



Article

“I Shut the Door”: Interactions, tensions, and negotiations from a location-based social app

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Abstract

Location-based social apps leverage mobile phones to provide face-to-face (FtF) social opportunities for physically proximate individuals, such as finding nearby people to socialize, date, or hook up. Prior work on dating and hookup apps has focused mostly on profiles and user goals, but this leaves open important questions of how, after constructing a profile, people use these apps to connect and realize their goals, and what these experiences are like. We report on 22 interviews with users of Grindr, a location-based social app for men who have sex with men. We examine interaction processes from viewing profiles to meeting up. Using the perspective of relational dialectics, we explore tensions around connecting with others, sharing information, and being predictable or novel. We find that profile presentations are flexible and subject to change, disinhibition challenges interaction and revealing goals, and social consequences increase through moving from profile browsing to meeting FtF.

Keywords

Computer-mediated communication, dating, dialectics, identity, location awareness, mobile phones

Introduction

Technologies have enabled social connections between strangers for decades, ranging from early forums and chat rooms for online-only encounters (e.g. Fisher et al., 2006;

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Zheng et al., 2002) to dating sites for pursuing relationships that often move offline (e.g. Ellison et al., 2012; Whitty et al., 2007). Many recent dating apps use location awareness to show users profiles of others who are nearby, often for the purpose of catalyzing face-to-face (FtF) interaction in the *near-immediate future* (i.e. within minutes or hours) (e.g. Gudelunas, 2012; Licoppe and Inada, 2009; Sutko and De Souza e Silva, 2011; Toch and Levi, 2013). As these apps promote social encounters and awareness based on location, but often do not allow for the explicit articulation and representation of network ties as online social networks do (Ellison and Boyd, 2013), we refer to these apps as location-based social apps (LBSAs). We focus specifically on those LBSAs designed to help users find others for offline dates or sexual encounters, such as Grindr and Tinder, which are each used by millions of people per day (Grindr, 2015; Tinder, 2016).

LBSAs, along with older dating platforms, present researchers with the opportunity to understand the dynamics of how people interpret information in others' online profiles, initiate relationships online via chat, and ultimately decide whether and how an FtF encounter takes shape. This process involves multiple phases (Brown et al., 2005) and sometimes complex negotiations between individuals who may have very different goals, preferences, and expectations. Despite the complexity of these processes, however, there has arguably been a disproportionate focus in the literature on the composition (e.g. Birnholtz et al., 2014; Fitzpatrick et al., 2015) and interpretation (Blackwell et al., 2015) of individual profiles. Where research has focused on people's experience of LBSAs beyond profiles, it has been on how people use suites of social media platforms to achieve different high-level social goals (Gudelunas, 2012), how users experience LBSAs outside the canonical urban gay enclave (e.g. Hardy and Lindtner, 2017), and how people manage (and seek/avoid) various forms of uncertainty that arise (Corriero and Tong, 2016).

We know less about people's detailed perspectives on the dynamics of their interactions on LBSAs, as they move from composing and viewing profiles to chatting with each other and possibly to quite intimate encounters. There is some evidence, moreover (e.g. Licoppe et al., 2015), that these dynamics play out in unique ways that have not been fully explored. By focusing on these interactions, we can update our practical and theoretical understanding of how relationships are initiated and play out on LBSAs. In this article, we present results from an interview study of users of Grindr, an LBSA designed to support social and sexual interactions between nearby men who have sex with men (MSM). Drawing on the theory of relational dialectics, we explore the nature and trajectories of people's experiences interacting with others, from assessing profiles, to chatting with each other, and then meeting FtF. In doing so, we argue that the profile is both a site of interaction and a launching point for additional interaction and that all these interactions play a key role in negotiating tension as nascent relationships unfold on Grindr.

Research context and related work

There is a growing body of literature on the use of LBSAs by the MSM community (e.g. Blackwell et al., 2015; Gudelunas, 2012; Hardy and Lindtner, 2017; Licoppe et al., 2015). This community is a useful entry point for studying LBSAs for two reasons. First,

several commercially successful LBSAs are designed for MSM. Grindr, for example, has 7 million users in 192 countries (Grindr, 2015). Second, the MSM community has a history of using technology for social and sexual connections. These apps' popularity can, in part, be understood in light of the challenges of locating other MSM as interest in sex with other men is typically not a visible trait. MSM have a history of utilizing a range of physical spaces such as bathhouses (e.g. Chauncey, 1994) or bars (Taub, 1983) and online spaces such as chat rooms (e.g. Brown et al., 2005; Jones, 2005; Shaw, 1997) and personal ads (Gudelunas, 2005; Haimson et al., 2014) to identify and connect with each other. Grindr and apps like it build from this history, and their large, active user bases provide a rich site of inquiry.

Research context: Grindr

Upon launching Grindr, the home screen shows a tiled display of profile photographs (Figure 1, left) of the 100 closest users, sorted from the physically closest to the farthest away. (More profiles can be seen in the paid subscription version of the app, which was less popular among our participants.) Small green dots in the corner of a profile photograph indicate that a user is online now or has been online in the past 10 minutes. Other displayed users have been online within the past 60 minutes. After 60 minutes of inactivity, a user's profile is no longer visible to others nearby on the tiled display.

Each photograph in the tiled display can be tapped to reveal that user's full profile (Figure 1, center), a separate screen which may include screen name, headline, age, height, weight, ethnicity, body type (selected from common descriptors such as "bear"), tribes (pre-defined categories, e.g. "geek" or "jock"), looking for (relationship, dating, "right now," etc.), relationship status (single, married, dating, etc.), links to social media profiles, "about me," and distance away (in feet/miles or meters/kilometers) as well as (at

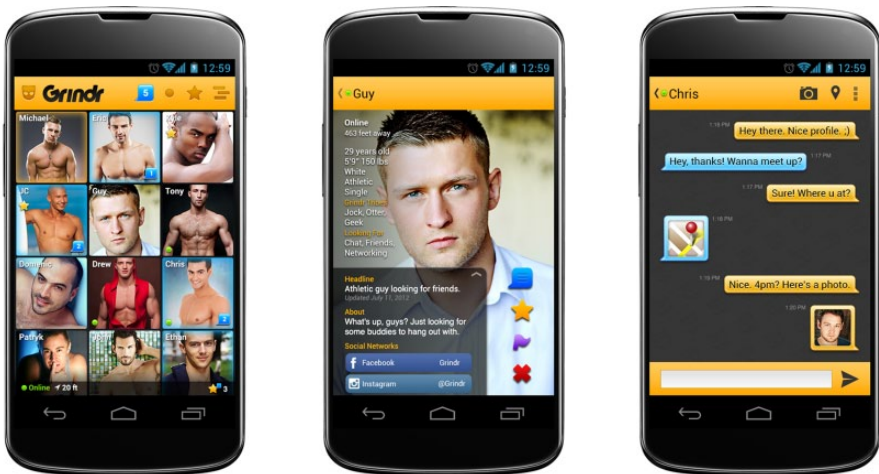


Figure 1. Screen shots of the Grindr home screen (left), a profile (center), and one-on-one chat (right) (Grindr, 2015).

the time of our study, though since removed) travel time, in minutes by foot or car, from the user looking at the profile. The profile also features a “chat” icon which can be tapped to interact with that user via one-on-one chat. This chat feature (Figure 1, right) supports the exchange of text, photographs, and location information. The free version of Grindr does not provide push notifications for received messages, so users must sign in to see whether any new messages have arrived.

Within Grindr, profiles are essentially public in that they can be viewed by any nearby user, and a user’s profile is the starting point for all interaction with them. From the profile, in addition to initiating chat, it is possible to “favorite” that user so that their profile appears on a separate list of “favorites” or to “block” them such that the pair will be subsequently unable to see each other’s profiles and chat with each other. A “favorite” link between users is unidirectional (i.e. A can favorite B, but B need not favorite A) and no notification is provided to a user who is “favorited.” Blocking is necessarily bidirectional, although no explicit notification is provided to the blocked user. There are no “public” or group chat features, and names or counts of profile visitors cannot be viewed.

From individuals to emergent relationships

A significant focus of research on dating sites, LBSAs, and Grindr itself has been profile contents, impression management, impression formation, and user goals. Some previous work emphasized profiles as a portrayal of an ideal self (Ellison et al., 2012; Hitsch et al., 2010; Mascaró et al., 2012), which is enabled and complicated by ambiguity and deception afforded by technology (Ellison et al., 2012; Toma et al., 2008; Toma and Hancock, 2012). Grindr profiles, comparatively constricted due to text and photograph limits imposed by the app, are similarly susceptible to self-presentation challenges, such as how often profiles are updated and how forthcoming they are at any given moment (Brubaker et al., 2014; Licoppe et al., 2015). In analyses of profile text, Birnholtz et al. (2014) show how Grindr users use ambiguous or euphemistic language in their profiles to avoid potential stigma around behaviors some viewers may see as undesirable, such as casual sex. Fitzpatrick et al. (2015) further show that disclosure of different types of information in Grindr profiles varies by location and demographic factors, which suggests that local norms influence these practices.

While self-presentation is an important part of LBSA use, the connections these apps enable ultimately involve interaction between two people for a variety of possible purposes. As Gudelunas (2012) notes, people use LBSAs as part of a suite of social platforms that allow them to achieve particular relational objectives. Achieving these objectives, moreover, requires managing and acting on uncertainty around relational goals or objectives (Corriero and Tong, 2016) and sometimes the use of particular linguistic and para-linguistic strategies to achieve desirable outcomes such as casual sex while avoiding those that are not wanted, such as long-term friendship (Licoppe et al., 2015). Race (2015) further focuses on subcultures, such as those focused specifically on drug use or HIV status, while Roth (2014) focuses on the “bear” subculture within the gay community and identity around that body type.

In this work, we focus on the dynamics of these interactions by drawing on Baxter’s (1990) theory of relational dialectics. From this perspective, interpersonal relationships

are conceptualized as a set of continuous negotiations of each party's position on key relational dialectics or tensions. Relational dialectics compel us to move past individuals and profiles and consider interactions as dynamic, unfolding processes between two individuals. It further moves away from more linear models of self-disclosure and self-presentation in which information is progressively revealed and relationships grow progressively closer and toward a model in which relationship state and disclosure are continually in flux and under negotiation. We characterize the profile as a site of initial interaction and engagement between two Grindr users as an emergent relationship, subject to the three key dialectics Baxter describes. These include autonomy–connectedness, the primary dialectic which underpins all relationships, and the secondary dialectics of novelty–predictability and openness–closedness (Baxter, 1988, 1990).

Autonomy and connectedness refers to the surrender of autonomy that inevitably follows from connecting or interacting with others, with the assumption that people are constantly negotiating the tension between acting autonomously and in concert or connection with others. On Grindr, this plays out both in the connectedness to other Grindr users that occurs whenever a user signs in and in the moves toward connectedness that accompany chatting with somebody else or meeting them FtF. In the extreme, of course, a more permanent form of autonomy can be achieved by deleting the Grindr app and not reinstalling it, as explored by Brubaker et al. (2014). Similarly, complete autonomy relative to any particular user can be achieved by using the “block” feature.

Once connected even cursorily, people in a relationship must also negotiate the tension between openness and closedness, which relates to intimacy, honesty and vulnerability. Scholars have argued that people in relationships want and need openness, or sharing and transparency, to become close to one another. When there is too much sharing, however, they can become vulnerable to losing a sense of self inside the relationship (Rawlins, 1983; Rosen et al., 2008). A way of handling this tension is to share selectively and in varying levels of detail at different phases of the relationship (Baxter, 1990). On Grindr, openness happens as people share about themselves and their goals, in their profiles, chat, and in conversations or activities that take place FtF. There are risks, however, in revealing too much or too little at certain times, as we will further detail in our results below.

The third dialectic, *novelty and predictability*, describes tension between the potential for staleness that comes from behaving in predictable and familiar ways, with the potential for instability that comes from rapid shifts in behavior or too much change (Altman et al., 1981). The role of novelty can be to perturb the current relationship state in ways that introduce excitement or joy (e.g. an unexpected bouquet of roses), though novelty could also lead to conflict (e.g. a job offer in another city). Predictability, on the other hand, is useful in that it results in routines and consistency, though these can become boring or stale with time. On Grindr, this is complicated by what is often significant uncertainty about users' goals or objectives (Corriero and Tong, 2016) and their own experiences of routine interactions with others on Grindr, which may vary from user to user (Blackwell et al., 2015). A key element of this is users' expectations of each other based on initial impressions and past experience with a particular user or other users and the extent to which an interaction conforms to or deviates from these expectations. Substantial deviation from expectations, as we will show below, can potentially move the nascent relationship in a desired direction or, alternatively, lead to an abrupt ending.

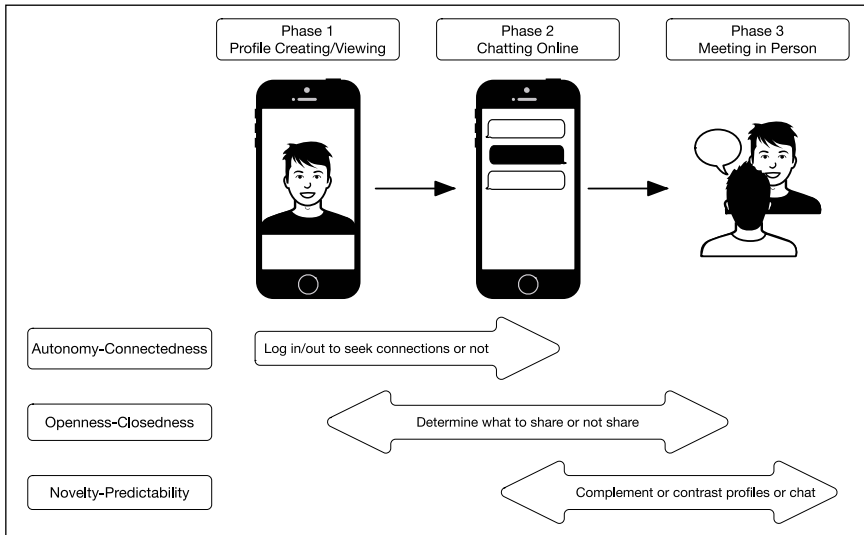


Figure 2. Diagram relating phases of interaction with most salient dialectics.

Phases of interaction and open research questions

Dialectic tensions unfold over time. In taking a dialectical perspective, we look across the different phases of interaction Brown, Maycock and Burns (2005) identified on dating platforms, which also apply to LBSAs. These phases include the following: (1) composing and viewing profiles, (2) chatting online, and (3) meeting in person. While composing and browsing profiles are clearly an important element of this process (as demonstrated in the work cited above), preliminary evidence about LBSAs suggests that the process of impression formation and negotiating relational dialectics does not end when users begin to interact synchronously or even when they plan to meet FtF (Blackwell et al., 2015; Couch and Liamputtong, 2008; Van De Wiele and Tong, 2014). Rather, we argue that initiating a conversation with somebody is a starting point for more interactive self-presentation and impression formation processes, as “performers” move from a broad audience (for a profile) to an individual engaged in conversation. We lack a systematic understanding of how these processes play out in this context, however, because the latter two of Brown’s phases have not been explored empirically through qualitative fieldwork, and the first phase has been studied largely from the perspective of either the profile composer or the profile viewer, but not covering interaction by the pair. In Figure 2, we highlight the salient dialectics across each of these three interaction phases.

While the past studies have focused on profiles as sites of self-presentation (e.g. Blackwell et al., 2015), re-conceptualizing the profile as a site of interaction allows us to tackle novel and important questions. Given that profiles set up later phases of interaction, we first ask the following:

RQ1. How is an LBSA profile interactive? What tensions and negotiations are present or salient within profiles of LBSAs?

Once users have identified profiles of interest (i.e. whom to connect with across the autonomy–connectedness dialectic), there remains the challenge of starting a conversation and determining whether they would enjoy further interaction with the other user, online or FtF (Fiore et al., 2010; Zytka et al., 2014). We were interested in if and how system features impact this process across phases. Prior work on online dating profiles suggests that perceptions change as uncertainty about an individual is reduced. Toma and Hancock (2012) find that longer text descriptions mean less uncertainty and greater perceptions of trustworthiness. Gibbs et al. (2010) investigated uncertainty reduction strategies, finding that online daters with greater concerns about personal security, misrepresentation, and recognition use more uncertainty reduction strategies when communicating with potential dates. Corriero and Tong (2016) found recently that people’s desire for and strategies for managing uncertainty varied with their goals in using Grindr. We sought to build on this work by focusing in detail on people’s perspectives on how this process unfolds. We ask the following:

RQ2. What do users chat about? What tensions and negotiations are present in chat? How does chat relate to profiles?

Through examining profiles and chatting, users may confidently gauge whether or not they want to pursue further interaction, but until they meet in person they may not be sure of what exactly will happen. As Couch and Liamputtong (2008) demonstrate, people’s FtF meeting experiences vary broadly, from a short coffee meetup during the day to a broad range of sexual experiences. While some of these parameters may be agreed on explicitly in advance, others are uncertain or, as we will see below, others may selectively reveal their motives for meeting. We ask the following:

RQ3. What happens as interactions move from online to FtF? How do relational tensions play out and get negotiated in this transition?

Methods

We conducted a qualitative interview study on experiences using Grindr across different phases of interaction. We then performed iterative, open coding to identify emergent themes, from which we turned to theoretical literature to frame the findings, and offer insight to the discussion around the negotiations experienced by our participants.

Participants

As noted earlier, any user’s experience of Grindr is highly dependent on when and where they use it. To maximize the range of experiences captured in our study, we recruited participants from across the United States. We used four approaches, from January to September 2014. Following Blackwell et al. (2015), we recruited using the app itself, setting a tablet’s location to “drop in” on Grindr in seven places across the United States. We also recruited through emails to lesbian, gay, bisexual, and transgender (LGBT) mailing lists (eight different Listservs) and ads posted to the Jobs and Volunteers sections of Craigslist (40 ads totally in 20 locations). In total, with all recruiting methods, we reached 20 US states.

There were 22 participants from eight locations, including five cities or urban areas and three rural areas. Nine participants were from the Southeast, one from the Mid-Atlantic, six from the Midwest, two from the Northwest, two from the West, and two from the Southwest.

Procedure

We used a semi-structured interview protocol with eight sets of questions that covered how participants constructed their profiles and the impression they wanted to give, what they chat with other users about and what they share about themselves, and positive and negative experiences meeting FtF with other users. Two members of the research team collected and analyzed the data, with regular discussion with the third team member about progress and direction. All interviews were conducted over the phone, save one instance where the participant chose to be interviewed via Skype chat. Interviews lasted 50–75 minutes, with an average of around an hour. Each interview was audio-recorded with participant consent and transcribed for analysis.

Data analysis

Two research team members (one male and one female; one the first author and the other a research assistant) used qualitative coding methods including regular comparison, identifying key concepts, and iterating through the transcripts (Miles and Huberman, 1994). This process began after 10 interviews had been completed. One performed iterative open coding on these first transcripts to identify emergent themes and refine the interview protocol for later participants. To develop an initial codebook, the members read three transcripts several times and iteratively coded for key themes and ideas. This process led to a list of 45 initial codes. After discussing the initial themes and codebook with the other team member, the members continued coding and conducting additional interviews, comparing and discussing data after each one. From this discussion and more specific data from the revised protocol, the codebook was updated to include 65 codes. The interview protocol was adjusted to emphasize questions around specific details of what happens during chats and FtF interactions.

Central themes of tension and negotiation emerged around the interactions participants reported. These tensions and negotiations cut across all three phases and were experienced in three critical ways: around decisions in connecting with others, what information to share and when, and how spontaneous or predictable to be.

Findings

Participants described experiences across the three phases of interaction, which included decisions about which profiles to view and what users shared in their own profiles (RQ1), what to share and not share in these chats (RQ2), and, at times, with whom to meet FtF and what happens when meeting (RQ3). Participants reported that they experienced what we identify and label as dialectic tensions present in Baxter's (1990) theory throughout all three phases. Participants' experiences demonstrate that negotiating tensions in earlier

phases affects interaction in later ones. As tensions are overlapping and cross-cutting, some of our examples may seem relevant to two or more of the tensions. We report any given example within the particular phase and dialectic we believe it best illustrates. To this end, we found autonomy–connectedness most salient during Phase 1, openness–closedness most salient during Phase 2, and predictability–novelty during Phase 3.

Connecting/disconnecting

Our first research question concerned the interactivity of profiles and how users decide what to communicate in their profiles and what to look for in others. It became clear in our analyses, however, that this question skips over the question of when participants decide to connect to Grindr at all. Because visibility of one's profile to others depends on recently signing into Grindr, the timing and frequency of users' Grindr activities can impact the nature of their connections with others. This can usefully be considered in light of the autonomy–connectedness dialectic, where connection is represented by frequently signing into Grindr such that one is visible to and, in some sense, connected to nearby others, and autonomy is represented by signing in only rarely or not at all.

There is a sense in which Grindr's architecture, by not providing push notifications and requiring recent sign-in for visibility, pushes users toward the "connected" end of this dialectic. Most participants said they sign in regularly throughout the day, including first thing in the morning and before going to sleep at night. They described their motives for doing so, which included checking for new messages, seeing who is online, pursuing new connections, or merely killing time. Signing in to Grindr becomes a way of signaling a sort of low-level connection to other users and perhaps a desire to connect more directly and interactively.

Not all participants sought to stay regularly connected and visible on Grindr, however. One participant, Dave (27, urban South) described a "love–hate relationship" with the app itself, regularly deleting and then reinstalling Grindr. In his words, "I usually don't have it on my phone. [...] Then when I get drunk sometimes, I'll just [download it] for that night or whatever and then the next morning when I wake up, I [delete it again]." Typically, he said he would reinstall it on weekends to hook up with others while hanging out late at night. He would then delete the app at the end of the night, effectively disconnecting from others on Grindr until he installed it again. From a dialectic perspective, Dave oscillates between periods of intense connection with the Grindr community (i.e. late at night when he is drunk and looking to hook up) and longer periods of autonomy when he has no connection with Grindr users. Requiring users to sign in to be visible likely encourages regular sign-ins for those who seek to be regularly connected. For those with more sporadic connection desires like Dave, however, Grindr's architecture means that Dave can effectively disconnect and remain invisible until he downloads the app and signs in again. The effect of this is that relational asymmetry in the desire for connectedness can be foregrounded by Grindr's architecture. That is, if either party wishes to disconnect (and does not sign in to Grindr), the other party in the relationship has no recourse for getting a hold of them assuming they are not connected on other social platforms.

Open versus closed: strategic sharing

Returning to our first research question about profile construction and assessment, decisions about what information to reveal and when is a critical aspect of interaction in all phases on Grindr, both from the perspective of crafting an attractive profile and in terms of effectively communicating one's intentions to others at the right time and in the right way. This process is complicated by all profiles being public: people may present themselves in their public profiles one way and within a private chat with a specific user another way. We considered this difference in terms of the openness–closedness dialectic. What to share and when also have important consequences in Phase 3 (FtF) if the relationship gets there, as nascent impressions are sensitive to each piece of information that is revealed.

Jason (33, urban South) explained how he would adjust his profile to improve chat initiations from other users. Jason was interested in pursuing dates with other guys, but the information included in his profile led to sympathetic conversations instead of romantically charged ones. As he puts it,

[My profile used to say] that I was in a relationship with someone for ten years and I contracted HIV 'cause he didn't disclose to me. And I just moved to Atlanta to start over things, and all that. And some people would actually take the time to read it; they'd say, "Oh, that's really sweet. I'm sorry that happened," or whatever like that. I wasn't fanning for sympathy, so I thought ... I took it down, because I was getting this sympathy thing. And like ... I wasn't saying it for that. I was just letting it be said, you know. [...] So I just took it down and just said it the way I said it. Just that I'm positive.

Jason demonstrates here the effects of openness within emergent relationships. He found being open about the details of his history with HIV to be too much, too soon for the relationships he was wanting to pursue. Consequently, he removed his story from his profile, just keeping his status, which he found led to better connections within chat.

Whereas Jason had difficulty in chat when providing too much information in his profile, others reported difficulty chatting given insufficient and/or vague profile information. To resolve this uncertainty, conversation was typically necessary. Participants explained that their chats on Grindr regularly start with a casual greeting (e.g. "Hey") and a brief response (e.g. "What's up?"), if interested in further interaction. As they chat, one person must make a shift, subtle or direct, toward more openness around what is to come. This shift usually comes after users have been chatting long enough to signify interest in determining what a given user is currently looking for.

Grindr's chat environment both enables and complicates this tension. For example, mediated communication is often characterized by disinhibition in discussing potentially uncomfortable topics such as sex. This can help lead to rapid openness about sexual desires or other practices in the chat. Adam (25, rural South), for example, explains, "I'll [suggest sex acts] through the application. Like, 'Hey, well if you ever want head or something, you should hit me up'. But in person, I really won't be that daring or crass." Adam describes himself as shy and it shows in the way he hedges his communication in a casual, almost indifferent tone ("hey," "well if you ever," "or something," "hit me up"). He still is able, however shyly, to communicate his desires through Grindr.

Participants did not always welcome openness, particularly when topics of sex or fetish are concerned. Our participants reported a range of experiences related to unwelcome openness. Colby (30, urban Northwest) related an instance where a man sent a photograph of a fetish early on in this conversation, which put Colby off from talking more. Phil (22, urban Midwest) puts these experiences in more general terms: “When I talk to someone [and] they just say, ‘I’m looking for sex’, [...], then I’m not really interested in furthering communication with them. Unless it’s that 25 or less percent chance that I’m just horny.” Here Phil points to his goals changing over time and the effect of these changes on his responses toward other users’ openness around sex. Phil captures here the contextual (looking for sex or not) and tension (openness around goals) that commonly occurs between users. For a connection to happen, this boils down to sharing the right information with the right person at the right time.

Our participants’ reflections on their experiences suggest that they are conscious of many decisions they make about how open or closed they are with others in any given Grindr interaction, and that they consider the implications of these decisions for connecting with others. This can be tricky in that the chat environment may foster disinhibition and sharing, but there is a very real risk of sharing too much or too little.

Novel versus predictable: expectation violations and reclaiming autonomy

On Grindr, some users move quickly from viewing profiles to chatting to meeting FtF. Participants express some shared understanding or expectation of what is likely to occur next, though there is also some important variation. These expectations stem both from what is explicitly mentioned in a user’s profile and people’s prior experience interacting with others on Grindr. The result is that behaving in novel ways can have unpredictable results, often including a decisive move toward autonomy by the other party (i.e. terminating the relationship), particularly during the first two phases of interaction when this is relatively easy as we noted above.

In the third, FtF, phase of interaction, it becomes even more difficult to move toward autonomy, because of social norms of politeness in FtF interaction. For example, Allan (37, urban Northwest) shared a story where a guy invited him out to a drink, but had him stop by the apartment first. Allan obliged, only to find out that the man not only looked different than the photographs he sent but also already had pornography playing and wanted to masturbate together. Allan was not interested in these activities, so seized on the opportunity presented by two incoming phone calls to excuse himself and leave politely.

Social etiquette did not always stop participants from reclaiming autonomy when encountering expectation violations (excessive novelty) in meeting FtF. One participant, Travis (33, urban South), described inviting a man over to hook up, but the man arrived “overweight and [...] not even looking like the picture.” Travis said he stood in the doorway and asked him, “*who are you?*” When the man explained the pictures were old, Travis shut the door, literally and metaphorically closing the door on their encounter. The man knocked and stayed outside using Grindr chat to explain the situation more, elaborating that the photographs were still of him, but he had gained 15 pounds. Unsatisfied with this explanation, Travis told him to leave, despite the man saying he “*came all this*

way.” The man’s argument highlights the notion of commitment and expectations that increase the resistance to terminating connection at this phase of interaction. It is possible that the man was seeking to strategically exploit this resistance in using an old photograph, expecting that Travis would follow through on his commitment to hook up, but we could not verify this.

In addition to predictable, at least to one person, violations occurring, participants also reported moments when both parties were surprised. An extreme example of this again comes from Travis, who shared an instance of being interrupted during a hookup at another man’s apartment by the man’s boyfriend, of whom Travis was unaware at the time. As he puts it, “the guy was sucking my dick and [his boyfriend] walked in and caught it. I’m trying to pull my pants up. [...] It was just uncomfortable. [Now I host because other guys] can have roommates, boyfriends” Recognizing that others may not be open about key details, Travis tries now to ensure more predictability by hosting at his place, although clearly others may share the same concerns when arriving at his place, so this strategy cannot be adopted universally.

Several shifts occur through these interactions, involving people, places, and behaviors. While the design of Grindr seems to promise clarity of goals for people to find others, in practice Grindr simply provides the connection and the users must negotiate goals among themselves. Travis, Alan, and Richard all had to recalibrate their engagement with other guys when they met FtF. Where Grindr succeeds is in affording the connection, albeit a potentially ambiguous one; beyond that, it is the users who engage in complex interactions to determine relational outcomes.

We find that at a broad level, the ambiguities and sensitivities of Grindr create space for potential incremental novelty as users negotiate their interactions with others across phases. What seems crucial on Grindr is the fast pace at which people move through phases and therefore negotiate these tensions. Interactions on Grindr can be different from other relationship settings in that where other relationships may require shifts in novelty–predictability to prevent staleness, we find that shifts in novelty–predictability can actually threaten nascent relationships of Grindr given the low time and commitment investment in them.

Discussion

We began with the assertion that profiles on LBSAs are a site of initial interaction that serve as a springboard for subsequent interaction, during which several dialectics or tensions that underlie interpersonal relationships are negotiated and addressed. We used this relational dialectics approach to explore LBSA interaction across multiple phases of relationship development as people move from browsing profiles toward a possible FtF meeting. Our results have implications for both research and practice in the area of LBSAs.

Research implications

By focusing on the tensions common to relationships (Altman et al., 1981; Baxter, 1988, 1990; Rawlins, 1983), we have shown how interactions around Grindr, across all the

phases identified by Brown et al. (2005), can be considered in a relational context. We recognize, of course, that the tensions we describe are common to all social relationships. In focusing on these, here we wish to highlight the ways in which they appear to play out differently on LBSAs. We wish to highlight three aspects of this.

Profile as initial negotiation. Our first contribution is that where prior work has focused on the profile as a primary vehicle for self-presentation that serves as a “promise” for future interactions (Ellison et al., 2012; Gibbs et al., 2010; Toma and Hancock, 2012), we found that the profile is one element in a suite of strategies people use to negotiate relational tensions across phases of a relationship. The profile can be seen as a particularly blunt strategy because information revealed is visible to all other users and thus difficult to tailor to a particular situation or relationship. Thus, there is a sense in which one must negotiate tensions in all one’s current and potential relationships when editing the profile. Moreover, merely having a profile, and a presence, on Grindr means surrendering some autonomy and provides opportunity for connection, as our participants (especially the one who deleted his account regularly) told us. This builds on Brubaker et al.’s (2014) account of leaving Grindr as a multi-step, socio-technical process. In our terms, we would describe this process as a negotiation of connection and disconnection with the Grindr community, with certain steps (such as deleting the app) forcing a strong, but often ultimately temporary, position on this dialectic.

Our participants were conscious of the information that they and others shared in profiles and the opportunities this information afforded or foreclosed. In contrast to work on deception and self-presentation in profiles (Ellison et al., 2006; Gibbs et al., 2010; Toma et al., 2008; Toma and Hancock, 2012), however, we saw people thinking less about lying or being lied to and more about how much to reveal about their goals and when in the process to reveal this information. This also builds on work by Gudelunas (2012), which suggests that people have different uses for social technologies by showing that people are conscious of both their own and others’ goals and that they think strategically about how to assess others’ goals and how/when to reveal their own. In addition, it addresses questions about uncertainty raised by Corriero and Tong (2016), via qualitative exploration of how people think about uncertainty about their own and others’ goals. In that study, for example, the authors noted that uncertainty was desirable for those with sex-oriented goals, but the authors could not explain why. Our results suggest that one reason for this may be the flexibility that uncertainty offers in terms of simultaneously occupying multiple positions on the key relational dialectics that are specific to different unfolding relationships. Uncertainty allows for more fluid negotiation of these tensions within the scope of specific relationships, which may be particularly sensitive for those seeking sex, as our participants describe.

Using dialectic terms, we have shown that it can be easy to use uncertainty to mask one’s goals, or take a neutral stance on the openness–closedness dialectic, when composing a profile. This uncertainty is then clarified through chats and interactions. The reverse is not true, however. That is, revealing a specific goal (e.g. the desire to hook up) in one’s profile can make it difficult to rescind this information in later interaction stages or to be open to other possibilities. Given that goals vary with time and that some goals may be stigmatized, and that attraction varies by individual, this can significantly complicate chat

and FtF meetups. Thus, in answer to Corriero and Tong, we suggest that uncertainty on LBSAs affords flexibility in negotiating the tensions inherent in nascent relationships.

Chat as strategic and interactive. Our second contribution is that chat in an application such as Grindr is more than just a way to build connections and coordinate FtF encounters or to progressively disclose information about oneself. On its face, Grindr appears to be a space for people to articulate, using a combination of profile text and one-on-one chat, what they want and pursue it. In practice, we find it not to be that simple. Through dialectics, we come to understand Grindr's chat feature as a forum for strategically (and often incrementally) introducing novelty and openness into nascent relationships. Moreover, people do this dynamically and adaptively. Rather than listing something in one's profile for everybody to see, for example, one can see how others respond to incremental bits of information and adapt accordingly.

These strategies can also backfire, however, as our participants described. For example, surprises when people met FtF, such as appearing less attractive than one's photograph or seeking sex instead of a non-sexual encounter agreed on in chat, ended with the participant breaking off the nascent relationship. While there are often socially tactful ways to break off such relationships, such as simply not going another date, in more traditional modes of meeting, LBSAs can challenge these practices. Inviting somebody to one's home to hook up prior to an FtF date, for example, here seemed to encourage the much more blunt strategy of shutting the door in somebody's face, as if merely clicking an FtF version of the "block" button on Grindr.

This encounter illustrates how the dynamics of these conversations blend some attributes of both online and FtF interaction in ways that build on Corriero and Tong's (2016) findings. People described attributes of their interactions that reflected literature on computer-mediated communication in that it was disinhibited (i.e. they explicitly discussed sex) and had limited cues (i.e. one could not easily predict or see others' responses). At the same time, these interactions also had real relational consequences in an already-uncertain context. People had to be careful: being too open or overtly sexual, for example, could mean that the other person may not want to meet up if they are not looking for an immediate hookup. Not being clear enough, however, could mean the other person may not realize what one wants and lead to disappointment, confusion, or the end of the relationship. That is, uncertainty could be used as a resource when sex was the goal as prior work suggests, but using this uncertainty effectively to achieve their goals could be challenging for our participants.

FtF as another site of negotiation. Our third contribution is that relational dialectics continue to be negotiated and that significant uncertainty still remains even after LBSA users have decided to meet FtF. This expands on prior work that has focused on how people present themselves and interact on the apps, but looked less closely at what happens once people meet FtF. The dynamics of these negotiations, moreover, change as people move through the phases of interaction. Prior work focused on self-presentation in profiles (e.g. Ellison et al., 2012) suggests that uncertainty is reduced and deception becomes more difficult when people meet FtF and are physically visible to each other. In our terms, we argue that it becomes more difficult as one progresses through the relationship

phases to occupy a neutral position on the key dialectics: one is being more or less connected, more or less open, and more or less surprising. These shifts are then responded to by the other individual in the relationship, with positive or negative consequences for the relationship itself.

Our results suggest that it can be easy to obfuscate or appear neutral in one's profile and even in chat, but that this is much harder when deciding whether or not one is on a "date," whether or not to let somebody into one's home, and whether or not to engage in sexual relations. We suggest that meeting FtF, rather than being an end goal, is actually just another stage on which the same relational negotiations play out, but in ways that may be more difficult and have greater social consequences.

This further builds on work by Gudelunas (2012) and Hardy and Lindtner (2017) in showing how different notions of what constitutes normative use of LBSAs and different experiences of LBSAs can influence how these negotiations play out once an FtF meeting takes place. In the rural settings Hardy and Lindtner (2017) describe, where meeting FtF may involve significant travel, this can be even more consequential as our participants' experiences further illustrate. Thus, we urge further qualitative and quantitative exploration of how the tensions of nascent relationships play out once people have decided to meet up, and how this varies based on people's experience using LBSAs to satisfy various needs (e.g. Gudelunas) and in settings where meetups require varying levels of commitment and investment of time or other resources.

Design implications

We believe that our results offer several contributions for designers of LBSAs, both for dating/hookups and more broadly. One key lesson is that users' goals and motivations for using an app such as Grindr can be various and dynamic. Allowing them to specify this information in profiles (e.g. the "looking for" field on Grindr) can seem like a useful design feature. In practice, however, this often failed because many users did not wish to say they were looking explicitly for sex, to avoid social stigma, or were only looking for a specific goal some of the time, but did not update their profiles accordingly. Each of these situations merits separate design consideration.

For the first point, we urge designers to consider mechanisms for matching users with similar goals, without necessarily revealing those goals to all other users. That is, one could reveal goals only to the system, and it could then match them with users who have similar goals. Another possibility would be to specify goals on a per-user basis. That is, as users view profiles or interact with others, they could submit goals for individual people. If people match individually on the same goal, the system may inform each of the users and they can interact from there.

For the second point, we urge designers to consider the pace at which information in profile fields is likely to change and consider different mechanisms for automating or updating information that changes often. We have noted that Grindr is sensitive primarily to shifts in location (because this is tracked and central to visibility on the app) and goals (because people use the app to satisfy in-the-moment urges). Location is automatically updated by the app. Goals seem rarely to be updated for users, however. Specifying goals at each login or on a per-other-user basis, as we suggest above, could help with this.

But, as features are introduced that make goals more explicit or require more steps to engage in interaction, possibilities for spontaneity may be constrained. As we learned from our participants, sometimes the shifts in goals of users are a result of human persuasion and interaction. Leaving room for spontaneity and ambiguity can play an important role in allowing experiences and relationships to unfold through negotiation, rather than simply trying to match on goals and preferences expressed at a particular point in time (Aoki and Woodruff, 2005).

Another way to address shifts in goals that would not require users to dynamically update an explicit goal field would be to allow for ephemerality of certain messages that are associated with an in-the-moment goal or interest (such as a hookup). This removes the problem of what we might consider the residue of prior goals. In Phil's case, for example, he notes that most of the time he uses Grindr to meet guys and chat, but sometimes he is seeking an immediate hookup. Crossing between those objectives could be awkward, particularly after going to sleep after seeking a hookup. With time-expiration as an option, a user wanting to hook up before bed one night could send a time-expiring chat to another that would disappear if he does not receive it by a particular time. This would help reduce friction in goal shifts caused by "residue" from prior interactions. This idea is not without complication, of course, but a mix of ephemeral and persistent messaging would be novel and worthy of exploration (perhaps especially if paired with goal declaration at session login).

Limitations

As with any study, our study has limitations that urge caution in interpreting our results. First, we report on interviews with a limited sample of Grindr users. While they were recruited nationally and described a wide range of experiences, it is not possible to generalize from this sample. At the same time, however, by the end of our interviewing process, there were clearly repeating themes suggesting that we had reached or neared theoretical saturation.

Second, our data also come from participants who use Grindr, just one of several LBSAs for MSM. Although our interviews asked specifically about interactions on Grindr, we also asked whether participants used any similar apps for similar purposes. While some participants reported using other apps, they reported them to be very similar in the types of experiences they had.

Third, a common limitation of studies like this is that we only have our participants' side of their stories. Moving forward, pursuing lines of inquiry on dyads (or groups) in these spaces will be productive, though admittedly recruiting would be tricky given the types and dynamics of interactions on Grindr that we have described.

Finally, we looked at an app for MSM. While some aspects of interaction are perhaps specific to MSM populations, such as sexual roles, we believe that the overarching issues around when and how nearby strangers connect can be applied more broadly to other location-based technologies. This is a specific case of a population with specialized needs, but, as Newell and Gregor (1997) argue, edge cases highlight salient issues for design more broadly and may be used to help inform design for larger populations. As designers, we tend to focus on supporting possibilities for connection but do not always

examine the interactions that happen after. On Grindr and other LBSAs, however, the in-app connection is just the beginning of a user's experience.

Conclusion

We have presented a qualitative study of how people make connections on Grindr. Grindr is a particularly interesting context for studying interaction because its architecture makes user experience sensitive to shifts in user context, in contrast to other social apps or sites that provide a more stable set of visible profiles or are more focused on shared objectives. While much research on online dating and mobile social apps has focused on profiles and self-presentation, we focused on how users assess others' profiles and goals, how they decide when and with whom to interact, and how they make decisions about meeting FtF. We argued that Grindr's architecture affects users' experience as it plays a role in relational tensions that are subject to the users' and app's sensitivity to time and place. We found that despite its simple architecture, Grindr supports users engaged in complex relational work with broad range of outcomes.

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