Tinder's lesbian digital imaginary: Investigating (im)permeable boundaries of sexual identity on a popular dating app

Abstract

Dating apps have received rapid uptake, with Tinder as one of the most popular apps in the heterosexual market. However, little research has investigated the experiences of women seeking women (WSW) on this app. This article combines two interview studies of WSW in Australia, Canada, and the United Kingdom to investigate their self-presentations of sexual identity on Tinder. By configuring settings to "seeking women," participants perceived they were entering a space conducive to finding WSW. However, men, couples, and heterosexual women permeated this space, heightening the need for participants to signal non-heterosexual identity. Their signals fused references to lesbian and queer culture with Tinder's infrastructure to evoke a digital imaginary, as a routinized set of practices imagined to resonate with a shared community. Although signals within this digital imaginary were sometimes playful and ambiguous, their default toward a recognizable lesbian identity often rendered other sexual or gender identities invisible.

There is a certain aspect of trying to look queer when you're on your Tinder profile.
– Jane (23, United Kingdom)

Tinder was the first location-based mobile dating app to receive rapid uptake in the heterosexual market, reaching more than 15 million matches per day in 2014, just two years after its launch (Bertoni, 2014). It has become a common tool for navigating intimate life in Australia (Newett et al., 2017) and the United Kingdom (MacKee, 2016), with the company claiming its impact is global (Tinder, n.d.). Tinder's popularity has sparked research interest, with studies identifying that the app's swipe functionality, Facebook login, and heavily visual profiles shape how users present themselves on the app (David and Cambre, 2016; Duguay, 2017; Ward, 2017). While Tinder has historically been promoted among mainly heterosexual user populations, such as college sororities and fraternities (Summers, 2014), the app affords users the ability to change their account setting to "seeking" others of the same gender. With few apps targeted specifically for women seeking women (WSW)[1] (Murray and Sapnar Ankerson, 2016; Tang, 2017), these individuals turn to popular, predominantly heterosexual dating apps to meet others for dating (Hatmaker, 2014). However, popular platforms pose complications for LGBTQ+ people as they manage sexual identity disclosure across multiple, overlapping audiences (Cho, 2017; Cassidy, 2018). As Jane observes, modifying account settings is only one step toward "trying to look queer" within the context of Tinder; she must also evoke these qualities throughout her self-presentation.

    Much scholarly attention has been paid to gay men's self-presentation on dating apps (Licoppe et al., 2016; Bonner-Thompson, 2017), but there is little research addressing how WSW manage self-presentation on predominantly heterosexual dating apps. This article examines how WSW construct and seek out indicators of sexual identity on Tinder through a combined analysis of two interview studies with 27 participants based in Australia, Canada, and the United Kingdom (UK). Tinder's settings enabled participants to enter a perceived space they spoke about as separate from the app's predominance of heterosexual users. However, the space's frequent permeation by cisgender-presenting men, couples, and heterosexual women intensified participants' need to "look queer," which they satisfied by fusing a range of digital practices with cultural references to develop signals of sexual

identity. We theorize that these signalling practices formed a digital imaginary, as a shared understanding of recognizable female non-heterosexuality linked to an imagined community of WSW. While some ambiguous and playful signals expanded the boundaries of identity signals associated with WSW, narrow and stereotyped self-presentations were common as strategies for recognizability, characterizing the digital imaginary as predominantly lesbian. The impermeable aspects of this lesbian digital imaginary contributed to the othering of bisexual, transgender, non-binary, and feminine-presenting individuals. These findings highlight how cultural practices related to signalling sexual identity combine with imagined affordances (Nagy and Neff, 2015) and become routinized, producing digital imaginaries that shape participation within the app.

Shared imaginaries of sexual identity

Scholars have identified a long history of religious, medical, and psychiatric institutions contributing to the stigmatization of non-heterosexual identities (Foucault, 1979; D'Emilio and Freedman, 1997). This history has also encompassed practices, rituals, and cultural signals adopted by LGBTQ+ people to identify each other in hostile spaces. These signals have included gay men's hankie code (Reilly and Saethre, 2013), demarcated gay and lesbian venues and "villages" (Ghaziani, 2014), and the production and claiming of certain films and television shows (Walters, 2001). Despite this, WSW have often struggled to attain the visibility necessary for mutual recognizability. Theresa de Lauretis (1993) attributes this to representations that consistently construct them as fundamentally different from or inherently similar to men. While certain codes and symbols have signified lesbian identity at different times in relation to cultural trends, such as 1990s butch/femme gender performances in lesbian bars (Case, 1993) and references to celebrity icons like Ellen (Dow, 2001), WSW have historically needed to self-identify to avoid a default of invisibility imposed by heteronormativity and hegemonic masculinity.

While the internet has played a fundamental role in connecting LGBTQ+ people (Gray, 2009), the signalling and recognition of shared identities has remained important online. This is true for older technologies, such as gay men's chatrooms with coded domains and erotic usernames (Campbell, 2004), to today's fragmentation of Tumblr into niche sexual and gender subcommunities (Cover, 2018). On an early lesbian email listserv, the

"Muff Diva Index" served as a sophisticated user-made code for signaling gender identity and preferences (Wakeford, 1996)*.* Contemporary apps and platforms tend to provide such codes and cater to certain forms of self-presentation through targeted marketing materials and interface design. Studies of websites and apps targeting WSW identify programmed gender categories that encourage users to self-categorize as femme, butch, or queer/other (Hightower, 2015; Tang, 2017). *Her* – a dating app for WSW – initially launched with marketing materials and a homepage backdrop that included photos of white, feminine cis-women socializing. In pairing these images with an interface that mimics the soft feel of Pinterest, the design prescribed self-presentations reflecting a highly marketable, lesbian-identified "social collective of white femininity prioritizing a 'fun, feminine vibe'" (Murray & Ankerson, 2016: 64). While such apps may encourage users to conform to recognized, monolithic expressions of sexual identity, users also attempt to simultaneously subvert these categories, establishing multi-faceted self-presentations through photos, biographies, and other creative displays (Hightower, 2015; Tang, 2017).

Popular platforms that are not LGBTQ-specific provide new opportunities for self-presentation while underscoring the need to be recognized as non-heterosexual. Migrating to platforms like Facebook and Instagram has enabled gay men to escape stereotypes associated with dating apps like Gaydar and Grindr (Cassidy, 2018). However, gay men's use of identity signals, such as location-based hashtags (e.g. #gaybrisbane), poses complications for managing overlapping audiences. In Herrera's (2017) study of WSW on Instagram, interview participants often eschewed sexual identity labels offline but used lesbian-related hashtags (e.g. #lesbian, #lesbiansofinstagram). Even if participants identified more closely with other labels, such as "queer," or aimed to de-center sexual identity from their self-presentation, they perceived "a powerful social requirement to make their sexuality intelligible to others through naming it" (Herrera, 2017: 7). This intelligibility is complicated for those whose sexual identities lack a consistent visual code, as Pond and Farvid (2017) observe in their study of bisexual women's use of Tinder. Their participants attempted to communicate sexual identity and evaluate others through photos, emoji, and self-descriptions but felt these attempts were often unsuccessful due to difficulty matching with WSW. Our studies build upon these findings to develop a broader understanding of

how shared practices of signalling to an imagined community can result in the exclusion of individuals who do not conform to an easily recognizable identity category.

Imagined possibilities of digitally mediated dating

Digitally mediated dating involves a degree of imagination regarding the physical and substantial semblance of potential partners met through apps and websites. Users implement uncertainty reduction strategies to establish an accurate perception of a potential date, perceiving that "the profile constitutes a promise made to an imagined audience that future face-to-face interaction will take place with someone who does not differ fundamentally from the person represented by the profile" (Ellison, Hancock and Toma, 2011: 56). Online daters imagine that they are accountable to a profile they can embody in person. In turn, users expect their dates will not differ fundamentally in appearance, personality and other qualities from their profile presentation.

Functionalities and practices associated with mobile dating apps place urgency upon identifying potential discrepancies in self-presentation. Dating apps highlight proximity as they co-situate users in digital and physical space, establishing an imperative of meeting in person (Quiroz, 2013; Blackwell et al., 2015). On Tinder, this emphasis on meeting up is reinforced by the app's focal swipe functionality: as individuals are presented with another user's photo, they can swipe left to discard or right to "like." If two users "like" each other, they form a match and unlock a text message screen that is conducive to sending short, quick messages. The swipe affords rapid, binary sorting with an emphasis on users' visual self-presentation (David and Cambre, 2016; Duguay, 2018). Users respond to Tinder's swiping and reduced cues in profiles by posting photos emphasizing not only their attractiveness but also attributes imagined to entice similar others (Ward, 2017).

To allay concerns about this accelerated process of matching, Tinder's functionality for registering through Facebook serves to verify users' authenticity (Duguay, 2017). The app imports a user's first name, age, photos, gender, likes, and friendlist, conveying a difficult to fake self-presentation built over time. Although Tinder now allows registration by email and phone number, it has retained the Facebook login and added connections to Instagram and Spotify, enabling further cross-platform self-presentation. Tinder's connection with Facebook has been shown to render gay men's self-presentations

recognizable across multiple audiences, encouraging increasingly normative and less sexualized behaviour than on Grindr (MacKee, 2016). However, for individuals working to keep information about their sexual identity separate from homophobic Facebook audiences (Cho, 2017), importing self-presentations from this platform to Tinder may not convey sexual identity with enough salience to be detected by potential matches.

Conceptualizing digital imaginaries

Throughout this article, we situate the digitally mediated signalling practices of WSW on Tinder within the concept of digital imaginaries. We understand digital imaginaries as the interplay between cultural referents, such as symbols and media, and technological infrastructures, which gives rise to routinized practices assumed to resonate with an imagined community. We draw on Hess and Zimmerman's (1999) concept of "transnational digital imaginaries" that considers how digital media can refigure "past/future traces" (1999: 152) to open up possibilities for creating cultural meanings through the combination of current and past media practices. These possibilities are realized through individuals' engagement with digital technology in practices of vernacular creativity, as the novel recombination of cultural resources in ways that are "recognizable because of their familiar elements, and create affective impact through the innovative process of recombination" (Burgess, 2006: 206). The resonance of these creative outputs, which appear on contemporary platforms as videos, photos, GIFs and memes, relies upon the shared cultural competencies and knowledges of creators and audiences alike (Kanai, 2016). Fusing digital tools and practices with cultural referents can be understood as exercising digital literacy, since these practices enable individuals to communicate through a "digital vernacular" (Kanai, 2016: 4) that fosters a shared sense of social belonging (Wargo, 2015; Kanai, 2016). Therefore, the ability to comprehend and convey cultural references demonstrating a shared sense of identity is integral to participation in a digital imaginary.

Alongside culture, technological infrastructures are pivotal to digital imaginaries. In her discussion of "sociotechnical imaginaries," Jasanoff (2015: 4) describes them as "collectively held, institutionally stabilized, and publicly performed visions of desirable futures." She mobilizes Anderson's (1983) concept of an "imagined community" consisting of individuals who may never meet in person but who are thought to possess a shared

commonality. Assumptions about what a community shares become programmed into the technological infrastructures stemming from sociotechnical imaginaries. Nagy and Neff's (2015) concept of "imagined affordances" provides a way for comprehending how these infrastructures feature in users' digital imaginaries: imagined affordances are "expectations for technology" – on the part of both designers and users – "that are not fully realized in conscious, rational knowledge but are nonetheless concretized or materialized in socio-technical systems" (2015: 1). Users construct their own digital imaginaries of how to act on a platform alongside or in response to the sociotechnical imaginary inscribed by designer intention and a technology's materiality.

Through negotiations of technological infrastructures and imagined affordances, individuals attempt to manage their self-presentation on social media. Several scholars understand digital self-presentation through adaptations of Goffman's (1959) framework of impression management, which identifies that individuals give performances of the self that are appropriate to specific contexts and audiences. Platforms tend to collapse social contexts, rendering users unable to account for their overlapping audiences and leading them to cater to an imagined audience, as the envisioned and intended receivers of specific performances (Marwick and boyd, 2011; Litt, 2012). Further, dating apps layer physical and digital contexts for interaction, shaping impressions that are made simultaneously across these spaces (Blackwell et al., 2015). While an imagined audience may conjure visions of family or friends, a digital imaginary is a vision of a targeted, shared community accessible through the skillful deployment of sociocultural and digital practices that reflect a user's perception of that community identity.

Methods

This article brings together two similar studies of Tinder's use by WSW, both of which involve interview accounts and attend to the role of Tinder's technological infrastructure. AuthorA applied the walkthrough method (Light et al., 2018), consisting of two phases: first, Tinder's environment of expected use (constituted by its vision, operating model, and governance structure) was established through a scan of official materials, media coverage, and social media discussions. Then the technical walkthrough phase involved step-by-step walking through screens and observing how the app's features and functions are

designed to shape user activity. In 2015-2016, AuthorA recruited participants through local LGBTQ+ organizations and on social media, resulting in ten women responding: eight located in Australian urban centers and two in central Canada. Through in-person and Skype interviews, participants engaged in "user-led walkthroughs" (Light et al., 2018: 896), showing the researcher their profiles and interactions on the app while discussing experiences and perceptions of other users.

AuthorB carried out a similar approach with participants in the UK in 2017. She conducted semi-structured interviews alongside the media go-along method (Jørgensen, 2016), a tool developed in response to Hine's (2015) call for a "mobilities-oriented Internet ethnography" that allows the researcher to observe individuals with mobile communication at hand. As Light et al. (2018) note, the media go-along and user-led walkthrough are related approaches, where the participant guides the researcher through the app's features and typical interactions. After recruiting through social media and LGBTQ+ national and student advocacy groups, AuthorB's study reflects the experiences of 17 participants split between one large and one smaller city in the UK.

After each researcher analyzed her own interviews, we shared findings and identified parallels. Then we returned to our own datasets and re-coded segments according to shared criteria and emergent analytical themes (Morse and Richards, 2002). We co-constructed the analysis that follows by iteratively discussing, writing, and checking our conclusions against the literature. This rigorous dive into the data retrieved multiple, detailed participant experiences, providing "thick descriptions" (Geertz, 1973) from which to understand key themes. This approach triangulates sources and analysts, examining the interviews from different perspectives and evaluating findings gathered through similar methods (Patton, 1999).

Taken together, these findings reflect the experiences of 27 WSW, ranging in age from 19 to 35. Participants' self-described sexual identities included lesbian, gay, homoflexible, pansexual, queer, and bisexual. They identified as women, along a spectrum of gender identities that included non-binary, femme, and masculine-presenting. Participants' employment status included service industry workers, white-collar workers, and students. Their names have been replaced with chosen or researcher-designated pseudonyms.[2] These findings are subject to some limitations. Interviews focused on Tinder

as the most popular app among interviewees when these studies were conducted and thus only reflect the imagined affordances and self-presentational practices of this app. While this article provides a transnational analysis and draws similarities across participant accounts, it only focuses on specific western countries and comparative design was not considered from the outset. Although our combined sample of participants represent a wide diversity of sexual and gender identities, these findings primarily reflect the experiences of white women, with only two non-white participants, who identified as Asian and Iranian respectively. These limitations and the need to understand a greater diversity of experiences in relation to dating apps highlight opportunities for future research.

Findings and Discussion

The following sections present themes that surfaced throughout our analysis of interview data and Tinder's infrastructure. First, we discuss perceptions of what participants described as "Gay Tinder," a space of interaction created through the configuration of gender preferences, which enabled WSW to focus their partner-seeking on each other but remained permeable to other actors. Then we describe how participants responded by heightening their signals of sexual identity and closely evaluating others' signals. Through signals that involved cultural and digital aspects, participants constructed a digital imaginary that mostly referenced conventional and stereotypical notions of lesbian identity in order to be recognisable to an imagined community of WSW. While the boundaries of this lesbian digital imaginary were expanded through ambiguous and playful self-representations, the final section explains how this digital imaginary nonetheless contributed to the invisibility and exclusion of bisexual, transgender, genderfluid, and other non-normative identities.

Gay Tinder

"Gay Tinder" surfaced as an *in vivo* code that reflected participants' perception of a digital space they entered when switching their settings to "seeking" individuals of the same gender. Jamie (24, UK) explained, "I am very literal in that, I just assume, if you're on Gay Tinder, then you're gay, well not gay, but queer." For participants, Gay Tinder described a portion of the app dominated by LGBTQ+ people, assumed to be the only ones to change their gender settings due to the heteronormative uptake and discourses surrounding Tinder.

Jamie invoked "gay," and used it interchangeably with "queer," to construct a broad category of non-heterosexuality, reflecting young people's ambivalence toward specific identity terms (Herrera, 2017) and the popular uptake of "gay" as a catch-all for the wide spectrum of sexual identity beyond "straight" or heterosexual.[3] Our participants imagined themselves entering a space – whether or not they specifically called it Gay Tinder – where only WSW should be visible. Since users entered Gay Tinder intentionally by changing the app's default settings, Laura (34, Canada) felt that this could convey same-gender interest without the need for programmed identity labels:

> It doesn't say that I'm pansexual…you turn your interests on, like seeking men or women. So, if other women have women as their interests, then that's how they're going to see me and that's how they're going to know I'm interested in women.

Gay Tinder emerged as an imagined affordance (Nagy and Neff, 2015), stemming from the designers' intentions to allow same-gender partner-seeking, the materiality of the app's settings, and users' perception that switching the settings opened up a space for interaction that was coded as non-heterosexual.

Similar to the way that mutual recognition on Grindr can generate a co-presence among gay men in digital and physical space (Blackwell et al., 2015), co-presence among women on Gay Tinder enabled participants in both studies to assume some knowledge of others' sexual identities. Erica (25, UK) explained how this could reduce awkwardness with new acquaintances, "I don't know how to broach asking if you're gay or queer or whatever. But on Tinder, you knew, as soon as you were meeting someone, that that was potentially on the cards." Danaë (19, Australia) noted that Tinder was:

> …more successful even than going to a gay club or bar. Because you have no telling factors even in a gay club that people are gay which again is annoying… [Tinder] just takes away the horrible sort of guessing game.

With historically LGBTQ+ urban spaces gentrifying and becoming increasingly heterosexualized (Ghaziani, 2014), Tinder provided participants with an alternative way to identify WSW across physical spaces. Putting it succinctly, Thea (25, UK) remarked that this was the "informational value" of Tinder.

However, Gay Tinder was easily permeated, shattering perceptions that it was an entirely separate space of WSW. Sabrina (28, UK) expressed frustration about the frequency

with which male-presenting individuals appeared on her swipe screen: "Why is this person setting himself as being a woman? What is that about? Just to show you how upsetting this is - *this* is apparently a woman," she exclaimed while showing her screen to AuthorB. Opinions were mixed on why so many men surfaced when swiping with settings configured to show only women. Several participants were adamant that men changed their gender settings to "female" to appear in WSW's searches and potentially sway their desires. Other participants simply attributed this phenomenon to a glitch.

Deceptive, predatory users, couples looking for threesomes, and heterosexual women also intruded Gay Tinder. Predatory accounts often solicited sexual behavior: Julia (28, Australia) experienced several accounts immediately asking for "nudes" after matching with her. Participants from both studies encountered heterosexual couples looking for sexual encounters with bisexual women. Elizabeth (26, UK) interpreted their intentions as exploitative: "You are an experience; I am going to use you." Participants also screened out straight-looking women. Alex (21, UK) described identifying duck-face selfies as a "complete and utter stereotype of heterosexual femininity" that caused her to swipe left. In further exploration of these interruptions, AuthorA (forthcoming) has examined how their accumulation contributes to a sense of scarcity among WSW on Tinder. Duguay, Burgess, and Suzor (2018) underscore that Tinder's policies and governance mechanisms have failed to curb the sexually aggressive behaviour of predatory and deceptive users, resulting in WSW feeling unsafe and unwelcome on the app. These findings also reflect bisexual women's encounters with men and couples on Tinder, leading Pond and Farvid (2017) to conclude that Tinder is not a queer woman-friendly space. These interruptions illustrate that while co-presence on Gay Tinder provided indications of interest in women, the conceived space's permeability spurred participants to develop more salient signals and collect greater evidence of others' sexual identities before considering them viable as potential dates.

Tinder's lesbian digital imaginary

Danaë (19, Australia) described multiple stages of identifying WSW:

There's a three-stage thing to how confident I am that they're gay. If they have the 👭 but nothing else, then I'm like, "Maybe." And if they have the 👭 and then they have

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[Facebook] 'likes,' like [gay bars], then I'm like, "Probably." But if they're like

outright, "Oh, I like girls" or they slip in that they're gay somewhere, I'm like, "Yep."

Indicators of sexual identity generally comprised four categories: shared symbols, visual self-presentation, references to LGBTQ+ media and personalities, and self-declared labels. Danaë identified the most recurrent shared symbol: the "girl-girl emoji," as Jamie (24, UK) called it. Gertie (34, Australia) remembered when she added the emoji to her profile, "I realized that that's what everyone was doing. So, I did it just to help out, I guess." Emoji are at once cultural referents, conveying affect and communicative messages, and programmed features made available through commercial digital devices (Abidin and Gn, 2018). Phyllis' (23, Australia) girl-girl emoji appeared to be slightly different from others, highlighting how digital configuration through particular devices, operating systems, and companies both constrains and normalizes the presentation of sexual identity: "It's a weird Android thing I've got there. I was almost going to return [the phone] when I got it, because I'm like, 'That is totally not obvious enough. I can't see it.'" The discrepancy between the Android and iOS emoji sets nearly motivated her to change phones. Although rainbow emoji were also popular, participants felt they were more ambiguous. When observing a profile with 🌈☮️❤️ in the bio and nothing more, Sabrina (28, UK) was stumped, "So, she is gay, is that what she's saying? I don't know." While not all participants personally identified with the white, slender, feminine girl-girl emoji – Jamie described it as overly "cutesy" – it emerged as a popular and reliable symbol for indicating interest in women.

Participants attended to the signals in their own and others' visual self-presentation. Multiple participants identified short hair and what Bec (30, Australia) described as "stereotypical lesbian clothing" as indicators of sexual identity. For ThunderGoddess (35, Canada), this included "plaid" and "rainbow shit." She looked to see, "Do you have motorcycles in your profile?" linking this imagery to WSW identity through association with the lesbian motorcycle club *Dykes on Bikes*. When met with an ambiguous profile, participants examined multiple photos before feeling confident in a user's sexual identity. Elizabeth (26, UK) illustrates this process:

> Here's a picture of her and a man. I don't know, he might be gay, she might be bi.
> She's wearing queer badges in all the photos…and she's wearing rainbow colored

bangles so she's marking herself as very clearly: I'm a member of the queer community.

In another instance, Jane (23, UK) noticed subtle variations across another user's photos, "I think they're trying to look queer, again, because they have sort of a suit… [flicking to the next photo] This picture is more classic, it's more classic feminine." The mixture of feminine and masculine self-presentations sometimes made pinpointing a user's sexual identity unintelligible but often still indicated non-heterosexuality.

Profile photos frequently referenced lesbian stereotypes, often relying on expressions of masculinity or lesbian tropes. Beth (22, UK) assessed a profile laden with these signals:

It's very stereotypical…the haircut is a very short buzzcut, but it's also very stylish… Even in the photo she has with her group of friends, like glitter, dyed hair, it looks like they're coming from [a] glam ball or drag ball or whatever. And then the cat, nicely placed around the pussy area… I'd say she's definitely queer, like, I don't know what her actual label would be.

The cat photo links this user to a WSW identity by combining a common stereotype with sexual innuendo (Radulovic, 2016). The inclusion of stereotypical and more broadly queer signals communicates non-heterosexual identity but overwhelms Beth's attempt to apply a specific label. Instead of clear categorizations of femme, butch, and queer common in lesbian dating websites and apps (Hightower, 2015; Tang, 2017), Tinder's lack of drop-down selection menus combined with WSW's playful and ambiguous signals to also expand, poke fun at, and destabilize lesbian identity.

Shared references to LGBTQ+ media, celebrities, and activities were also indicators of sexual identity. Rachel (24, UK) discussed the 'likes' on her profile: "I have [a] membership at Heaven, G-A-Y. So that conveys that I am really active in LGBT things." Her affiliation with the most popular local bars indicated that she was an insider in the LGBTQ+ scene. Since LGBTQ+ subtexts in mainstream media are often subtle, participants frequently signalled specialist knowledge of them through complex references. Phyllis (23, Australia) posed questions to matches: "Oh, do you watch *Orange is the New Black*? Or, have you seen *Rocky Horror Picture Show* before?" The latter being a musical entrenched in LGBTQ+ culture and the former a television show that many participants referenced for its lesbian and bisexual characters. Emily (23, UK) included a joke in her profile about having a

"clandestine glove lunch," a reference to Kate McKinnon's parody of the movie, *Carol,* from the 2016 Spirit Awards. Others would only understand this as a lesbian reference if they knew of the movie, which is about forbidden love between two women in the 1950s, or if they recognized McKinnon as an openly lesbian comedian/actress. AuthorB, a self-identified bi-woman, had never heard of this sketch before interviewing Emily. While participants understood such nuanced discussion as difficult to fake, indicating that those who could engage with these topics were WSW, their assumptions of the shared knowledge of an imaginary community may produce false negatives in practice.

Participants who wanted to be understood as interested in women without ambiguity included sexual identity labels in their bios. Sabrina (28, UK) wrote that she was a "big lesbian" to reflect that "I'm very out with my identity and I don't want anyone to be confused." While "lesbian" was a highly recognizable label, participants whose labels were less common felt the need to change or clarify their usual self-identifications. Caitlin (24, Australia) identified as "homoflexible" but wrote "bisexual" in her bio:

> I think people recognize 'bisexual,' but other things, not so much. So, if you said you're 'pan' [pansexual], it may require further explanation, depending on who you're talking to. If you said, 'homoflexible,' again, further explanation. It's a convenience thing.

Similarly, Elizabeth (26, UK) wrote "bi/pan," using bisexual as a clarifying label before pansexual while hoping that "pan" would still signal her interest in users with non-binary or transgender identities. Participants found that easily understood labels common in public discourse were useful for quickly signaling sexual identity.

Altogether, participants' signals for indicating sexual identity contributed to, and resonated with, a broader lesbian digital imaginary on Tinder. Participants' references to lesbian and LGBTQ+ culture often encompassed stereotypes pertaining to fashion, pets, degrees of masculine self-presentation as well as affiliation with particular venues, media texts, and recognizable labels. These cultural referents were integrated into digital practices in which participants responded to Tinder's sociotechnical imaginary, engaging with emoji, imported data, and the opportunities and constraints of app features to form their self-presentations. These practices reflect a multi-faceted digital literacy that entails both technical skill and shared knowledge (Kanai, 2016). Therefore, participants hoped that their

digital, cultural indicators of sexual identity were legible to an imagined community of WSW, which – due to the stereotypes circulated and the need for rapid recognizability – often narrowed to an imagined lesbian community.

While some participants identified room for ambiguity in self-presentation, and users' playful self-expressions were presented next to conventional tropes, the permeability of Gay Tinder also made them likely to dismiss the profiles of women whose sexual identity remained unclear. Alex (21, UK) stated this strongly, describing that her profile was intended to "generate a sense of, 'I am queer, don't fuck with me if you're not.'" The imperative to clearly signal a non-heterosexual identity that aligned with popular understandings of lesbian, gay, and queer identities also led to the invisibility and exclusion of individuals with more fluid and less recognizable identities.

Tensions and exclusions

Within Tinder's lesbian digital imaginary, individuals were expected to make static, unambivalent claims about their gender and sexual identity. This expectation posed challenges for those who were still developing a sense of sexual identity and for bisexual women, whose identities were often interpreted as unstable. Jane (23, UK) did not state her sexual identity explicitly on her profile because she was working to understand it herself while contending with values instilled from her parents:

> I don't necessarily agree with them anymore. But they would say nobody needs to know that you like men and women. So I don't think it's the first thing I would say to describe myself necessarily… And I was not maybe as confident about my sexuality as well, because there's always a certain question of, "Am I queer enough?" because I've mostly dated men.

As one of several participants who acknowledged the prevalence of negative responses to bisexual identities, Jane appreciated the privacy that Tinder's design afforded her:

> I thought it was a good thing that people couldn't necessarily see that I was looking on both men and women profiles. I definitely wanted to look queer to the women I was seeing, but it was more in the conversations that I would straight away say, "Ok, I'm romantically interested in women."

Although Jane traded other users' trust for privacy with regard to her profile, she still felt compelled to clarify her interest in women when messaging matches. ThunderGoddess (35, Canada) attempted to dispel the notion of bisexual as an unstable sexual identity by writing "Bisexual, not bi-curious" in her bio, feeling that this confirmed, "I know who I am, I am bi." Since participants frequently encountered heterosexual women and couples searching for sexual encounters, bisexual women were often associated with these groups of users. Danaë (19, Australia) admitted, "This is really bad of me. I used to be quite prejudiced against bisexual girls because I think there's definitely a stereotype in society of like, they're just trying to get more attention from boys." These assumptions about bisexuality reflect Pond and Farvid's (2017) findings that such biases spur bisexual women on Tinder to signal their interest in women through popular indicators of lesbian identity, reinforcing the lesbian digital imaginary.

Transgender, genderfluid, and feminine gender identities were also seen as out of place or absent from the lesbian digital imaginary. Chloe (26, UK) struggled to assert a queer identity alongside presenting as a "femme": "A lot of gay women feel the need for reassurance, if you're feminine-presenting, that you're not straight, again and again…and again." Since displays of masculine clothing items (e.g. suits, plaid shirts), hairstyles, and activities were seen as references to a stable WSW identity, the absence of these signals drew one's sexual identity into question. With regard to transgender individuals, Laura (34, Canada) remarked on Tinder's insufficiency for including them in her profile browsing, "If I'm pansexual and I'm interested in meeting a trans person, that's not an option for me, so it is limiting in that aspect." Despite making a widely publicized change allowing users to specify a gender identity outside of the male/female binary (O'Brien, 2017), Tinder requires users who do so to select whether they want to be shown in others' searches for men *or* women (not both), which still sorts users along a gender binary. Tinder also does not allow users to specify whether or not to be shown transgender and non-binary people, making it difficult to ensure that they are included in one's dating pool. Chloe (26, UK) noted that when male-presenting individuals surfaced in her searches, she looked for "an androgynous side about them" that might indicate they are transgender or non-binary. Similarly, Natalie (19, UK) attempted to differentiate non-binary people from cisgender men: "I tend to look for pronouns if they've got them written but people who are presenting just as men and

don't tell me differently, then I don't swipe for them." She used the disclosure of pronouns as an indicator of non-binary or non-gender conforming identity. The permeation of cisgender-presenting male profiles into Gay Tinder, often as sexually solicitous users, heightened the need for participants to differentiate gender non-binary and transgender individuals from these other users.

Some participants omitted other stigmatized aspects of identity from their profiles altogether. Gertie (34, Australia)'s partner had not posted about her parental status, which led to a frank conversation: "And I said, 'Remember that you didn't put down that you had a child in your profile?' And she goes, "Why? Would you have not matched with me?' And I said, 'No.'" With the routinized practices of signalling sexual identity in Tinder's lesbian digital imaginary, including children or indicators of motherhood in profiles was seen as abnormal. Caitlin (24, Australia) confirmed her reflexive left swipe when viewing such profiles, "When I first started using Tinder, I had a bit of a knee-jerk reaction to people who are parents" and refused to match with them. However, she also reflected on her decision to not identify as polyamorous on Tinder, "[It's] far more controversial [than sexual identity], I think…especially if I relocate and use the app to meet people in the country town that I'm going to move to next year." The conventional and stereotypical presentations of sexual identity common within Gay Tinder shaped these users' understandings of desirability, leading them to downplay identities they anticipated would be perceived as deviant or stigmatized.

Conclusion

We have drawn on findings from our two studies of WSW's use of Tinder to understand participants' practices of signalling and discerning sexual identity. The ability for users to configure Tinder's settings for "woman seeking women" emerged as an imagined affordance, which participants perceived as allowing them to enter Gay Tinder – a space imagined as an opportunity connect more concertedly with other women and an informational source about their potential sexual identifications. However, frequent encounters with cisgender-presenting men, predatory accounts, couples, and heterosexual women heightened the need for participants to signal their sexual identity more saliently. Participants' signalling practices involved a fusion of digital and cultural referents, with

lesbian stereotypes and tropes commonly included as highly recognizable indicators of sexual identity within Tinder's rapid swipe screen. As these signals were imagined to resonate with a shared community of WSW, their normalization and routinization contributed to the construction of a lesbian digital imaginary that shaped participants' self-presentation and interpretation of others' profiles.

Our findings pertaining to Tinder's lesbian digital imaginary are most pertinent on three levels. First, participants' signals and those they evaluated in others' profiles referenced not only stereotypes but also playful and ambiguous expressions of identity. This suggests an expansion of the notion of lesbian identity to include a wider array of signals of non-heterosexual female identity. Aligning with Herrera's (2017) finding that WSW on Instagram default to #lesbian for its recognizability, participants often defaulted to stereotypically lesbian self-presentations in order to be rapidly identifiable as non-heterosexual. However, many participants did not personally identify as "lesbian" and used identity-related terms like "gay" and "queer" interchangeably. The combination of lesbian cultural referents with indicators that challenged normative presentations of this identity, such as by combining feminine and masculine self-presentations in the same profile, holds the potential to de-stabilize this label and reflects individuals' dissociation from rigid identity categories. This broadening of self-presentation is facilitated by Tinder's lack of programmed sexual identity labels. Playfulness regarding identity is also sustained by the intertextuality of digital media and users' vernacular creativity in constructing profiles, which allow for recombining LGBTQ+ media, personal images, text and symbols to embed multiple forms of self-presentation within a single profile.

Secondly, despite these instances of ambiguity, the lesbian digital imaginary still presented impermeable boundaries for certain users. Duguay (2017) has discussed how Tinder's design, marketing, and importing of Facebook data generates a normative standard, framing Facebook-friendly dating profiles as authentic and, by extension, safe and trustworthy. Similarly, participants' routinized signalling of sexual identity – sometimes through imported Facebook photos and "likes" – imposed a normative understanding of the sexual identities recognizable within the lesbian digital imaginary. Tinder's limited integration of features related to gender diversity and participants' frequent encounters with cisgender-presenting men presented challenges for identifying and matching with

transgender and non-binary individuals. The imperative that Tinder's rapid swipe imposes for presenting a recognizable identity also makes non-normative or already stigmatized identities – such as identifications with parenthood or polyamory – salient as outsiders, quickly garnering left swipes.

We posit that these boundaries of the lesbian digital imaginary are likely to pose barriers for a range of users. Many of our participants were generally out to acquaintances in their lives, adept in LGBTQ+ culture, and therefore populated their Facebook and Tinder profiles with indications of sexual identity. However, those who were not comfortable stating a specific sexual identity struggled to become visible, negotiating between the bounds of their privacy and user trust. Individuals with limited exposure to LGBTQ+ culture, such as youth who are just developing a sense of sexual identity, may be unable to pick up on or produce nuanced signals of sexual identity. Further, Facebook's "default publicness" (Cho, 2017), which encourages sharing and complicates targeting specific audiences, poses challenges for individuals who have not publicly disclosed their sexual identity. Despite the option to register for Tinder without Facebook, some individuals may not be able to risk being recognized as non-heterosexual by acquaintances on the app or when in certain physical contexts. This could intensify the isolation of LGBTQ+ people who are already having difficulty connecting with others. Such implications reflect an enduring need for LGBTQ-specific digital spaces, whether as separate platforms or created through better mechanisms for separating user groups and protecting privacy, but without programmatic identity labels that inhibit playful, ambiguous self-presentation.

Lastly, our analysis has developed the concept of digital imaginaries, as user practices that integrate cultural referents with digital infrastructures in routinized ways that assume resonance with a shared, imagined community. Individuals' integration of digital and cultural referents constitutes an application of their digital literacy, as they tailor self-presentations to be recognizable to imagined similar others. The concept of a digital imaginary invites further exploration. It would be worthwhile to investigate whether non-heterosexual men (including gay, bisexual, pansexual, and queer male-identified users) also conceive of a separate space of Gay Tinder and construct a digital imaginary through their signalling practices. More broadly, studies have noted how the fusion of cultural and digital practices gives rise to technocultures among subsets of users, such as African Americans'

practices that form the technoculture of Black Twitter (Brock, 2012). We invite further research that explores the imagined identity boundaries of these cultural and digital practices and how they are shaped by different platforms' imagined affordances.

Notes

1. Since we discuss the fluidity of boundaries relating to sexual identity, we use "women seeking women" (WSW) to refer to female-identified individuals oriented toward other female-identified individuals. We understand this fluidity within the foundational works of queer theorists, who identify that sexuality is not static but is unstable and continually performed (Seidman, 1994). While there are no unproblematic umbrella terms for diverse sexual identities (Barker et al., 2009), WSW most closely reflects our participants' range of sexual and gender identities. When referring to existing studies, we use the authors' language (e.g. lesbians, gay men). To refer to lesbian, gay, bisexual, transgender, queer, and other sexually diverse individuals more broadly, we use "LGBTQ+."

2. This research received ethics approval from the authors' academic institutions [ethics approval numbers to be included].

3. See for example, the popular Facebook meme group "sounds gay, i'm in": https://www.facebook.com/groups/sounds.gay/

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