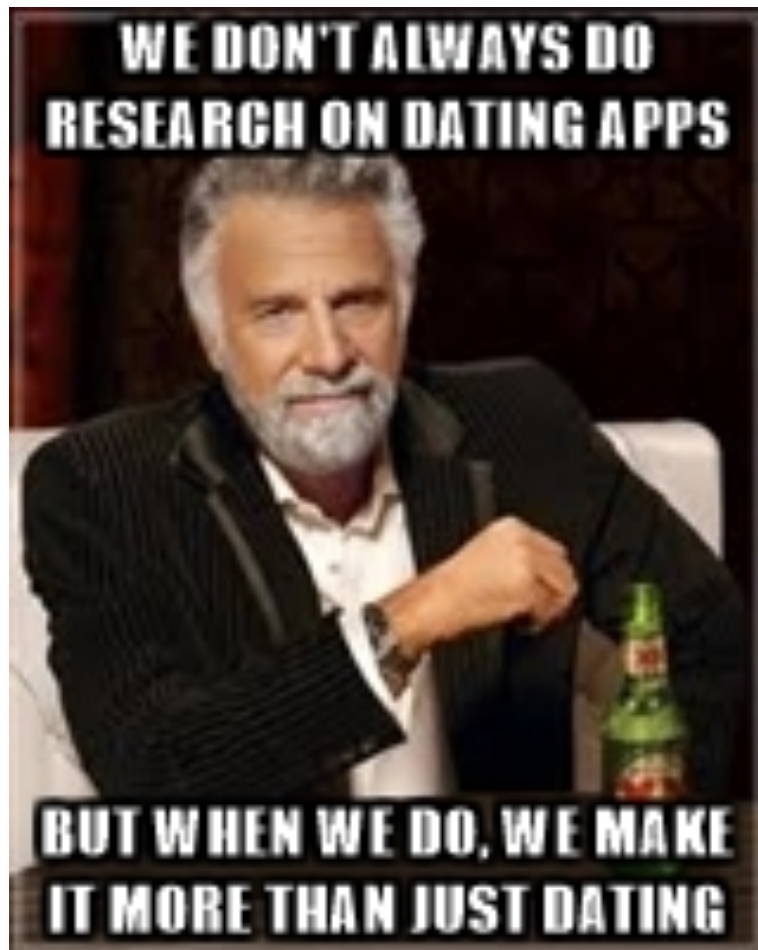


Figure 1. MoveMeant screens of the anonymous aggregate community venue data (left) and reveal dialogue for an individual location (right).

MoveMeant: Anonymously building community through shared location histories.

Sun, McLachlan, Naaman (CHI '17)

OH, ONE LAST THING



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Mor Naaman



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