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Dressing up Tinderella: Interrogating authenticity claims on the mobile dating app Tinder

Abstract

Mobile dating applications ('apps') have increased in popularity over recent years, with Tinder among the first to break into the mainstream heterosexual market. Since mobile dating intensifies the need to confirm that potential dates are not misrepresenting themselves and are safe to meet in person, Tinder's success indicates that it has allayed these concerns regarding the authenticity of its users. This article combines Giddens' conceptualization of authenticity, as the ability to reference a coherent biographical narrative, with Callon's sociology of translation to investigate Tinder's framing of authenticity within mobile dating. Applying a walkthrough method that interrogates Tinder's technological architecture, promotional materials, and related media, this hybrid theoretical framework is used to identify how Tinder configures an actor-network that establishes its app as the solution to users' concerns, enrols individuals in using its features in authenticity claims, and popularizes Tinder's framing across public discourse. This network of human and non-human actors frames authenticity as being established through one's Facebook profile and adherence to normative standards relating to age, gender, ethnicity, and socioeconomic status. However, user discourses on other social media identify and challenge negative outcomes of this framing, with normativity fostering discrimination and Facebook verification failing to prevent abusive behavior. This case study of Tinder payes the way for future investigation into user responses to its framing. Further, it demonstrates the efficacy and broader applicability of this theoretical approach for identifying both human and technological influences on the construction of authenticity with digital media.

Keywords:

Dating app, identity, mobile technology, social media, authenticity, Actor Network Theory

Twenty seconds into Tinder's debut promotional video, #ItStartsHere, a young woman and man exchange flirtatious smiles across a crowded room. Instead of initiating contact at that moment, they leave and later find each other's profiles on the dating app. When each swipes right toward the heart icon for the other's profile, the system notifies them, "It's a match!" Later, they meet for their first date on an urban rooftop at sunset. While it is not the plot of most romantic films, this scenario has been popularized as the modern-day dating fairytale (College Humor, 2014), where an attractive *Tinderella* awaits her prince and they right-swipe into happily ever after.

With the proliferation of technology-facilitated dating, this is not an unrealistic scenario. In 2015, 15% of Americans reported having used a dating app or website, with the use of dating apps increasing threefold since 2013 (Smith, 2016). Mobile means of identifying sexual or romantic partners have been common among men who have sex with men, using Bluetooth technology as early as 2005 to cruise on public transport (Mowlabocus, 2010) and contributing to the overwhelming success of dating apps, with an estimated 1.5 million using Grindr every day (Grindr Team, 2014) and many using other niche dating apps (Gudelunas, 2012). However, Tinder is different from these apps as it directly targets heterosexual users and has garnered the participation of a large number of heterosexual female users (Greenfield, 2013).

This article identifies how Tinder's success lies in allaying concerns about the authenticity of potential suitors who can be met through the app. The article brings together two theoretical fields to build a new approach to understanding the process by which authenticity is established in a situation involving relations among human and non-human actors within digital media platforms. Anthony Giddens' (1991) concepts impart insights into how authenticity is constructed interpersonally among human actors. Actor Network Theory – specifically Michel Callon's (1986) sociology of translation – traces how these authenticity-building interactions also involve non-human actors including app features, algorithms, and promotional mechanisms. Using this hybrid framework, it is possible to identify how Tinder frames authenticity within mobile dating as a problem for which its app is presented as the solution. The article steps through key moments of this framing, demonstrating how multiple actors become configured in ways that allow authenticity to be claimed through references to Facebook profiles and normative standards of attractiveness. This allows for consideration of how such framing can foster discrimination and exclusion of those

who are unable to claim authenticity through these particular means. The article concludes by identifying instances when Tinder's framing has been overflowed, calling for further investigation into user responses and alternative mechanisms for claiming authenticity. The detailed case study that emerges from this analysis demonstrates how the combination of Giddens and Callon's perspectives provides new insights into situations involving the construction of authenticity with digital platforms.

Digitally mediated dating and authenticity

Since digitally mediated dating raises concerns regarding authenticity, Tinder must address these in order to garner success. Gibbs, Ellison and Lai (2011) identified that online daters' most prominent concerns were that others were misrepresenting themselves – lying or exaggerating in profiles – and that their personal safety may be threatened upon meeting potential suitors in person. This indicates a lack of mechanisms through which online daters can establish authenticity in terms of expressing a stable and, by extension, safe identity. These concerns have led certain demographics of users, such as heterosexual women, to view online dating as a means only for the 'desperate' (Anderson, 2005). Tinder functions as a location-based realtime dating app, co-situating users by transmitting their physical location and copresence on the app (Blackwell, Birnholtz, & Abbott, 2014). These affordances can foster mobile intimacy (Hjorth, 2013), overlaying geographic space "with an electronic position and relational presence, which is emotional and social" (p. 113). Co-presence and mobile intimacy intensify the immediacy and ability of users to meet through apps. Consequently, Tinder's popularity hinges on the company's ability to identify a solution to these concerns.

This need for users to establish authenticity within mobile dating situations raises questions as to how exactly authenticity can be constructed among people. Multiple sociocultural perspectives have examined the notion of authenticity (e.g. Vannini & Williams, 2009), with many identifying that it is not an inherent quality but is instead generated through shared beliefs and interactions with others (Barker, 2012). In digital media studies, authenticity has often been discussed in relation to online identity and self-presentation (Marwick, 2013). Networked social media present new affordances for self-presentation, bringing together audiences and flattening spatial and temporal contexts (boyd, 2011). Several researchers have

applied Goffman's (1959) impression management framework to these environments, identifying challenges for the separation of backstage and front stage identity performances (Hogan, 2010; Author). In response, users perform *strategic authenticity* (Gaden & Dumitricia, 2015) by revealing personal information, displaying symbolic connections, and responding to their audiences immediately and regularly. These practices, along with monitoring self-disclosures (Marwick & boyd, 2011) and constant redaction of profiles (Papacharissi, 2012), help users to perform authenticity for multiple audiences.

While useful, these perspectives do not interrogate the *stuff* of authenticity. Focusing on maintaining authenticity through ongoing self-presentation, they do not delve into what is interpersonally and materially necessary to generate authenticity. Giddens (1991) provides insight into authenticity's interpersonal and interactional elements. Authenticity stems from the construction of identity as "The reflexive project of the self, which consists in the sustaining of coherent, yet continuously revised, biographical narratives, [and] takes place in the context of multiple choice as filtered through abstract systems" (p. 5). Identity is *reflexive* as it undergoes constant revisions while individuals select from multiple lifestyle choices. These revisions are smoothed into a cohesive narrative, reinforced by daily routines, which provides 'ontological security' as one's rationale for making certain choices over others (p. 36-39). Therefore, authenticity is constructed through one's ability to consistently reference a coherent, routinized narrative of the self. Giddens explains, "The authentic person is one who knows herself and is able to reveal that knowledge to the other, discursively and in the behavioral sphere" (p. 187). He identifies 'abstract systems' (p. 18) that shape how individuals reference this narrative. First, symbolic tokens, such as money, "have standard value, and thus are interchangeable across a plurality of contexts" (p. 18). Second, expert systems, such as advice columns, disseminate a variety of often-contrasting knowledge that cannot claim ultimate authority but shapes lifestyle choices. Abstract systems influence how individuals build and express the overarching biographical narrative upon which their authenticity claims rest.

Giddens' concepts of identity and authenticity contribute to understanding particularly human influences in digitally mediated dating. ANT has been criticized for treating human and non-human actors symmetrically (Rose, Jones, & Truex, 2005), failing to acknowledge the role of sociocultural interactions and discourses across networks (Sismondo, 2010). While this is remedied by incorporating Giddens'

insights into the interpersonal construction of authenticity, his perspective does not consider material, or non-human, influences on authenticity. Indeed, Latour (2005) criticized notions stemming from the later work of Giddens and others who focused on social structures without identifying the multiple, networked actors that materially comprise these structures within everyday life. ANT identifies that "the social is nothing other than patterned networks of heterogeneous materials" (Law, 1992, p. 381). Dating through Tinder involves not only users' claims to authenticity, through photos and text that reference their biography, but it also involves buttons, settings, and app connections that shape these authenticity claims. This is the other *stuff* of authenticity in networks involving Tinder, which a deeper application of ANT and ANT-based methods can elucidate.

Translating authenticity through multiple actors

Identifying the role of multiple actors in constructions of authenticity aligns with the Social Shaping of Technology (SST) perspective, which emphasizes the mutual shaping of human and non-human actors in technology's development and appropriation (MacKenzie & Wajcman, 1985). Within SST, ANT takes into account the range of actors in a situation, including objects and people, and traces their network of relations with attention to what facilitates or disrupts the network's functioning (Callon, 1986; Latour, 2005). Some actors within networks are merely intermediaries, which transport meaning without altering it, while others are mediators that "transform, translate, distort, and modify the meaning of the elements they are supposed to carry" (Latour, 2005: 39). This study is concerned with mediators that contribute to constructions of authenticity within actor-networks relating to Tinder.

Callon's (1986) *sociology of translation* provides a lens for understanding how human and non-human relations are assembled. Through the process of translation, "the identity of actors, the possibility of interaction and the margins of manoeuvre are negotiated and delimited" (p. 203). Tracing this process uncovers how Tinder's app, company, users, and other actors are configured in a set of relations allowing users to make authenticity claims and, ultimately, contributing to Tinder's success. Translation occurs through four key moments:

Problematization: The definition of a problem that identifies and defines the actors involved;

Interessement: Ways of invoking interest from actors and stabilizing their identity as defined by the problem;

Enrolment: When actors accept their role in the situation, agreeing on a specific representation of the problem and its solution; and,

Mobilization: When actors perpetuate this framing of the problem and its solution to others.

This lens can identify the framing of a problem for which technology is presented as a solution. Crawford, Gosling, Bagnall, and Light (2014) examined how an orchestra problematized its need to boost ticket sales, producing an app in response. However, users were not easily enrolled, resisting the app's participatory functions, and inhibited mobilization since they considered classical music to be appropriate only for a niche market. This demonstrates how actors can *overflow* the framing within an actor-network (Callon, 1998), redefining the problem and solution. Overflowing can be enacted as resistance to technology's features or intentions (Light & Cassidy, 2014), re-appropriation of affordances (Race, 2014), or discontinuation of use (Brubaker, Ananny, & Crawford 2014).

The sociology of translation provides a framework for examining configurations of users and technology in the problem of establishing authenticity within digitally mediated dating and Tinder positioning its app as a solution. Giddens contributes insights into human actors in this network, demonstrating why particular frames for authenticity may be effective, while ANT identifies material components of the network that generate and support constructions of authenticity. Although researching mobile apps can be complicated due to the locked-down, appliancized, and proprietary nature of many apps (Van Dijck, 2013; Zittrain, 2008), the following section describes a method designed to interrogate app relations.

Tracing Tinder's actor-network

The *walkthrough method* (Author et al.) examines mobile apps with attention to relations involved in their deployment, functioning, and everyday use. It combines practices from the digital humanities, such as close reading of software as texts (Frabetti, 2012), the social sciences, identifying discourses built into platform architecture (Papacharissi, 2009), and software studies, uncovering the *technicity* through which users and technical systems exert mutual influence (Crogan & Kennedy, 2008). Operating from an overarching ANT approach, this method takes

into account numerous actors and attends to the role of technology in networks of relations. The walkthrough method, therefore, builds upon scholarly investigations of technology from multiple fields while tailoring perspectives to the interrogation of mobile apps.

This method involves walking through materials that reflect an app's actor relations. It analyses what Van Dijck (2013) identifies as techno-cultural constructs – technology, content, and users – as well as socioeconomic structures of ownership, governance, and business models. Tinder's socioeconomic structures were investigated through analysis of promotional materials, policies, and news articles featuring interviews with company representatives. Media articles and online public discussion also provided insights into discourses surrounding the app. Analysis of these materials was paired with a walkthrough of Tinder's technological architecture. Similar to Light and McGrath's (2010) interrogation of Facebook's registration process, this involved a form of observation seeking to identify mediators, examine their associations, and account for translations resulting from these associations. It included downloading Tinder, registering, configuring a profile and preferences, engaging in activity flows, and deleting the account. Features and screens were recorded through screenshots with accompanying field notes. The walkthrough was executed multiple times, since Tinder presents different options based on users' Facebook information.

As an approach that engages the app and related materials but not users, this method is limited in its analysis of user responses to Tinder. Information about Tinder's communicative features (e.g., matching, chat) and users' behavior were not captured, though related insights were drawn from media articles, online discussions, and profile observations. While the technical walkthrough was executed in July 2014 using Tinder's iPhone version, later materials and features have been included in analysis to reflect subsequent changes.

Translating mobile dating

This section identifies how Giddens' concepts relating to identity and authenticity feature in key moments of translation framing Tinder as the mechanism for establishing authenticity among (digitally mediated) daters. It identifies the network of actors involved in problematizing mobile dating as an activity requiring Tinder's normative, Facebook-verified authenticity claims. Promotional materials

interest users, invoking enrolment in app features and mobilizing Tinder's translation to others. However, there is evidence of overflowing, as users reframe Tinder in their social media activity. Giddens' concepts demonstrate how Tinder's translation gains traction, fostering normative self-presentations to make coherent authenticity claims. Attention to material elements of authenticity identifies how Facebook profiles, restrictive app settings, and routinized swiping can also produce and reinforce these claims. Although discussed separately, moments of translation are, in actuality, overlapping and messy (Callon, 1986).

Problematization

Tinder's welcome screen presents a large blue button prompting users to "Log in with Facebook." It is not possible to use the app without taking this step. Since dating through Tinder involves evaluating others' self-presentations, exchanging geolocation information, and meeting unknown others – presenting the potential for misrepresentation and threats to personal safety – Facebook is Tinder's safeguard against the uncertainty this may cause. In its 2014 FAQs, Tinder declared: "We use Facebook to make sure you are matched with real people who share similar interests and common friends." While other dating apps have since integrated with Facebook, Tinder's approach was novel upon its launch in 2012. Concerns over information accuracy and security are appeased by constructing a profile from a Facebook user's first name, age, recent photos, and gender while storing likes and friendlists to display mutual friends and interests in browsing mode.

This solution situates Facebook as a primary actor in verifying that people are 'real' – a term used interchangeably with *authentic*, as demonstrated by Facebook's (2015a) assertion that its "real name requirement" enables people to connect using "authentic identities." Since its inception, Facebook has promoted a real name culture, with CEO Mark Zuckerberg stressing that this enhances the transparency of communication among users (Raynes-Goldie, 2010). Facebook has policed the use of real names, suspending accounts suspected of using fake names. It positions real names as symbolic tokens (Giddens, 1991) of identity, since individuals are likely to use them across multiple contexts. Legal names reference biographical narratives, reinforced by material objects, such as birth and death certificates, and other pieces of ID that Facebook can request for identity verification (Scudera, 2015). Identifying real names as symbolic tokens recognizes how they provide a seemingly authentic

reference to one's identity, supported by a network of actors including Facebook as a company and software platform, its regulation processes, and objects of identification. This network becomes configured in the context of dating through Tinder's initial registration screen.

The constitution of Facebook-verified authenticity claims shifted when the company reframed its approach to authenticity verification after public backlash against its suspension of pseudonymous drag queen and transgender people's accounts (Nichols, 2014). In a public apology, CPO Chris Cox (2014) specified, "Our policy has never been to require everyone on Facebook to use their legal name. The spirit of our policy is that everyone on Facebook uses the authentic name they use in real life." This stipulation alludes to everyday use of a specific name across situations and activities. Therefore, if users are not indicating authenticity through the symbolic token of a legal name, they must do so through consistent self-referentiality across the narrative of their Timeline. By applying Giddens' concepts to Facebook, Robards' (2014) found that the platform played a role "first, as a tool that can be used in the process of reflexive self-making, and second, as an object (or a product) of that project" (p. 29). The object, a fully formed profile arising from Facebook's selfreflexive use, is a key non-human actor imported into Tinder's network of relations. The Facebook profile is taken as 'proof' of consistent references to a coherent biographical narrative. Thus, authenticity claims are digitally delegated to this network of interconnected platforms and aggregated data products.

Importing profiles along with Facebook's requirement for authentic identities has implications for the construction of authenticity through Tinder. Facebook's expectation that individuals construct a real and unitary identity facilitates enforcement of its policies, since users are less likely to post prohibited content when it can be associated with real names (Omernick & Sood, 2013). Facebook's policies and restrictions (e.g., no nudity) are imported into Tinder as safeguards on what users can display, streamlining Tinder's approval through app stores' selective review processes (Hestres, 2013). This coincides with Facebook's (2015a) claim that its real name requirement "creates a safer environment," implying that those who refuse to follow its means for referencing their biographies pose security threats. Aside from formal policing, real names connect social media users with networks of acquaintances met offline (Baym, 2010) and friends of existing friends (Dutton, Blank, & Groselj, 2013), requiring self-presentations to align with pre-established

impressions among these audiences. Therefore, Facebook's real name requirement guides users toward policy abiding, peer-approved behavior, precluding the performance of fluid identities or the differential self-presentation desired (and often needed) by diverse minorities, such as queer subcultures (Lingel & Golub, 2015). In its problematization of digitally mediated dating as requiring proof of 'real' people and its solution through Facebook, Tinder's actor-network incorporates material objects like pre-existing profiles and proof of legal names in the construction of authenticity. The app itself gains legitimacy through its connection to Facebook and Tinder frames authenticity within mobile dating as a situation requiring a datable Facebook self.

Interessement

As Tinder benefits from Facebook fostering presentable users who abide by norms, these qualities are extended throughout Tinder's marketing depict its users as authentic. Connecting normative appearances and behaviors with authenticity is accomplished through Tinder's promotional materials, which interest and stabilize the role of users in the app's actor-network. Giddens (1991) explained that ontological security relies upon a shared reality comprised of day-to-day regimes, as "learned practices that entail tight control over organic needs" (p. 62), such as dress and physical appearance. Regimes give rise to lifestyles as sets of practices that "give material form to a particular narrative of self-identity" (p. 81). Giddens specifies that the authenticity necessary for intimate relationships is built on displays of selfmastery, which condition regimes to fit into a lifestyle in the narrative of the self. In organizing actors, Tinder depicts users as embodying lifestyles that reflect dominant discourses of gender, sexuality, race, and status, which shape notions of attractiveness, safety and, ultimately, authenticity. As Law (1992) describes, "it is possible to impute somewhat general *strategies of translation* to networks, strategies which, like Foucauldian discourses, ramify through and reproduce themselves in a range of network instances or locations" (p. 338). Tinder's promotional videos and social media accounts function as actors implementing strategies of translation. They communicate discourses that depict and encourage adherence to particular regimes comprising lifestyles idealized as authentic.

Tinder's marketing increasingly emphasizes the realness and normativity of its users. Its attempts to counter notions of technology-facilitated dating as virtual or

separate from everyday life (Quiroz, 2013) are evident in a progression of taglines from, "Like real life but better" to "It's how people meet" and "Any swipe can change your life." Early launch videos on YouTube marketed Tinder as a supplement to hook-up culture, congruent with drinking and partying all night, as represented by its sponsors Bacardi and Red Bull. However, these videos were short-lived as Tinder's post-launch marketing shifted toward depicting lifestyles portrayed as desirable in the media, resembling the upper class, urban characters on TV dramas like Girls. #ItStartsHere, Tinder's first professionally edited video, featured people affluent enough to participate in youthful activities (e.g. sightseeing, concerts, rooftop parties) and live in large urban lofts. This was followed by #TinderMoments, which opened with two youthful, skinny women modeling designer clothing, later transitioning to a montage of similarly posh people engaging in leisure activities. Tinder Plus was the first video featuring an individual in the workplace. It portrayed a young, thin, blonde, white-collar woman's flashback to her recent European vacation where she used the app's paid features to find a male partner during her trip. As the setting for Tinder's videos transitioned from nightclubs to urban streets, the company began to sell the fantasy of dating people deemed real through their embodiment of normative ideals regarding beauty, income, location, and lifestyle.

Older, gender variant, homosexual, low socioeconomic status (SES), and rural-dwelling people are absent from Tinder's marketing and featured actors are predominantly white. Actors' physical regimes display self-mastery through fitness and donning the latest fashion. These characteristics are reproduced on Tinder's Instagram and Facebook accounts, which mostly feature celebrities and young, upper class, heterosexual, white people. Even *real life* couples, who have submitted engagement and wedding photos thanking Tinder for helping them meet, resemble the actors in Tinder's videos. Depicting Tinder as populated by users possessing normative characteristics aligns with its early promotion to sororities and fraternities (Summers, 2014). These groups, which tend to be homogenous collectives of white, high SES, heterosexual students adhering to traditional gender presentations (DeSantis, 2007), were the app's pioneering user base. Tinder's marketing approach not only intimates that users will be normatively attractive, it also taps into perceptions of normative identities as being safe. Just as Facebook was perceived to be safer than MySpace because its gated walls reduced the chance of encountering

unknown or dissimilar others (boyd, 2012), Tinder promises that users will find matches aspiring toward the same normative regimes.

Tinder's marketing alludes to the possibility that, by using the app, individuals can create lifestyles similar to those portrayed. Acceptance of Tinder's framing of authenticity as aspiring to normative ideals is reflected in countless profile photos exhibiting normative regimes, such as gym selfies and participation in affluent activities like posing with exotic animals¹ or volunteering abroad². Dedication to these standards is evident through users policing those who do not adhere to norms. Individuals calling out non-normative users, such as on the Tinder subreddit (r/tinder) or the Tinder Nightmares Tumblr, are not hesitant to re-post profile photos highlighting how users with varying body shapes or life situations (e.g. single parents) are not attractive. Giddens describes how individuals must sustain "normal appearances" (p. 118) to establish basic trust with others, which opens the opportunity to build authenticity with them. Tinder arranges actors, including its videos, social media pages, and users, according to strategies of translation around dominant discourses that determine normal appearances within the app. Users' conformity to these standards in order to claim authenticity reflects just one way they have become enrolled in Tinder's translation of mobile dating.

Enrolment

Tinder's technological interface includes actors, such as buttons and settings, that are enrolled and enrol users in constructing authenticity through Facebook profiles and normative discourses. After logging in with Facebook, Tinder places users directly into browsing mode. This enrols Facebook profiles as self-reflexive products sufficient for referencing one's biographical narrative. If users wish to configure their profile further, they can change their gender or add different photos from Facebook but all other information must be changed through Facebook. User self-descriptions are contained in an "About" box permitting up to 500 characters of text (or emojis). As of April 2015, users can also display their Instagram photo feed (Parkinson, 2015). The inability to post photos from a phone's camera shapes authenticity claims by constraining visual biographical references to those preestablished with acquaintances on Facebook and Instagram. In rapid browsing mode, Tinder presents cards consisting of a potential partner's name, photo, age, and an indication of mutual friends and interests, which have all been imported from

Facebook. Tapping a card provides more information, such as the "About" section, but interrupts the flow of swiping. These technical mechanisms maintain the Facebook profile as a primary actor making authenticity claims on a user's behalf.

The "Discovery Settings" menu allows users to configure their browsing experience within Tinder's constraints. Users can select an age range of potential partners, though Tinder does not present the same options to everyone. Tinder permits teenagers ages 13–17 to browse each others' profiles while being unable to see users 18+, who cannot search for users under 18. By creating these app-delineated barriers, Tinder undertakes the duty of policing 'proper' age relations. The app's treatment of older users has fluctuated with updates, originally setting the upper limit at 50+, shifting to 50, and expanding to 55+, including everyone over this age in the same dating pool. Given Tinder's focus on youthfulness in its promotional materials, this reduced functionality for older users is unsurprising. From this screen, users can also specify their preference for "Only Men", "Only Women" or "Men and Women", Tinder's default is based on a user's 'interested in' field on Facebook or, if unspecified, the assumption that women are seeking men and vice versa. Although Facebook (2014) has slowly expanded its gender identity options to include nonbinary identities, Tinder only allows users to seek out and identify as male or female. If users select a gender-neutral identity on Facebook, Tinder presents an additional mandatory registration screen, requiring individuals to choose either "male" or "female" before using the app. Tinder's discovery settings enforce normative values that delineate what identities are identifiable, datable, and ultimately, authentic.

Tinder sustains enrolment through game-like activity flows, which routinize its use in daily activities. Its co-founder Sean Rad stated, "We always saw Tinder, the interface, as a game" (Stampler, 2014). Liking or dismissing users in browsing mode resembles earlier online games, such as *Hot or Not*, created over a decade ago as a user rating game (Hot or Not, n.d.) and it is also similar to the first iteration of Facebook, *Facemash*, designed for Harvard students to rank each other according to their attractiveness (Kaplan, 2003). Giddens (1991) asserts that routine is fundamental to ontological security, providing coherence to day-to-day life and giving rise to rituals through which individuals rationalize their activities. Tinder's repetitive and fast-paced swiping is designed to invoke ongoing participation, rationalizing the app's use for dating and generating authenticity as it becomes part of one's biographical narrative.

Other features further enrol users in the notion of Tinder as a game. Matching with others unlocks the ability to exchange messages. If a user is subsequently unmatched or blocked, the FAQs advise users to "Tinder on!" as encouragement to keep playing. Tinder also allows users to hide their profile without deleting it, permitting individuals *pause* to pursue matches or take a break. Differing from platforms that make it difficult to find the delete button, such as Grindr (Brubaker et al., 2014), or require multiple steps, such as Facebook's departure survey (Baumer et al., 2013), responding affirmatively to Tinder's, "Are you sure?" after tapping "Delete Account" immediately returns users to the initial login screen. The process is akin to pressing *reset*: if users have swiped through everyone nearby or accidentally dismissed the love of their life, they get to play again. Tinder's new algorithm ranks users according to how successfully they match with others (Ehrhardt, 2016). This provides incentive to strategically play the game, generating reputation-based authenticity, as defined from the algorithm's perspective. Altogether, users' enrolment reinforces Tinder's framing of mobile dating, fortifying notions of who is authentic and routinizing the app's use in one's biography. In turn, users' widespread enrolment mobilizes this translation to others.

Mobilization

Word of mouth, mass media buzz, and public discourse all perpetuate Tinder's problematization of dating as the need for authenticity and its solution in an app that incorporates Facebook and appeals to normativity. The app's design provides multiple routes for mobilization, including a "Share Tinder" button on the main menu that declares, "Sharing is caring." It allows users to send a social media post, e-mail, or SMS with a pre-scripted message: "Check out Tinder... It shows you who likes you nearby!" including a link to the Tinder homepage. This function also appears with the invocation to "Invite your friends!" after swiping through all nearby users and the offer to "Tell your friends" upon matching with someone. While it is not clear how frequently these in-app functions are used, the participation of companies, mainstream media, and users in Tinder's mobilization is highly visible in other forms.

As a gatekeeper to enrolment, app stores are a significant actor in an app's mobilization. The store's search function makes Tinder findable and provides greater detail than is available on Tinder's homepage or in its videos. App stores make Tinder accessible to a range of users, removing the extra step and potential stigma of visiting

a conventional dating website while engaging audiences who may not have otherwise sought it out. While Apple's app store rates Tinder as 17+ (conflicting with Tinder's 13+ age restriction) for "infrequent/mild" profanity, crude humor, sexual content, nudity, and "frequent/intense mature/suggestive themes," these warnings at the bottom of the page do not detract from the legitimacy gained from Tinder's approval through the store's review process. The store prominently displays star ratings, reviews, and third-party apps promising to optimize Tinder's features, which validate its utility as a dating app.

From moral panics about hook-up culture, such as blaming Tinder for the rise in sexually transmitted infections (Gabbatt, 2015), to first-hand accounts of using the app (Spechler, 2015), mainstream media mobilizes Tinder through widespread publicity. Humorous stories, such as those featuring parody accounts like the Tinder dog Hero (Veix, 2014), and celebrities' use, epitomized in singer Hilary Duff's music video featuring her Tinder dates³, are shared broadly and perpetuate public discourse about Tinder. In-app advertisements also increase Tinder's prominence, as users swipe not only on dates but also on TV characters or musicians (McIntyre, 2015). Integration into entertainment media demonstrates Tinder's movement into mainstream culture in contrast to niche dating apps. This is reflected in the incorporation of Tinder-related terms in vernacular language, with *Tindering*, *Tinderella*, and *Tinderitis* (negative outcomes from Tinder use) featured on urbandictionary.com.

Mobilizing actors express views about what Tinder is and how it should be used. Tinder's rise in popularity has led to an onslaught of bloggers and advice columnists writing about how to best use the app (e.g. Twentywaves, 2014). Many individuals also follow and contribute to related hashtags, such as #tindermoments on Twitter, and Tinder-dedicated social media accounts (e.g. *Tinder in Brooklyn* on Tumblr, @tinderconvos on Instagram). Contributors to discussion forums, such as the Tinder subreddit's weekly *Profile Review*, exchange tips for accruing matches. These actors form expert systems (Giddens, 1991), as a multiplicity of authoritative sources of technical knowledge. Expert systems rely on trust: individuals make a leap of faith, depending upon information disseminated by expert systems to supplement their limited knowledge. Users' faith in Tinder's framing of mobile dating is reflected in their readiness to give and receive advice about how to construct a normative, authentic profile. Expert systems also reinforce Tinder's framing, with celebrity

profiles as archetypes of normativity, and supplement it, such as through media articles demonizing casual sex in ways that shape user activity.

Among bloggers, journalists, celebrities, and users, Tinder's app also functions as an expert system. Its design asks users to trust that the integration of Facebook makes profiles authentic. Tinder also requires trust in the limited amount of customizable information in profiles and the opaque browsing algorithm that determines which profiles to present to particular users. Through this analysis, it is possible to see that expert systems can be comprised of humans, including bloggers, celebrities, and journalists, as well as non-human actors like algorithms and design features. These expert systems mobilize Tinder's framing of mobile dating as requiring the construction of authenticity through normative, Facebook-friendly selves. It is questionable, however, as to what extent users make this leap of faith, since some individuals overflow Tinder's framing, replacing it with a different translation.

Overflowing

Activity outside of Tinder indicates that some users are questioning its framing of authenticity in mobile dating. The rationalizing function of the app's game-like qualities is challenged by a video art project, *Tender*⁴, depicting an automated, rotating piece of raw meat continuously right-swiping, rendering matches meaningless. Commentaries on critical blogs (e.g. Straight White Boys Texting) highlight the continuously misogynistic and demeaning behavior enacted through the app, which is exacerbated by normative standards and not prevented through connections with Facebook. The Twitter hashtag #ShitWhiteGuysTellMe was created by Jessica Deer to confront the racist comments that indigenous Tinder users regularly receive (CBC News, 2015). Similarly, in a Vine video (now removed), a man mimicked reading a woman's profile, "I need someone that's a doctor, has a house and a car" then posed as himself saying, "Oh, I'm a doctor and I have all that." The screen flicked back to him posing as a woman saying, "But you're not white." Other Vines show parents and middle-aged people playfully using Tinder. These individuals, who have been deliberately omitted from Tinder's marketing, display and critique their participation through social media, making visible Tinder's use by those who do not fit neatly into normative identity categories.

While overflowing Tinder's framing, users provide their own translations and solutions to problems of mobile dating. Some users add information to the About section to compensate for Tinder's lack of profile details, such as posting about being transgender to bypass the need for disclosure later (Lees, 2015). Profile observations also uncovered users' inclusion of Snapchat and Instagram (prior to integration) usernames in About sections. Since self-presentations on other platforms may be subject to different content constraints, audiences, or policies, they provide an alternative to Facebook for making authenticity claims. Through these actions, users configure alternative actor-networks with social media to reject reliance on Facebook as the sole reference to their biography and to resist Tinder's normative categories as the criteria for establishing authenticity.

Conclusion

This article has combined Giddens' concepts relating to authenticity with ANT and Callon's sociology of translation to identify the *stuff* – users, features, developers, algorithms – from which Tinder constructs authenticity in its framing of mobile dating. The construction of authenticity, understood from Giddens' perspective as consistently referencing a coherent biography, is conducted within Tinder by both human and non-human actors. For users, this consists of importing one's Facebook profile, displaying normative appearances, conforming to policing behavior, following activity flows of searching for and browsing users according to Tinder's categories, and mobilizing the app through discussions across social media. Scaffolding analysis through moments of translation, an ANT lens also allows for identification of when non-human actors contribute to and make authenticity claims on users' behalf. The work of constructing authenticity with Tinder is often delegated to objects, including the Facebook profile as the product of self-reflexive archiving, the routinized swiping mechanism that rationalizes Tinder's use in everyday life, and the matching algorithm that functions as an expert system requiring users to trust that they are being shown real and compatible potential partners. Through this configuration of actors, Tinder translates the concerns of mobile dating into the requirement for constructing authenticity through the means provided by its app.

By tracing moments regarding this particular assemblage of actors, it is possible to consider outcomes for those who cannot or will not conform to Tinder's strategies of translation. Since Tinder promotes the display of normative Facebook-

friendly identities, non-normative sexual orientations, gender presentations, practices, or desires are viewed within this framing as unauthentic and therefore dangerous. With the requirement to login with one's potentially recognizable Facebook identity, individuals deviating from mainstream norms may risk discrimination and threats to their safety. Further, the app's framing may dissuade use by anyone outside of normative categories, whether relating to sexuality, ethnicity, income or other aspects of identity. With dating apps' increasing popularity, abstaining from use could negatively affect these individuals' access to potential partners (and, by extension, opportunities to form relationships and families) as other means of meeting people decrease in popularity or become entwined with digital technology (e.g., Tinder parties at dance clubs). While discussion of overflowing was brief due to the walkthrough method's focus on the app rather than users, these possible repercussions of Tinder's translation of mobile dating warrant future research investigating users' responses to the app. Through re-appropriation and resistance, it is possible that individuals can overflow Tinder's translation to better suit their needs. This article facilitates further research by building foundational knowledge about how an app at the forefront of digital changes in partner-seeking combines human and digitally delegated authenticity claims in ways that lead to its success while overshadowing and precluding alternative means of constructing authenticity

Beyond the case of Tinder and dating apps more generally, this hybrid theoretical framework is useful in the analysis of other instances where human and non-human actors feature in the construction of authenticity. While not all works within Giddens' theoretical corpus fit well with ANT's granular tracing of actornetworks, the combination of concepts employed here allows for understanding of how human modes of constructing authenticity can feature and rely upon digital, non-human actors. For example, this approach can be used to trace an actor-network of the professional networking platform LinkedIn and its construction of authentic potential employees. LinkedIn enrols users in mechanisms like "endorsements" where human actors vouch for a quality on a user's profile. However, non-human actors, comprised of pop-up boxes, buttons, and text-recognition algorithms, present prompts for endorsements and examples of qualities to endorse. These endorsements, co-constructed by human and digital actors, then stand in as references to a user's biography, functioning as self-reflexive products that can claim authenticity on a user's behalf.

This brief analysis of a platform designed for a very different purpose from that of Tinder demonstrates the portability of this theoretical approach. The application of this approach provides an understanding of actor-networks involving digital media that makes it possible to identify how multiple actors shape the affordances, constraints and boundaries encountered by users in constructing authenticity. This understanding facilitates explanations relating to platform-specific outcomes (e.g., racism, policing of self-presentations) and lends direction to further research into user responses to such configurations. Through the development of this hybrid theoretical framework, bringing together Giddens' interpersonal concepts with ANT and demonstrating its efficacy in application to the case of Tinder, this article has shown how such an approach is particularly useful for examining platforms where digital actors are essential to claiming authenticity.

Notes

- 1. http://tigersoftinder.com
- 2. http://humanitariansoftinder.com
- 3. https://youtu.be/pW4qU4aWrDg
- 4. https://vimeo.com/111997940

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