

Article



Departing glances: A sociotechnical account of 'leaving' Grindr

new media & society
2016, Vol. 18(3) 373–390
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sagepub.co.uk/journalsPermissions.nav
DOI: 10.1177/1461444814542311
nms.sagepub.com

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Jed R Brubaker

University of California, Irvine, USA

Mike Ananny

University of Southern California, USA

Kate Crawford

Microsoft Research, USA

Abstract

Grindr is a popular location-based social networking application for smartphones, predominantly used by gay men. This study investigates why users leave Grindr. Drawing on interviews with 16 men who stopped using Grindr, this article reports on the varied definitions of leaving, focusing on what people report leaving, how they leave and what they say leaving means to them. We argue that leaving is not a singular moment, but a process involving layered social and technical acts – that understandings of and departures from location-based media are bound up with an individual's location. Accounts of leaving Grindr destabilize normative definitions of both 'Grindr' and 'leaving', exposing a set of relational possibilities and spatial arrangements within and around which people move. We conclude with implications for the study of non-use and technological departure.

Keywords

departure, Grindr, leaving, location-based social media, non-use, quitting, sociotechnical, technology refusal

Corresponding author:

Jed R Brubaker, Department of Informatics, Donald Bren School of Information and Computer Sciences, University of California, Irvine, Donald Bren Hall 5042, Irvine, CA 92697-3440, USA. Email: jed.brubaker@uci.edu

Introduction

Leaving a service or technology may seem like a straightforward process. Accounts can be closed and applications can be uninstalled. But who leaves, how and why they leave are understudied and poorly understood sociotechnical questions. People who leave are difficult for researchers to find and leaving can manifest itself in multiple ways (from active refusal to implicit non-use). People's reasons for leaving can be as varied as their rationales for adoption. While a number of empirical cases have documented departures from specific technologies or systems (Baumer et al., 2013; Birnholtz, 2010; Mainwaring et al., 2004; Wyatt, 1999), rising interest in 'technology refusal' amid the widespread uptake of information and communication technologies (ICTs) such as Facebook (Marwick, 2011; Portwood-Stacer, 2013) prompts the need for an explication of leaving as a sociotechnical phenomenon.

In this article, we contribute to the literature on technology non-use by demonstrating the complexity of leaving Grindr,¹ a location-based social media application (app) used by gay men to see and connect with others nearby. We aim to describe how people's experiences and understandings of leaving depend on a system's social and technical dynamics. Drawing on interview data, we analyze the dynamic process individuals engage in as they negotiate social and technological aspects of use and departure. Based on the varied definitions of leaving, we argue that scholars should think critically about the limitations behind our assumptions of how users come to adopt and abandon technologies.

Literature on non-use and abandonment

Existing work on non-use and abandonment critiques a scholarly focus on technology use and users. Satchell and Dourish (2009), for example, argue that human–computer interaction researchers and designers, while interested in non-users, generally regard them as 'potential users' (p. 9). Empirical work on technology departure is limited, but two studies are worth noting. Birnholtz's (2010) study of instant messenger (IM) adoption, use and abandonment demonstrates how shifts in users' contexts relate to their long-term use and adaptation of a communication technology. Based on interviews with individuals who had transitioned from high school to college, Birnholtz reported that IM made his participants too available to contacts from previous contexts, prompting some to leave IM altogether.

While Birnholtz did not report on the circumstances under which those who abandoned IM might return, Mainwaring et al. (2004) explored this issue in their study of 'disconnectors' – those who had abandoned various infrastructures such as mass media and bank accounts. Disconnectors rarely held absolute opinions about the infrastructure and instead valued a 'selective and reversible disconnection' (Mainwaring et al., 2004: 425). Together, these studies situate leaving within evolving relationships between users and their sociotechnical contexts, and find leaving to be a fluid and unfixed phenomenon.

We find a similarly dynamic experience, but in ways that are distinct from the existing literature on 'technology refusal' that focuses on systems with mass uptake, such as Facebook. For example, 'online suicide' or 'infocide' has received increased attention

(Portwood-Stacer, 2013; Reagle, n.d.), as have projects like *Suicidemachine*, a system that automates deletion of social media accounts and content (Karppi, 2011). These refusals are seen as active, often political choices of individuals who can afford the 'cost of opting out' (Marwick, 2011). In contrast, our study demonstrates non-use of a more mundane variety: 'technological departures' in which individuals use a system but subsequently, often gradually, cease to do so.

Research setting

Grindr is a smartphone app used by gay men to find other nearby men for chatting, dates or sexual encounters. Grindr is an attractive service for conducting a small-scale study of leaving a location-based social media app because, in theory, it should be easy to leave. Deleting Grindr's mobile app is straightforward. The community of other users one leaves predominantly consists of unknown others, or at most represents only a subset of one's overall social network. However, in talking with individuals about leaving Grindr, we heard different stories that expose the complexity of Grindr use and departure; the simplicity of the technology elides the richer social practices and cultural understandings at play. In this section, we provide a description of Grindr and its everyday uses. We start by surveying existing research on geolocative media, followed by a description of Grindr's functionality and a brief overview of literature from communication geography to frame the relationship between geolocative media and the physical space leveraged by services like Grindr.

Geolocative media

Location-based social networking applications offer new ways to see, engage with and represent those who occupy physical spaces. Early work on mobile ICTs focused on text messaging among teenagers (e.g. Grinter and Eldridge, 2003), and with the rise of geographic positioning system (GPS)-enabled smartphones, human—computer interaction researchers have produced a growing body of research on location-disclosure (e.g. Consolvo et al., 2005; Hsieh et al., 2007; Iachello and Hong, 2007). Geolocative services such as Dodgeball and Foursquare have also been studied (Humphreys, 2010; Lindqvist et al., 2011), but this research focuses on these systems' 'check-in' models or relationships to existing social networks.

In contrast, little work has considered an emerging set of geolocative services like Grindr that reveal other users, their relative locations and ostensibly enable people to meet others nearby. As Sutko and de Souza e Silva (2011) explain,

[T]he brunt of literature on mobile phones generally highlights the capacity for these technologies to reinforce the bonds among existing social ties. But we might be witnessing a social shift towards the ability for location-aware media to help build and connect with new ties. (p. 819)

Grindr's popularity, as well as the success of competitors such as *Scruff*² and *GROWLr*,³ may be in part due to its target demographic. These services (as with online dating and



Figure 1. Screenshots from Grindr's iPhone app: (Left) List of profiles showing online gay men sorted by proximity. (Right) Sample user profile.

hookup sites like *ManHunt*⁴ and *Adam4Adam*⁵) echo techniques that gay men have long used to meet each other, including book and pen pal clubs, as well as travel guides that identified gay-affirmative spaces dating back to the 1940s (Meeker, 2006).

Design and use

Seeing and connecting with new ties is at the core of Grindr's design. After installing and opening the application, the user is taken to the 'cascade' (Grindr, 2012b). The cascade displays profile thumbnails for the 100 users who are currently online and nearby, ordered by proximity (see Figure 1, left). Selecting a thumbnail reveals a user's full profile (see Figure 1, right) and proximity (e.g. '522 feet away'). Profiles include a single picture, prominently displayed, along with a handful of optional information such as age, height, weight, ethnicity and the user's selection of what they are looking for, chosen from a list of system-provided options. From the profile, one can 'chat' with another user through an interface for exchanging messages, photos and location on a map. Like many mobile apps, Grindr is designed for easy adoption, giving new users almost immediate access to the profile cascade. At the time of this study, users were not required to create an account, register with a name or email address or provide a picture. Instead, after opening Grindr for the first time and agreeing to its terms of service, Grindr registers the user and instantly displays a visual cascade of nearby users.

Grindr's focus on profile images is an intentional design choice. In public interviews, Joel Simkhai, Grindr's founder, has claimed that 'it's one of the most important things, what does the other guy look like?' (Rosen, 2010). Visibility and representation are likewise reflected in existing scholarship on geolocative apps for gay men. Mowlabocus (2010), for example, approaches mobile technologies such as Grindr as both a form of digital cruising and queer congregation. Tinkcom (2011), tracing Grindr through cinema, claims that 'the "visibility" of the erotic becomes here [on Grindr], in quite explicit terms, the conditions under which sexual pleasure circulates' (p. 712). Conversely, a study of Grindr use among rural gay youth found that lower population densities perpetuated a notion of 'no gays around here' (Schwartz, 2011: 15). Rather than enabling local, in-person interactions, Schwartz (2011) found that the absence of nearby users limited the ability of teenagers to 'develop a sense of local queer community and create autonomous actions to promote local queer identity work' (p. 15). These contrasting accounts of Grindr highlight different understandings of the system, and reinforce the importance of understanding contexts of use and non-use.

Interactions in coded space

Grindr's geolocative nature requires that we consider the way location and interactions are figured by the platform and experienced by its users. Communication geographers conceptualize the relationship between communication and space in a variety of ways. Tuan (1977) distinguishes between 'space' as a container for social action and 'place' as a subjective understanding of that space. Adams and Jansson (2012), likewise, provide a framework for considering when and how communication 'textures' a subjective experience of a place as opposed to 'structuring' one's interactions within a space. The distinction between space and place can help differentiate between the technological affordances of Grindr as a space and how these affordances are impacted by structural properties of a physical location. Likewise, place allows us to account for how subjective experiences of Grindr are textured by individuals' interactions and experiences of the space Grindr as an app provides.

Other theorists claim that we cannot examine space as either static in nature or a container for social action. Notably, Kitchin and Dodge (2011) argue that space is always in the process of being produced and that with the growing ubiquity of software and systems in all parts of life, space is increasingly transduced through code. The gay bar, for example, can be 'remade' by apps like Grindr that provide new ways of engaging with and producing queer space. Grindr can act as an overlay – creating another layer of interaction – while physically at the gay bar. In this way, Grindr can extend the bar experience by providing a virtual space for queer socializing. Thus, studying departure requires attending to how individuals' understandings of Grindr emerge from practices and experiences that are 'smeared across multiple sites and moments in complex and often indeterminate ways' (Mitchell, 2003: 14).

As a communication platform, Grindr users actively remake the app's space through their interactions and very presence within the system. Apps become places where users can display individual profiles and perform sexual identity to other users who are present. However, apps also provide places to visually note the *absence* of potential connections as users see their physical isolation rendered in cascades, distances and maps. We pay particular attention to the visibility of such connections and disconnections, tracing how they appear in users' own accounts of how they adopt and leave Grindr. This study speaks to the potential complexity of leaving a platform – as technology, practice and coded space – behind. We adopt a sociotechnical orientation in order to describe how leaving involves both social actions and technical moves. We consider how individuals conceptualize Grindr, the ways in which they leave and the significance of their departures.

Methods and analysis

We conducted 16 semi-structured interviews during a 2-month period in mid-2012. We recruited a convenience sample from our extended networks by posting recruitment messages on social media (Facebook and Twitter) and to lesbian, gay, bisexual, transgender and queer (LGBTQ) email lists maintained by the authors' affiliated organizations and via snowball sampling. In order to avoid in-group biases, participants known by the interviewer were excluded from participation. The aim of our recruitment was to collect diverse perspectives about how and why participants left Grindr. As such, our findings focus on surfacing and describing aspects of leaving, rather than on providing generalizable results about Grindr or its broader use.

Participants ranged in age from 27 to 43 years (mean of 31.2). Seven participants identified as single, with the remainder indicating some type of relationship (self-described as dating, having a boyfriend, monogamously partnered/married or non-monogamously partnered/married). The size of this study does not allow us to account for differences in practices of leaving by younger or older individuals. Likewise, our participants predominately identified as Caucasian (10), followed by Latino/Hispanic (4), Asian American (1) and mixed race (1). None of our participants were African American.

Acknowledging the differences between urban and rural gay technology use (Gray, 2009), specifically with location-aware technology (Schwartz, 2011), we restricted our study to individuals using Grindr in urban settings. Participants were located in Boston, Los Angeles, New York City, Washington DC, San Francisco, Las Vegas, Seattle, Minneapolis, Ottawa and San Juan, Puerto Rico.

Our recruitment materials solicited participants who had 'left' Grindr within the last 18 months. In our attempt to explicate leaving, this term was left intentionally openended, letting potential participants interpret leaving for themselves. Interview questions were semi-structured and designed to evoke stories, letting participants guide the discussion toward topics that most interested them. Interviews started with the question 'Why did you leave?' to prompt participants to describe their departure. This was followed by questions about how they started using Grindr and what their typical use was before leaving. Interviews lasted between 30 and 90 minutes, and were conducted in-person, via phone and video chat.

We performed inductive analyses of interview data using a grounded theory approach (Glaser and Strauss, 1967). Using open coding techniques (Corbin and Strauss, 2008), we labelled participants' reports of why they left Grindr and organized these codes into

preliminary categories that were then used to code the data. Categories were refined using the constant comparison method that 'combines inductive category coding with a simultaneous comparison of all social incidents observed' (Goetz and LeCompte, 1981: 58). Finally, the coded data were organized around three questions: 'What do people think they are leaving?', 'How are they leaving?' and 'What is the significance of leaving?'

What do people think they are leaving?

Rather than assuming that we knew *what* participants had left, we allowed interviewees to describe Grindr for themselves, using their characterizations and experiences to help us understand what it was they thought they had left. We discovered four interrelated themes in what users said they were leaving: a time-consuming application; a set of behaviours; interpersonal interactions and expectations; and a medium, aspects of which some participants found concerning or objectionable.

The most common statement was that Grindr had been a 'waste of time', with two sub-themes emerging: first, Grindr was seen as a distraction that interfered with other activities such as office work, and second, Grindr failed to help participants meet the 'right kind of person'.

Grindr's messaging system is similar to text messaging, and is often used while focusing on other tasks. Participants frequently shared realizations about the amount of time they were spending on Grindr and how Grindr distracted them from other activities. Matteo, a graduate student in the Boston area, described keeping Grindr open during study sessions at the library, habitually taking breaks when the latest message arrived. Messaging, however, can be laborious, and conversations can stretch over long periods of time. In Carter's words, 'Having a four sentence conversation ... it's easy to lose an hour and a half doing that'. These drawn out conversations continued for participants as they moved between different contexts such as home and the office. Participants specifically shared anxieties about the impropriety of being caught 'Grindring' at work.

Unlike text messaging, Grindr conversations are most often with unknown people. This leaves individuals to balance priorities such as studying, working and socializing with friends against engaging with unknown others. The long durations and unpredictable nature of Grindr conversations led participants to say that Grindr was ineffective, or just the wrong tool for them personally. Although many used Grindr to find dates or a relationship, participants generally felt that Grindr was a tool for facilitating casual sex. Drew, for example, had occasionally used the application for casual sex, but was frustrated with the inability to establish 'meaningful connections' with other users.

Even among those whose objective was to find sex partners, such as Elliot, discovering a good match on Grindr was 'sort of like finding a needle in a haystack'. A self-described 'bear', Elliot was attracted to many of the slender men he saw on Grindr, but found that they were often uninterested in him. He left Grindr after having more success on competing applications like GROWLr, a similar app targeted at bears. The slender men on GROWLr, Elliot explained, were there because they were interested in men like him. Elliot's switch demonstrates how geolocative services are not only about categorizing others (finding the 'right kind of person') but also about categorizing and situating *yourself* in spaces where others can find you.

Even when connections do occur, they may not be ideal. When David, who described himself as being in an open marriage and looking for more than casual sex, was asked what he left, he answered, 'Access to a bunch of twinks that ... are only looking to really fuck, which is very low on the scale of things lost'. Likewise, in certain locations or after using Grindr for some period, participants described recognizing most users on the cascade. 'You know half the people on Grindr anyway', Matteo explained. Matteo described a local gay community that was socially and geographically tight-knit, resulting in a cascade that only showed familiar profiles.

Given participants' expectations and hopes that Grindr would help them connect to new people, participants described a loss of 'potential' by leaving Grindr. Matteo explained this well: 'I left potential, but I don't have a lot of faith that that potential was going to come to a lot of fruition anyway, so I'm perfectly fine with having left'.

Finally, former users objected to how Grindr presents profile information and objectifies gay men. While this was not stated as the primary reason for leaving, one participant referred to Grindr as 'a catalog of men'. James described Grindr as 'dehumanizing' and 'flesh-focused', explaining, 'I've never had a problem turning myself into a piece of flesh ... But I think to formalize that and turn it into the kind of the arena that Grindr turns it into ... it makes actual intimacy that much harder'. Adam agreed, arguing that apps like Grindr undermine the creation of fulfilling relationships by promoting 'a gay culture in which we look and always keep looking, because the next best thing is right around the corner'. Statements like these were not universal, but mirror those in Hillis' (2009) study of gay men and webcams. Hillis argues that even as webcam sites fetishize users in ways they find disconcerting, this fetishization is voluntary. The resulting tension, he suggests, may result in users who are willing to be fetishized only for a limited amount of time before they quit.

People offered diverse and contradictory accounts of what they left in Grindr, but their departures always centred on the app not serving their particular objectives. Participants' descriptions of *what* they left offer evidence of what they thought Grindr was – what they wanted and expected it to be. Such accounts let us see that participants were leaving not only an app, but a set of ideals and relationships, both real and imagined.

How are people leaving?

When participants were asked *how* they left Grindr, many (but not all) reported that they simply deleted the app from their phone. When pressed for specifics, participants reported a variety of technical and social practices in how they left, what preparations they made and their expectations of return. This suggests some people understand 'leaving' in different and ambiguous ways. In participants' descriptions of departure, one key friction involved the distinction between app, profile and user account. Few participants reported that they deleted their account. Some reported looking for ways to delete it, but were unable to determine how. As a workaround, many users anonymized their profiles, for example, by changing their photograph. A number of participants reported believing that removing the app from their device would also delete their Grindr account and any associated data, although this is not how the system is designed. Grindr leaves multiple

traces that surprised some participants. For example, Elliot reported that he had anonymized his profile and deleted his account prior to deleting Grindr, but was dismayed when, despite these efforts, he found a backup copy of the app stored in iTunes on his computer.

This raises questions around how users understand and define departure. For most, leaving technologically meant removing the app from their mobile device. But the distinctions among app, profile and account were often unclear and made it difficult for them to pinpoint the moment of departure or be sure that they had succeeded. Matteo, for example, only realized that his account was still active when a friend he had met on Grindr held an iPad to his camera during a Skype call to remark on their chat history. Matteo then described reinstalling the app in order to anonymize his profile.

Participants thus described a range of *technical* acts: deleting the app, anonymizing their profiles and attempting to close their accounts. Some acknowledged the futility of a complete departure, given the unavoidable trails of data they had left behind. Meanwhile, the *social* aspects of leaving included forfeiting access to other users, a means of meeting others and exiting a broader Grindr culture. For some, departure included leaving a version of themselves after self-realizations such as those experienced by Drew and Matteo.

Leaving was rarely a singular moment or action. Participants described gradual shifts in social circumstances rather than any specific causes. They often had only a rough sense of when they had stopped using Grindr (e.g. 'last summer'). Indeed, for many 'leaving' did not involve any distinct act at all:

There's no active departure, I guess ... You do have an account on Grindr but I've never investigated how to close it. It's funny. I consider things like websites to be more official in that when you're not using them you close down your membership. But an app ... we get them, we use them for little while, and we don't use them anymore ... (James)

For many, then, leaving is an attenuated process with both technical and social attributes. Indeed, several participants still had the application installed and some, like James, described leaving as disuse. Despite having left, he admitted delight in occasionally sharing Grindr with 'straight people during dinner parties who are incredulous that such a thing exists'. Conversely, David's departure was unintentional and unnoticed. Having switched mobile devices several months ago, it was only upon seeing our recruitment materials that he realized he had never installed Grindr on his new phone. For him, 'leaving' was more like 'forgetting', not a single moment of rejection but gradual neglect concretized by switching devices.

These stories demonstrate varied definitions and criteria for leaving. 'Leaving' describes a relationship to an individual's goals and expectations for the app more than its deletion or the running of its code. Nowhere was this more evident than in Jose's description of leaving Grindr despite regularly spending time with it. After meeting a couple of other Grindr users in person, Jose left Grindr because it was connecting him with 'people I would have never interacted with otherwise'. However, he still regularly logs on to view nearby profiles and occasionally chats. Asked to define 'leaving', Jose said, 'I think for me "leaving Grindr" means not meeting people off of Grindr'. Jose's interview marks distinctions between using Grindr for viewing profiles, interacting

with these people online and meeting in person. Goals and expectations can centre on the app's ability to facilitate offline experiences from online interactions, but expectations can be limited to online-only practices as well. Because *participation* means different things to different users, so too does *departure*. Understanding why 'former' users even define themselves as such can help articulate what it means to use or be part of a system.

Leaving included a temporal component. Some participants described installing Grindr with the expectation of leaving it sometime in the future, while others had left but expected to return. Daniel, for example, joined while on vacation, knowing that he would remove the app once he returned home; his adoption of Grindr was contextual (while on vacation), as was his departure from it (upon returning home). Others said that although they left Grindr, they intended to use it in the future. Matteo anticipated using it while abroad the following year: 'It's not like as soon as the plane lands, I'm going to reinstall Grindr but I don't want to be too sort of rigid in my position about it'. Similarly, Marshall, who was relocating, explained that while he would try to meet people without Grindr, 'I can't rule out the possibility that it [using Grindr] might happen again at some point'.

The location-specific nature of these departures and re-arrivals – while on vacation, or in a new city – suggest that individuals may not be leaving Grindr but, rather, a particular version of Grindr tied to specific *locations* or *inhabitants*. Indeed, Drew lamented his negative experiences with Grindr since moving to Las Vegas, but spoke at length about how Grindr was 'exciting when I was in Long Beach'. For people like Matteo, Marshall and Drew, use – and thus non-use – is geographically bound.

Finally, a number of participants spoke of gradually preparing to leave Grindr. Active steps included changing their interaction styles, converting contacts to other communications services and trying out competing apps before leaving. For example, when reflecting on his use of Grindr after meeting his now boyfriend, James described a series of slow changes they both made to their respective profiles as a way to discourage other users from messaging them:

And so we both kind of had this transitional phase where we anonymized our photos ... just kind of blurring our faces We just had these weird abstract representations of ourselves as a way of, like, beginning the goodbye or creating another layer between ourselves and other people ...

Leaving Grindr also meant forfeiting access to people and losing contact (or potential contact) with some people. Despite Drew's negative experiences, he made an effort to get the cell phone number of one person before leaving Grindr. Participants also prepared to leave Grindr by exploring alternative services. A number of our participants talked about leaving Grindr for one of its competitors. Often this was another geolocative service (typically *Scruff* or *GROWLr*) but a number reverted to non-geolocative systems, specifically dating sites like *OkCupid* or *Match.com*.¹²

These processes of leaving Grindr demonstrate an ambiguity and complexity elided by the ease with which users can remove the application from their phones. Individuals enact the versions of departure most appropriate to their understanding of the technology and their particular social circumstances.

What is the significance of leaving?

Some participants saw little significance in leaving Grindr, saying that they had regained time and eliminated distractions. Those who had removed the app often stated that they simply had 'one less app' on their phone. Others, though, described ways in which leaving the app was more complex and meaningful, with three themes emerging. First, participants changed how they were meeting men. Second, some described self-realizations as a result of, or bound-up with, their departures. Finally, even after leaving, for some, Grindr became an object of negotiation in the context of romantic relationships.

Many participants described the effect that leaving Grindr had on meeting people for sexual encounters, dates and romantic relationships. Many, like Drew, described returning to earlier ways of meeting people 'at the bar or through my network of friends and coworkers'. Interestingly, participants were quick to frame this shift positively, reiterating what they described as Grindr's inability to facilitate appropriate connections:

People don't actually know what they want most of the time, so Grindr may be very good at getting you ... outside your bounds, but then after a while you begin to understand what you do and don't want, and suddenly Grindr's very bad at helping you find that. (Jacob)

Discussions of meeting others were often in the context of reevaluating personal priorities. Many participants left Grindr because they thought it was focused on casual sex or hookups and would not result in 'meaningful connections.' Several men talked about self-realizations, personal evolutions or reexaminations of their actions and behaviours relative to a new life 'stage'. For example, for Aaron, leaving Grindr meant losing a way to find casual sex: 'If there was Grindr when I was maybe 18, I would probably have loved it, but where I am in my life at the moment, I think I've sort of grown out of constantly looking for sex'. Drew, meanwhile, elaborated a belief that hooking up was a detriment to finding what he wanted in a relationship:

My priorities changed. I thought that ... my stage in life merited more than just coasting and [a] hook up ... I also began to believe ... that if you hook up initially, it puts a damper on forming a meaningful relationship.

In Aaron's and Drew's accounts, leaving Grindr was about reaching a stage in life where they felt casual sex was incommensurate with their objective of being in a relationship.

Leaving Grindr also had broader implications as it caused participants to rethink how and why they met new people. With Grindr, Matteo described feeling responsible for making connections happen:

I think what it might be is ... a general sort of being okay with not feeling like I have to be actively participating in the process of meeting somebody. Just kind of like letting life happen as opposed to always feeling that I need to be making it happen in some way.

For some participants, departing from Grindr meant engaging in a form of selfdiscovery. That might mean reflecting on what they wanted from the app and the people it connected them to, or the meaning of casual sex in intimate relationships. For others, it was about considering the responsibilities they have for creating the relationships they envision.

For participants in romantic relationships, talking with their partner about leaving Grindr was an opportunity to discuss relationship objectives and desires. Asking what Grindr meant to each other acted as a conversational prop for discovering how the relationship was perceived and what it might become:

We discussed [Grindr] pretty early on when we started dating ... We compared notes about our experiences ... or why we did it at the time in our lives that we did, and basically trying to establish that now it's not something that we're using in the context of our relationship ... So in a sense, having that conversation was a way to talk about exclusivity ... I didn't know what he was hoping ... [but] I wanted to pursue a relationship ... So it was like a way to get us on the same page, I think, having that conversation about Grindr. (Aaron)

For Aaron, discussing Grindr with his romantic partner was a starting point for talking about the significance and dynamics of their relationship. They talked about what their relationship meant – or *could* mean – as they discussed how they used the system, framed previous experiences with casual sex and revealed what role, if any, Grindr had as the relationship developed. Conversely, some participants spoke of the challenges Grindr presented for their relationship. Daniel, having used Grindr briefly while on vacation, explained why he quickly deleted the app upon returning home to his boyfriend:

We don't have an open relationship ... I just didn't want him to think that I was up to, you know, something behind his back ... I was concerned about overstepping the bounds of the relationship.

Simply having Grindr installed on his phone was a potential breach of the terms of his relationship. Grindr seemed to present more of a challenge if relationship boundaries had already been set. Adam, for example, recounted a confrontation he had with his boy-friend of 8 months:

So we were all up in northern California ... [and] my two roommates, who are in a monogamous relationship, and have been for five or six years, they still are on it [Grindr] ... And one of them got on it and saw this hot guy and showed me the picture. And I just looked at it ... nothing more. But my boyfriend saw me ... and got very upset. You know – essentially accusing me of Grindring. But I wasn't, I just looked at it. Just the notion that I ... could even potentially be Grindring made him very upset.

Even though Adam was not actively using the system (he had no account, had not installed the app, was not messaging anyone), Grindr provided an opportunity for his boyfriend to express anxieties around commitment:

The possibility that I would be looking somewhere else, even ... just for fun, bothers him ... because Grindr carries with it such implications that you are, in fact, on there ... for hooking up. (Adam)

It is notable that this confrontation happened in the presence of Adam's roommates - a committed, monogamous couple. When asked to contrast the tensions that Grindr

produced within his relationship against that of his roommates, Adam spoke of the stability and security of his roommates' relationship:

They've been together a long time ... They trust that the other person isn't going to do anything. They're in a civil union ... So yeah, I think they just have that level of security and trust.

Grindr may present challenges particular to newer relationships where the terms of how people relate to each other – and others – have not yet been negotiated. Participants said that Grindr draws them into a space for meeting other men, even if that is not their intention. Encountering Grindr – having it installed on your phone, messaging other users, or simply looking at it on a friend's phone – means having a de facto encounter with a cascade of men. These encounters can raise questions about the state of a relationship, the context of a text message or the meaning of commitment. Assumptions about what it means to encounter Grindr – or encounter other people *through* Grindr – become starting points for understanding and negotiating what it means to be in a relationship.

Even when participants claimed that their use of Grindr was uneventful and their departure insignificant, leaving required participants to position themselves relative to the system's technology, people, interactions and cultural implications. Although people stop using Grindr, or remove the application, there is always a network of actors that can pull them back into a relationship with the system. In these moments, individuals must renegotiate Grindr's significance to their relationships – to the expectations and desires they have for themselves and others.

Tenuous departures

Our study highlights leaving as a complex process, influenced as much by social factors as technological ones. Rather than a simple narrative or explanation for leaving Grindr, we found a wide range of meanings: from leaving a constant source of distraction, finding the app no longer welcome after starting a relationship, leaving a space that was not meeting expectations, to gradually using the app less and ultimately forgetting about it. Participants talked about Grindr use and non-use as a way of defining relationship boundaries, as a problematic vehicle of self-presentation and in terms of the 'version of themselves' that they felt Grindr's system design invoked.

Although people use and leave Grindr in a variety of ways, we observed that for all the participants leaving is a gradual process, involving both social and technical acts, and it is profoundly connected to the particularities of a specific time and place. Significantly, participants made sense of leaving Grindr in relationship to remembered and imagined understandings of the self.

Departure, then, is neither a singular moment nor a linear path. Rather, it is a process in which people execute, negotiate and undo the meaning of leaving, even while keeping open the possibility of return. Leaving can mean actively choosing not to use an app, limiting its use, changing one's expectations or gradually forgetting the application even exists. Users can often identify how and when they joined a service, but pinpointing their departure is less clear; they can feel absent from an application without making a visible exit. Jose, who still uses the application, feels that he has left because he has no intention of meeting other users in person. Elliot questioned whether he had truly left when he

found a backup of the Grindr app on his laptop. Although participants described themselves as disconnected from the app and not particularly invested in it, they had not taken visible, *technical* steps to quit. Even among those who deleted the app, only a minority tried to close their accounts or remove personal data. Because it is so easy to start using Grindr, users may not fully appreciate that it is difficult to uninstall, and thus inhabit a paradoxical position of thinking they have left while their profile – or data – continues on. Studying technological departure requires more than simply cataloguing technical actions and tracing data flows. It involves understanding a set of subtle, gradual and seemingly contradictory sociotechnical moves (and even the absence thereof) that, taken together, constitute departure.

The process of leaving is bound up with specific times and locations. Given Grindr's functionality, many of our participants talked about Grindr relative to their physical location. Users like Jared commented on the pleasure of using Grindr while travelling. Others indicated their openness to returning to the service in the future, in Marshall's case, after an upcoming move to a new city. Like Birnholtz's (2010) IM users, whose messaging practices changed as their contexts did, Grindr users understand the system differently depending on where they are, and what those physical locations mean to them. The site of departure in this study was rarely Grindr as a whole, but experiences in specific locations such as 'Grindr in Los Angeles', 'Grindr while on vacation' or 'Grindr in a new city'.

Indeed, our participants seemed to see clear connections between leaving Grindr and leaving places. Their decisions to leave were influenced by a desire *not* to be contactable in particular settings and, conversely, their potential willingness to *return* to Grindr was linked to imagined future experiences in future locations. Our findings are thus consistent with Mainwaring et al.'s (2004) finding that 'disconnectors' value a 'selective and reversible disconnection' (p. 425). Anticipation of future use suggests that research agendas around non-use may benefit from studying returns as well. Studying use and non-use in terms of cyclical adoption and departure may help us better understand broader trajectories rather than discrete periods of use or non-use.

Finally, understanding these departures involves tracing more than an app's *situated* meanings – how users interpret technological functions and attendant social relationships – but also app-related remembered and imagined versions of self. Returning to Matteo's quote from earlier – 'I left potential'. There seemed to be dimensions to leaving Grindr grounded not in rejecting an app's utility, community or representations, but in users' app-related memories of previous self-identities and of imagined future selves. Leaving may be a moment of *inflection* that marks, and is inseparable from, personal histories and plans. Departures simultaneously draw boundaries between previous app-related decisions and experiences, and future-oriented, aspirational identities that may require rejecting or re-interpreting aspects of self-identity experienced while using the app. We can offer only preliminary empirical evidence for this aspect of leaving, but suggest it is fruitful ground for future studies of sociotechnical departure.

Conclusion

Uninstalling is not leaving, and deleting is not departing. In this study of people's descriptions of how and why they left Grindr, we can see the ways in which leaving

encompasses a variety of social and technical moves, executed at different times and in different places, with equally diverse results.

Some participants left what they saw as a time-consuming and distracting app that objectifies men. Others left a way to meet people for relationships and/or casual sex. Still others left a broader sense of a possible future, a potential to have a relationship and fulfil a personal goal or aspiration. Some participants considered leaving to be a technical act (erroneously equating uninstalling with deleting personal data). Others made more elaborate attempts to anonymize profiles before departing (replacing personal information and images with generic data). Others emphasized the interpersonal and situational aspects of leaving (transferring contacts outside of Grindr or uninstalling once in a different location). Finally, some simply stopped using the app — equating non-use with departure.

Finally, we found that leaving Grindr was sometimes an opportunity for personal development, or doing relational work. We heard about conversations where couples explicitly discussed what *not* using Grindr meant for their relationships. And when others stopped using Grindr, they described leaving a 'version of themselves' – but one that they might resurrect or reencounter in another time and place. For them, leaving was a partial and attenuated act at best.

While we have described a range of leaving experiences and meanings, there are certainly others. We do not claim that these accounts of leaving Grindr can be applied to all mobile technologies and online communities, or even that these participants are representative of all Grindr users. The system and participants studied here are particular to the experiences of urban gay men using a specific geolocative app. Our contribution is a set of sociotechnical accounts of departure that highlight the diverse, subtle and multifaceted aspects of leaving. They suggest that an *absence* of use is just as complex and meaningful as overt and observable participation. Leaving is a personal, subjective experience that may not be a determined single decision, but a more subtle, slow and partial process. Any measure of users who are 'leaving' an application through technological acts such as deletion represents only a slice of a much broader set of practices. When studying nonuse, it is important to develop deeper theoretical understandings of the many ways people 'leave' a platform – and what personal, social and technological dimensions are embedded in our departures.

Acknowledgements

This study was conducted during Brubaker's internship with the Social Media Collective at Microsoft Research in Summer 2012.

Funding

This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

Notes

- 1. http://www.grindr.com
- 2. http://www.scruffapp.com/
- 3. http://www.growlrapp.com/

- 4. http://www.manhunt.com
- 5. http://www.adam4adam.com/
- 6. Grindr operates on a 'freemium' model: Standard users are limited to 100 profiles. For a monthly fee, users can see up to 300 profiles (Grindr, 2012c).
- 7. Grindr restricts usage to those 18 years old and above and prohibits pornographic profile photos. Grindr will transmit location information, but explains that users retain all ownership rights: http://grindr.com/terms-of-service.
- 8. In August 2013, Grindr started requiring users to create accounts in order to combat spam and support users with multiple mobile devices.
- 9. 'Bear' is a slang term used to describe members of a gay subculture characterized as heavyset, muscular and/or having hairy bodies and facial hair.
- 10. According to Grindr's documentation, 'It is currently not possible to delete your Grindr photo. However, you can change it to be all black: Take a picture with the camera covered, then follow the steps below to change your Grindr photo to that picture' (Grindr, 2012a).
- 11. This misconception may be the result of an iOS prompt seen when deleting an application: 'Deleting "Grindr" will also delete all of its data'. This message is meant to indicate that local data will also be deleted from the device, but may incorrectly suggest that remote accounts and data will also be deleted.
- 12. http://www.okcupid.com, http://www.match.com

References

- Adams PC and Jansson A (2012) Communication geography: a bridge between disciplines. *Communication Theory* 22(3): 299–318.
- Baumer EPS, Adams P, Khovanskaya V, et al. (2013) Limiting, leaving, and (re)lapsing: an exploration of Facebook non-use practices and experiences. In: *Proceedings of SIGCHI conference on human factors in computing systems*, Paris, 27 April—2 May, pp. 3257–3266. New York: ACM.
- Birnholtz J (2010) Adopt, adapt, abandon: understanding why some young adults start, and then stop, using instant messaging. *Computers in Human Behavior* 26(6): 1427–1433.
- Consolvo S, Smith IE, Matthews T, et al. (2005) Location disclosure to social relations: why, when, & what people want to share. In: *Proceedings of SIGCHI conference on human factors in computing systems*, Portland, OR, 2–7 April, pp. 81–90. New York: ACM.
- Corbin J and Strauss AL (2008) Basics of Qualitative Research. 3rd ed. Newbury Park, CA: SAGE.
- Glaser BG and Strauss AL (1967) *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Chicago, IL: Aldine Publishing.
- Goetz JP and LeCompte MD (1981) Ethnographic research and the problem of data reduction. Anthropology & Education Quarterly 12(1): 51–70.
- Gray ML (2009) Out in the Country: Youth, Media, and Queer Visibility in Rural America. New York: NYU Press.
- Grindr (2012a) *Popular Photo Questions*. Available at: https://grindr.zendesk.com/hc/en-us/articles/200301794-Popular-Photo-Questions
- Grindr (2012b) What guys are shown in my Grindr cascade? Available at: http://help.grindr.com/entries/20887252-what-guys-are-shown-in-my-grindr-cascade
- Grindr (2012c) Grindr xtra. Available at: http://grindr.com/xtra
- Grinter R and Eldridge M (2003) Wan2tlk? everyday text messaging. In: *Proceedings of SIGCHI conference on human factors in computing systems*, Fort Lauderdale, FL, 5–10 April, pp. 441–448. New York: ACM.
- Hillis K (2009) Online a Lot of the Time: Ritual, Fetish, Sign. Durham, NC: Duke University Press.

Hsieh G, Tang KP, Low WY, et al. (2007) Field deployment of IMBuddy: a study of privacy control and feedback mechanisms for contextual IM. *Springer Berlin Heidelberg, pp.* 91-108.

- Humphreys L (2010) Mobile social networks and urban public space. *New Media & Society* 12(5): 763–778.
- Iachello G and Hong J (2007) End-user privacy in human-computer interaction. *Foundations and Trends in Human-Computer Interaction* 1(1): 1–137.
- Karppi T (2011) Digital suicide and the biopolitics of leaving Facebook. *Transformations* 20. Available at: http://www.transformationsjournal.org/journal/issue_20/article_02.shtml (accessed 28 July 2012).
- Kitchin R and Dodge M (2011) *Code/Space: Software and Everyday Life.* Cambridge, MA: The MIT Press.
- Lindqvist J, Cranshaw J, Wiese J, et al. (2011) I'm the mayor of my house. In: *Proceedings of SIGCHI conference on human factors in computing systems*, Vancouver, BC, Canada, 7–12 May, pp. 2409–2418. New York: ACM.
- Mainwaring SD, Chang MF and Anderson K (2004) Infrastructures and their discontents: implications for Ubicomp. In UbiComp 2004: Ubiquitous Computing, Springer Berlin Heidelberg, pp. 418-432.
- Marwick A (2011) 'If You Don't Like It, Don't Use It. It's That Simple'. ORLY? In: Social media collective research blog. Available at: http://socialmediacollective.org/2011/08/11/if-you-dont-like-it-dont-use-it-its-that-simple-orly/ (accessed 28 July 2012).
- Meeker M (2006) Contacts Desired: Gay and Lesbian Communications and Community, 1940s–1970s. Chicago, IL: The University of Chicago Press.
- Mitchell WJ (2003) Me++: The cyborg self and the networked city. Cambridge, MA: The MIT Press.
- Mowlabocus S (2010) Gaydar Culture: Gay Men, Technology and Embodiment in the Digital Age. Ashgate.
- Portwood-Stacer L (2013) Media refusal and conspicuous non-consumption: the performative and political dimensions of Facebook abstention. *New Media & Society* 15(7): 1041–1057.
- Reagle J (2012) 410 gone Infocide in Open Content Communities. In F. Attwod (ed.), Selected papers of internet research AoIR13. Presented at the AoIR13, Association of Internet Researchers. (Acceptance rate 46% of 371.) Retrieved from http://spir.aoir.org/index.php/spir/article/view/5
- Rosen Z (2010) Interviews: the Fathr of Grindr, Joel Simkhai. *The New Gay*. Available at: http://thenewgay.net/2010/02/the-fathr-of-grindr-joel-simkhai.html (accessed 18 June 2012).
- Satchell C and Dourish P (2009) Beyond the user: use and non-use in HCI. *Human-Computer Interaction* 366: 9–16.
- Schwartz R (2011) Out of the grind? Grindr and teen queer identity work in rural US. Paper presented at the American Anthropological Association Invited Session, Montréal, QC, Canada, 17 November.
- Sutko DM and de Souza e Silva A (2011) Location-aware mobile media and urban sociability. *New Media & Society* 13(5): 807–823.
- Tinkcom M (2011) 'You've got to get on to get off': shortbus and the circuits of the erotic. *South Atlantic Quarterly* 110(3): 693–713.
- Tuan YF (1977) Space and Place: The Perspective of Experience. Minneapolis, MN: University of Minnesota Press.
- Wyatt S (1999) They came, they surfed, they went back to the beach: why some people stop using the Internet. In: *Prepared for the Society for Social Studies of Science annual meeting*. Available at: http://virtualsociety.sbs.ox.ac.uk/reports/surf.htm

Author biographies

Jed R Brubaker is a PhD candidate in Informatics at the School of Information and Computer Sciences at UC Irvine. His research focuses on digital identity, identity-based technologies and the relationship between human and data life cycles. Brubaker is a member of the Intel Science & Technology Center for Social Computing and a National ARCS Foundation fellow. Brubaker earned his MA at Georgetown University in Communication, Culture and Technology and his BS at the University of Utah in Psychology.

Mike Ananny is an Assistant Professor at the University of Southern California's (USC) Annenberg School for Communication & Journalism and Affiliated Faculty with USC's Science, Technology and Society cluster. He studies the public significance and sociotechnical dynamics of networked news systems. He has held fellowships and scholarships with Harvard's Berkman Center for Internet & Society, Stanford's Center on Philanthropy and Civil Society, the Pierre Elliott Trudeau Foundation, the LEGO Corporation and Interval Research. His PhD is from Stanford University (Communication), SM from the MIT Media Lab (Media Arts & Sciences) and BSc from the University of Toronto (Human Biology & Computer Science).

Kate Crawford is a Principal Researcher at MSR, a Visiting Professor at the MIT Center for Civic Media and a Senior Fellow at NYU's Information Law Institute. She researches the spaces where people, algorithms and data interact. Her work has been widely published including in Information, Culture & Society, the International Journal of Communication and Feminist Media Studies. In 2013, she received a Rockefeller Foundation Bellagio fellowship for her work on data and ethics.