# What Happens in happn?

# The Warranting Power of Location History



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#### THE METROPOLIS AND MENTAL LIFE

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

— Georg Simmel (1903)

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#### **URBAN ALIENATION**



#### **URBAN ALIENATION**



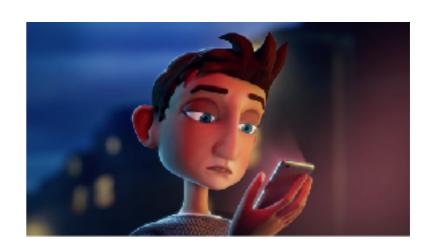
The Subway. George Tooker (1950) Whitney Museum of American Art, New York.



### **URBAN ALIENATION** — THE CASE OF DATING









## CAN WE DO BETTER?

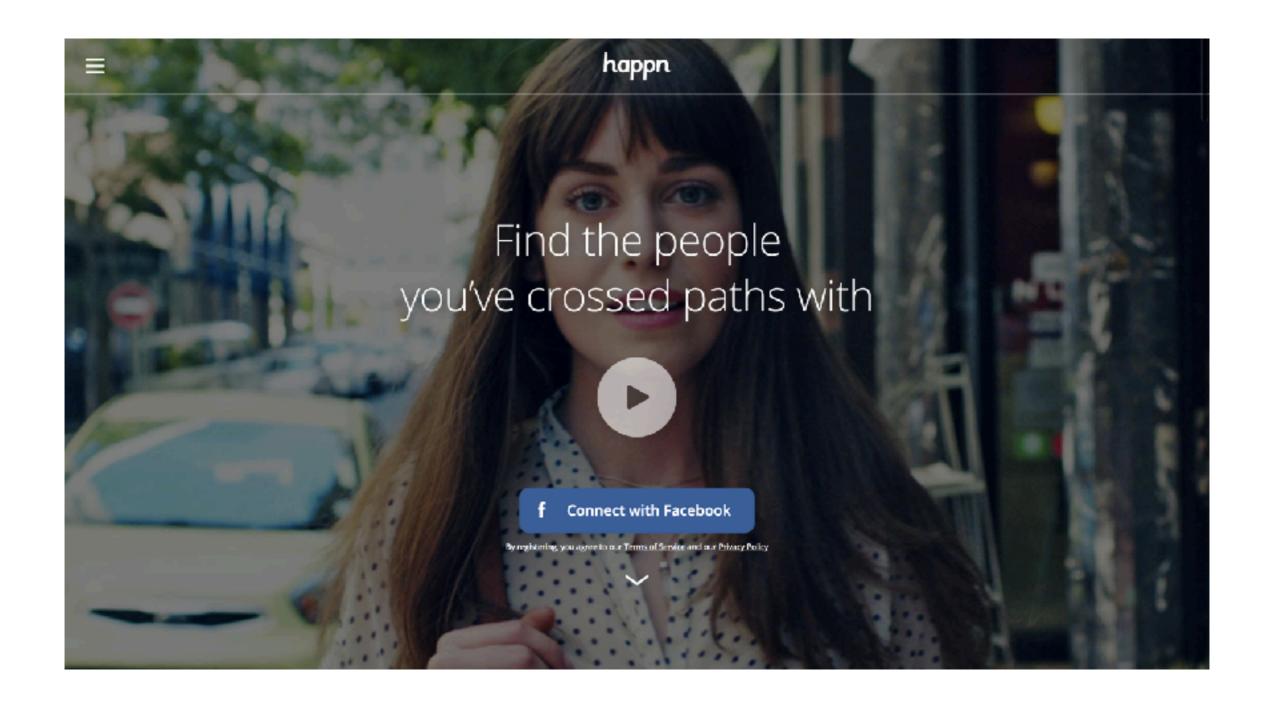


# CAN TECHNOLOGY HELP US MAKE MORE MEANINGFUL CONNECTIONS?

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



#### **HAPPN**





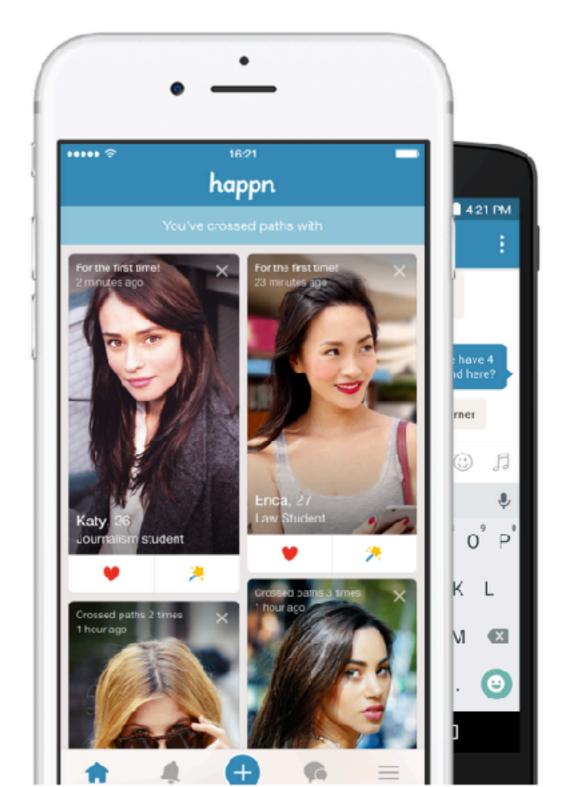
#### **HAPPN**

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

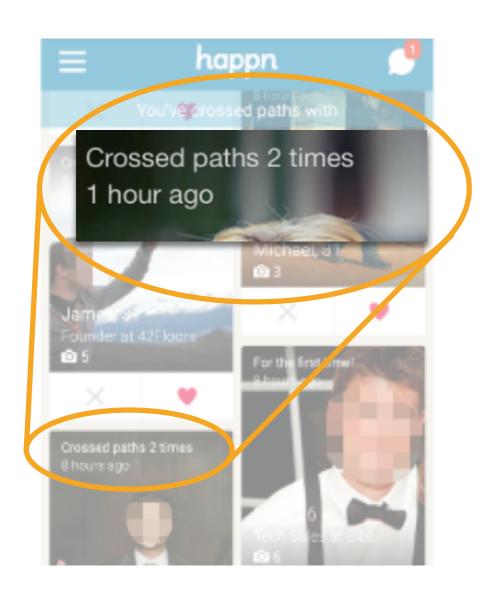
Allow



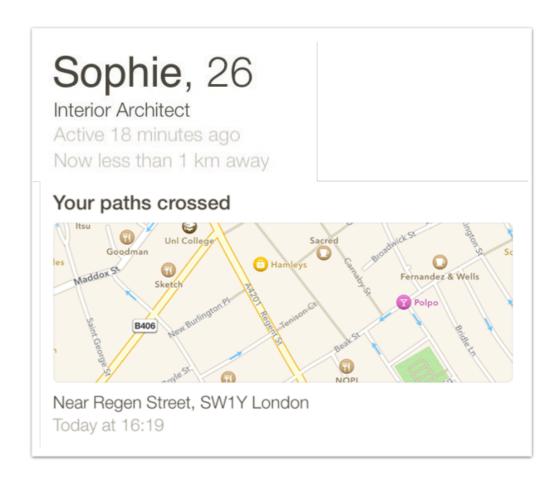


#### TWO TYPES OF LOCATION OVERLAP INFORMATION

#### 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?

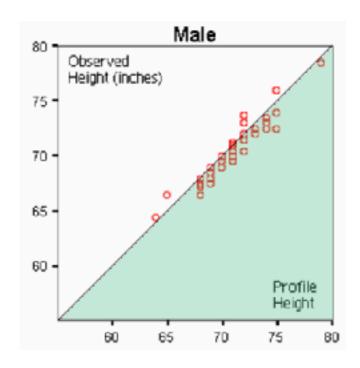


## STANDING ON THE SHOULDERS OF GIANTS





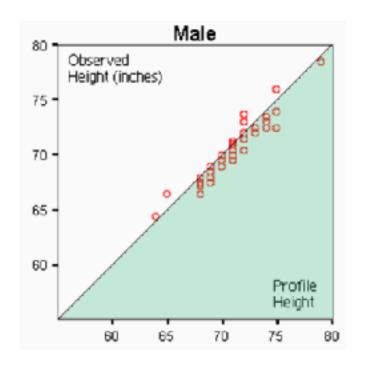
#### PREVIOUS WORK ON ONLINE DATING



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. First comes love, then comes Google. Hancock, Toma, Ellison (2007)

Gibbs, Ellison, Lai. (2010)



#### RELEVANT THEORIES

#### SOME EXPLORATIONS IN INITIAL INTERACTION AND REYORD: TOWARD A DEVELOPMENTAL THEORY OF INTERPERSONAL COMMUNICATION

CHARLES A. MERGER and NICHARD J. CALABRESS.

This paper provides a theoretical perspective for dealing with the initial entry stage of interpersonal interaction. The series unlessed and 10 decreases presented appear and of connects producing interactions and of the development of interpersonal relationships. The paper concludes with a discussion of sense of the problems to be considered iff the theoret is to be extended beyond the initial stage of interaction.

dicked expirited rewards on the interpretability support to our automs and theorems remains inside a power, they have resided to onricy social envelopical throtics as starting points. Theories adjound to such areas as person perception, social exchange, and interpersonal balance have frequently been couployed as finise-weds from which to delive testable begandance. about the interpersonal communication recess. Walle it is true that Newsonib's (1953) belance formulation and subsequent research on the acqualistance process (Newcomb, 1961) do include communication-relevant constructs, his theory does not focus on several important agency of terperand communication. Ordinally, And/s (1946) work in the area of person proceeding and subsequent developments in that area (Karlan & Anderson, 1975) are also relevant to the study of nal communication. However, here too we find that these formulations do not directly you upon the irrespondent communication pro-

The present model scales to remedy this situation by ampleying communication observe comstructs which, in turn, lead to the formation of hypotheses which directly involve communication billusion in constructing the theory, we have of interaction between strangers. Our hope is that size, the model can be used to make predictions about and explain interpersonal communication phenomena which occur later in relationships. In our explication of the model, we have attempted.

When communication researchers have some to behave produce research findings which lead

#### DEVELOPMENTAL STAGES

Notice or specific smalls constructed date parties were then of the provide regardly which the communication transaction might be viewed. For purposes of the discussion, it is assured that the persons involved in the communication transaction are examples. We have labeled the first stage of the transaction the every place. Our reason for the use of the term "entry" is flut when strangers their communication behaviors are, in part, deter-Some rates are implicit; persons may not be able to website them or indicate where they accurred them. Other rains are quite explicit and the indi-vidual might be able to indicate verbally what the rule is and where he possized his knowledge of the sult. For example, two person might both say "place" when obling seminare to pass them some while the other person might indicate that he said "pleas" because it is "actual" and not neces-sally "polite." From this completit would seen. that the first person is more oware of the "rule which guided his belowier. Of course, it would also be possible for a person to be more or law-cartain. about the appropriateness of a particular behavior. Some persons committedly have to concern them-

Uncertainty reduction theory. Berger & Calabrese (1975)

system alone. We suppost that warrant is also some matter of public record or farest access to relationships are embedded and by the sym balls offers partners undertake to make study, while address touch at an address at a commen make it desirable to do so.

#### Warranting and Social Structure

partner's social networkshouldlimit the degree description may work if it is specific and of warranteness in an en-line relationship. verificible te.g., "five feet, sine inches all" rather than "tall"). Such aspects would not include Two students become ristual triends as they inerax with each other in a distributed college - events that cannot be corroborated. Attitudinal course involving choses or two aniverstics, suscenses or biographical/binorical details with no initial Fell moveling and no planned tea. That are not proverely known in the individminal FtF encounter. At first planes, these usa's social circles should have linke effect in arrangement seem vers similar to those facility increasing wortest, and are more likely to tating no wastast what news. However, is this case, each partner is aware that the other also posted to be part of the hyperpersonal process corners in a social persons i.e., the distant for Tablett A. Waisher, 2003; One might sendount), which she can assess. Conserve with shink that the previous of morrorgically monthers of another person's social servicel - socially analysisable information may have a tanty-reducing information about relational partners Parks & Adelman, 1983). Ever the thun my other well-timed self-disclosure. potential to access a partner's social network. As for the observation of partners through permitte a harrest ability to consolvente men aspects of the pastner's disciourse (is the private stall to picous and photos before RF, partner male or legale, sall or store, athletic or - we can conjecture that these activities, too. solats, married or single?). The network also provide warranting information. We make provides an sudence in which a partner could be beid accountable for misstanements, gross (Siegman, 1987; and physical appearance

#### Warranting and Symbolic Efforts

Partial warranting in a potentially warrantproffering information that can be corroborend or used for correlectation. Simple courts plu might include a unifiable "red name," :

afficuld by the social structure in which the individual's BJ social structure. Reference to a Web page with an identifiable and account ble their self-presentations when their purposes tion or educational institution, more so than at anitSP of unknown origin) should provide some value. If an individual's home page appears to be created by someone other than the subsect of the page, so much more the marray ratio Reing sweet of and being Able to score a that information might possible. Even addself-disclosure of ambiguous information or serve as the kind of selective self-disclosure for corroboration, it should be no more useful

incrementally separabel, bandwidth, from many trait inferences from vocal qualities (Berscheit & Walser, 1974), and we rely on morrobal cum in order descrition because we assume they are less covariable than language content. Which physical curs through which channels matter most in this context les environmentshouldinvolve anindvidual's is not yet known. It may depend on the requiver's perferences and/or the seader's selfeconopt. Physical appearance can be importraceable address, identification of linguistical may be outlasted, whereas vacal qualities (not autoiographical) information in an infor-mation system (e.g., a directory), indication of acteristic that the sender would least want to

Warranting theory. Walther & Parks (2002)



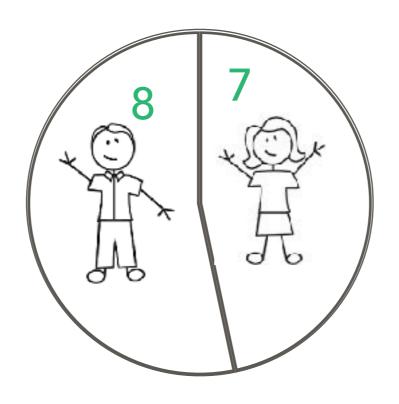
#### **OUTLINE**

Method Findings Discussion Future Work

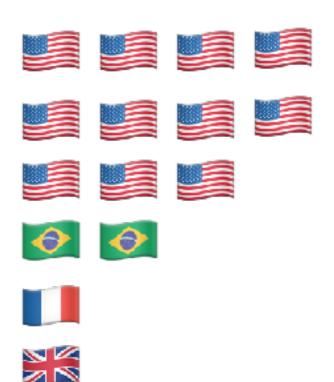


#### METHOD: SEMI-STRUCTURED INTERVIEW











#### **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)

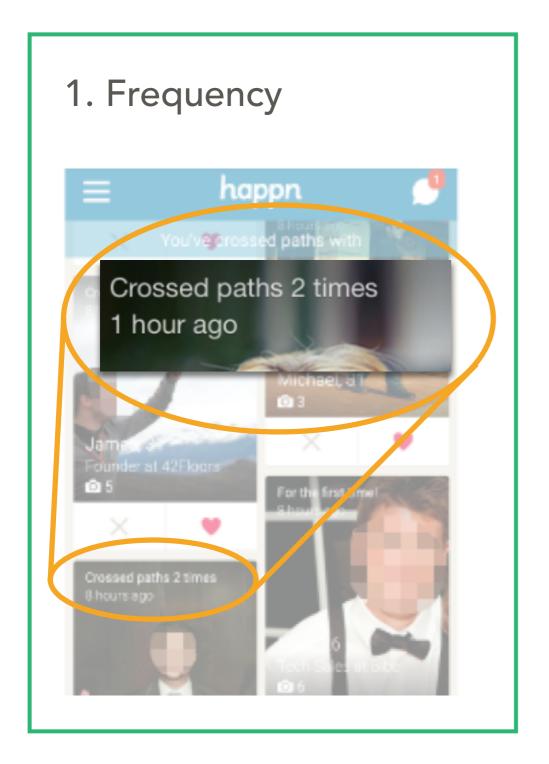


#### **FINDINGS**

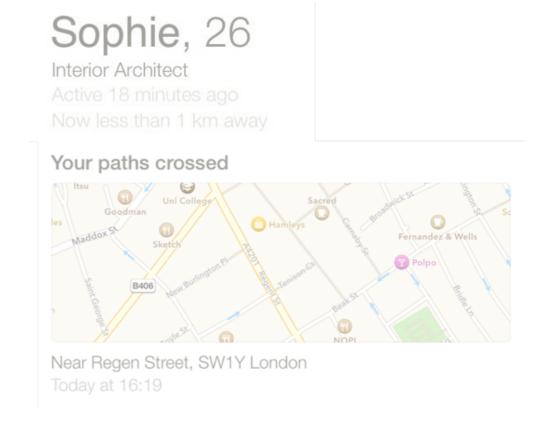
- 1. Interpretation of location overlap information
  - Inferring similarity
  - Meanings of different locations
- 2. Appropriation of location overlap
  - Convenience
  - Common ground
- 3. Interactions afforded through happn
  - Recognition
  - The good
  - The bad; and the really bad



#### TWO TYPES OF LOCATION OVERLAP INFORMATION



2. Most Recent Location





#### INFERRING SIMILARITY

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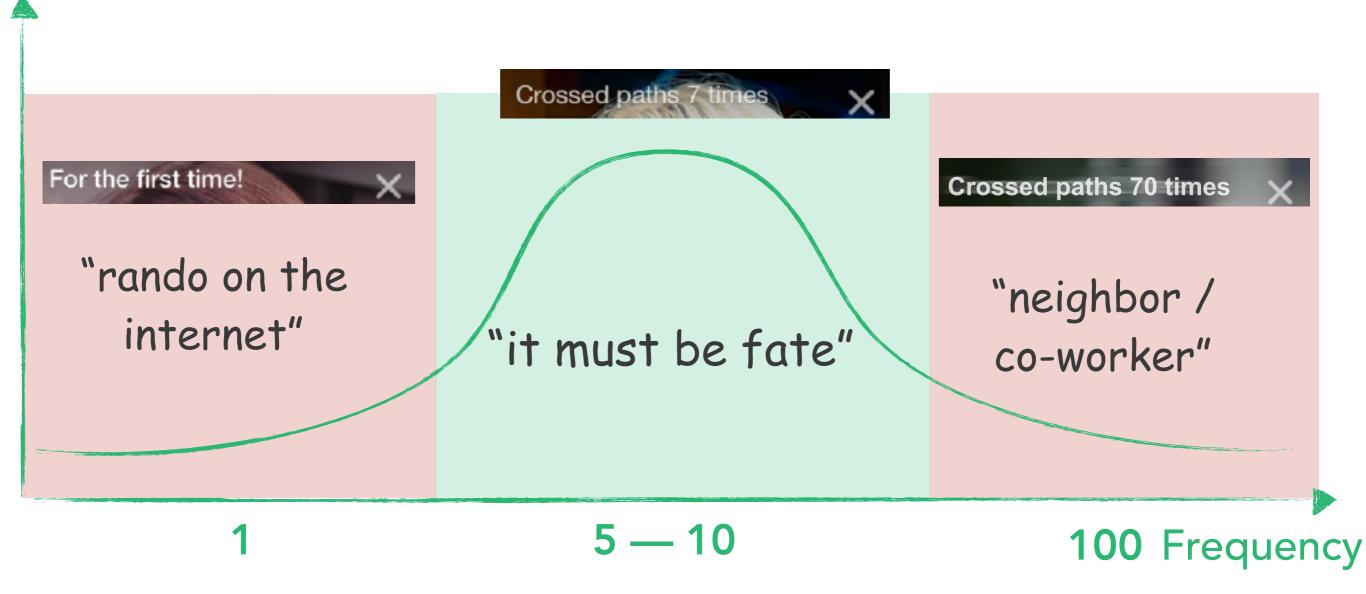
I'm much more likely to talk to a person that I crossed paths 20 times, because we are in the same place. We have similar habits and it's more likely for me to feel safe and for her, too... By the places that I go, by the place where I work at... the people who are in those places they are more likely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

— Male, 34



#### "THE GOLDEN ZONE"

#### **Good Match**

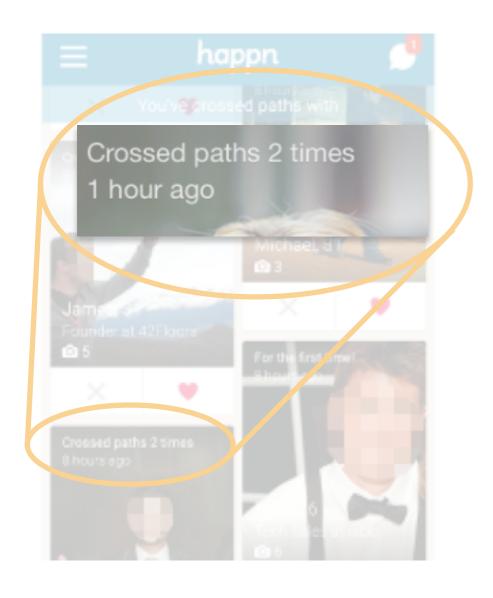


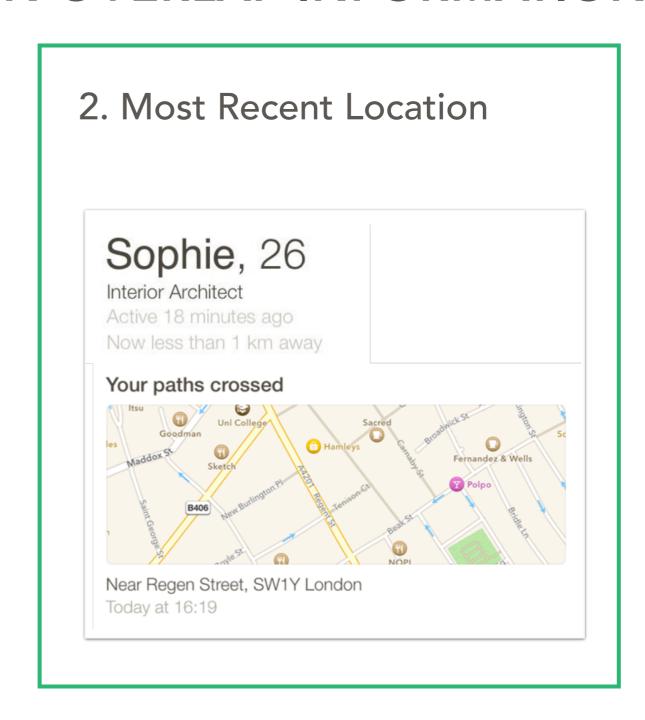
— Female, 25



#### TWO TYPES OF LOCATION OVERLAP INFORMATION

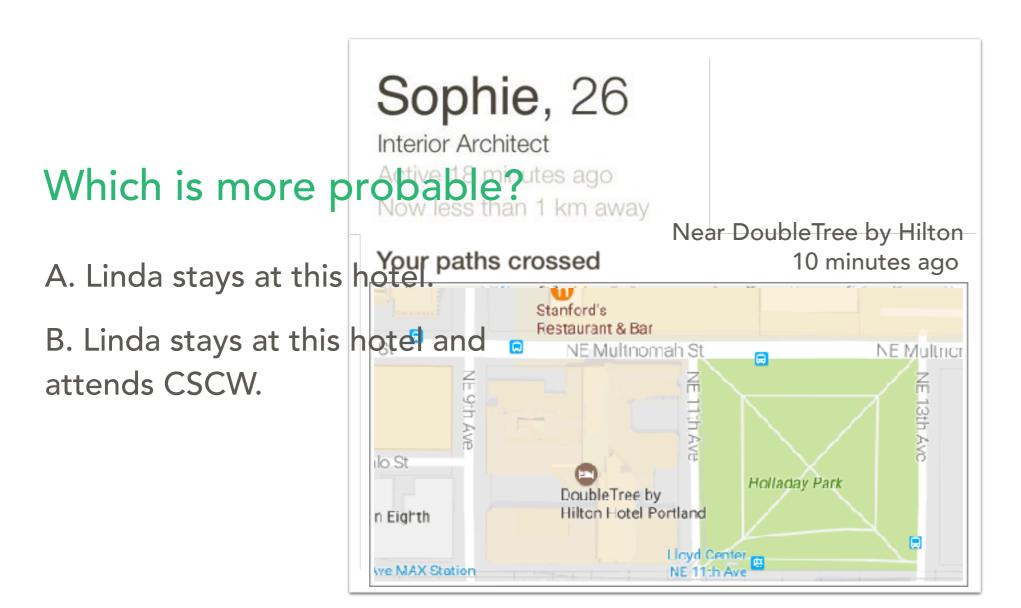
#### 1. Frequency







#### HOW DO YOU INTERPRET THIS LOCATION OVERLAP?



Judgment under uncertainty. Tversky and Kahneman (1982)



#### INTERPRETATION OF LOCATION OVERLAP

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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

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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

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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**

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#### CONVENIENCE

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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

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#### **COMMON GROUND**

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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

"

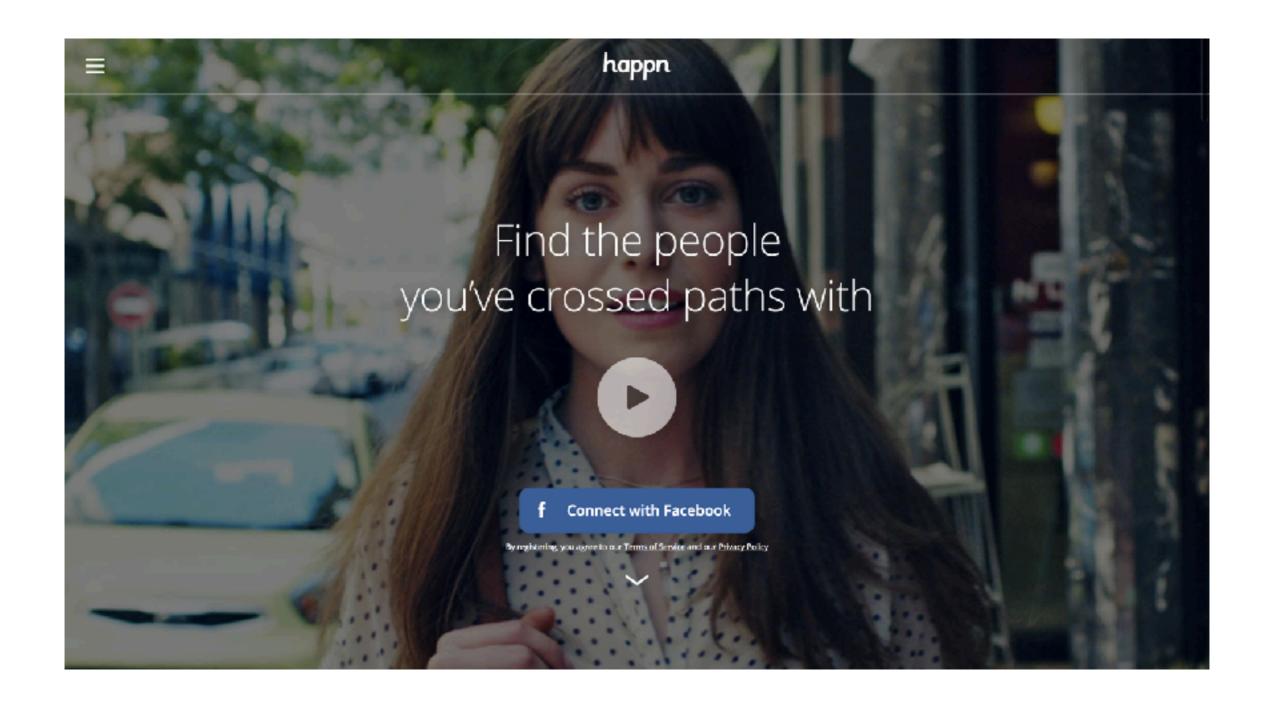


#### **FINDINGS**

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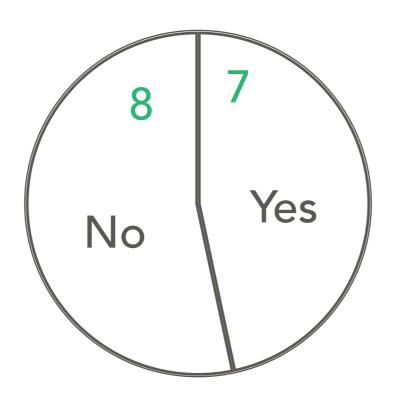


#### **DID THIS HAPPEN?**





# DID YOU RECOGNIZE SOMEONE FROM HAPPN IN REAL LIFE?





#### THE GOOD

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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

99



#### THE BAD

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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

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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

99



#### **OUTLINE**

Method Findings Discussion Future Work



#### **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)



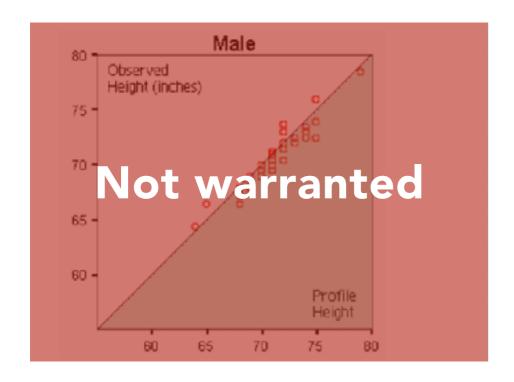
#### WARRANTING THEORY

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

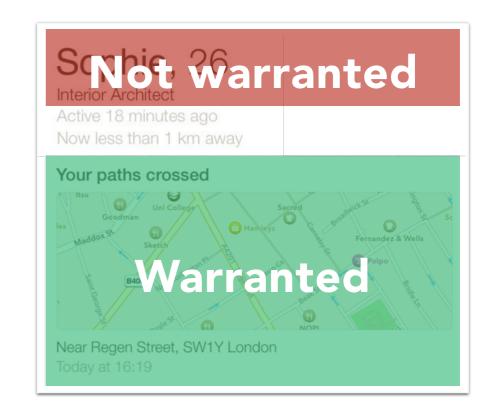
Stone (1995), Walther & Parks (2002)



#### WARRANTING - REDUCES MISREPRESENTATION



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





#### THE FAMILIAR STRANGER



Stanley Milgram (1972)



#### **BEYOND DATING**



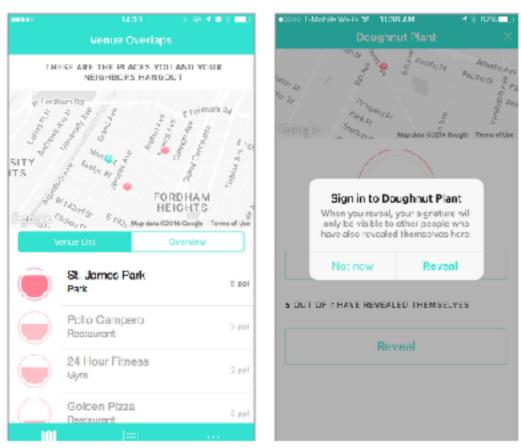


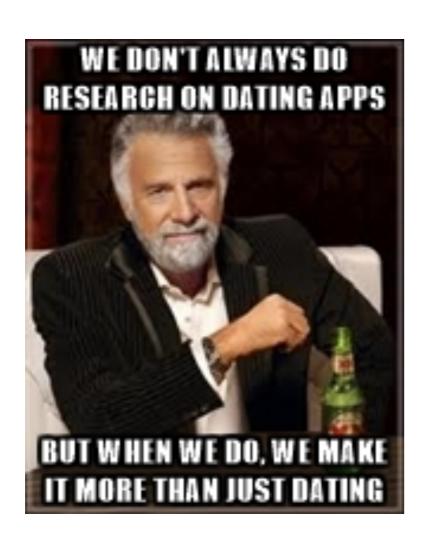
Figure 1. MoveMeant screens of the anonymous aggregate community venue data (left) and reveal dialogue for an individual location (right).

MoveMeant: Anonymously building community though shared location histories.

Sun, McLachlan, Naaman (CHI '17)



#### OH, ONE LAST THING



Xiao Ma



**Emily Sun** 



Mor Naaman



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