The Geotagging Counterpublic: The Case of Facebook Remote Check-Ins to Standing Rock

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This article suggests a concept of geotagging counterpublics, by conducting a case study on Facebook check-in posts generated in fall 2016 through which the users geotagged themselves to Standing Rock Indian Reservation from remote places. Examining the Facebook remote check-in posts, the study identifies 5 major themes: solidarity, obfuscation, education on geotagging, education on privacy setting, and doubts and debunking. The users believed that their collective check-ins would support protesters fighting against an oil pipeline construction in Dakota and that the remote check-ins would obfuscate the Facebook geolocation data allegedly monitored by the police. The users educated each other on the right geotagging practices and the privacy setting of the posts. Yet there also arose doubts about the effectiveness of remote geotagging. The article discusses the potential of check-ins in forming a geotagging counterpublic, and the importance of understanding geolocation data in the context of online activism and data surveillance.

Keywords: online activism, surveillance, geolocation data, obfuscation, counterpublic

Digital platforms are full of user data, and geolocation data is a critical type of the user information available online. Users of these digital services are increasingly concerned about the ubiquitous surveillance of their personal data in the datafied society (Hintz, Dencik, & Wahl-Jorgensen, 2018); geolocation data are included in this public concern. This article discusses the social construction of geolocation data on digital platforms and examines how people navigate and negotiate their geolocation data for political causes against perceived data surveillance. In the current datafied society, user data are collected as much as possible on platforms, and these data are used by corporations or government agencies to identify or "anchor" a digital self (Szulc, 2018, p. 9). As the platforms are increasingly serving as public spaces that facilitate what Bennett (2003) called "networked politics," in which people make use of "networked communication as foundation for political organization and action" (p. 145), the use of ubiquitous data as a way to locate the identity of people involved in political actions often makes protesters more vulnerable to surveillance by the authorities. Thus, it is pivotal to understand the social dynamics around different sets of user data available

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on digital platforms, and this study's particular focus is on how users on digital platforms are interpreting the spatial information they engage in.

The volume of geolocation data has been increasing since the location-based services (LBS) that share people's real-time location data online started to grow in 2006, using mobile GPS technologies (Tsai, Kelley, Cranor, & Sadeh, 2010). Facebook, a major social media platform, integrated a geolocation feature called "Places" into its architecture in 2010. Users can "check in" to places for rewards; it has evolved to services that enable geotagging of one's specific locations on his or her status updates or photo/video posts (Chang & Chen, 2014). Users mostly check in to specific types of businesses, including transportation services, scenic areas, and hotels on the LBS (Kim, 2016).

Far from being a popular business-related place, Standing Rock was not a frequent geotag on Facebook until more than 1.4 million people checked in to it from October 30 throughout the first week of November in 2016 ("What Is Standing Rock," 2016), following the arrest of at least 117 protesters of #NoDAPL (No Dakota Access Pipeline) movement. The protesters were encamping to protest the Dakota Access oil pipeline construction; the pipeline was controversial because it could "threaten the environment and destroy Native American burial sites, prayer sites and culturally significant artifacts" (Baldacci, Grinberg, & Yan, 2016, para. 10). The Standing Rock protest is part of the history of longstanding indigenous resistance to settler colonialism and needs to be understood in relation to its links to environmental activism (Estes, 2019). The #NoDAPL movement was a fight against injustice that has been nationally imposed on indigenous populations (McQueen, 2018), and a fight against industries that continue to harm the environment through natural resource extraction operations for their business interests. It is why an alliance of indigenous communities and environmentalists received wide public attention and support in challenging the oil pipeline's construction.

This study particularly focuses on the moment right after a "rumor" was circulated online, which claimed that the law enforcement was gleaning social media check-in data to identify #NoDAPL protesters on site. The Morton County Sheriff's Department officially denied the rumor ("What Is Standing Rock," 2016), but people continued checking in to Standing Rock on Facebook in an attempt to confuse the police's alleged surveilling activities. The authority's denial of online surveillance was hard to believe, as it is well documented that government agencies in different countries regularly keep indigenous populations and protesters under surveillance (Dafnos, Thompson, & French, 2016; Harb & Henne, 2019; Monaghan & Walby, 2017). In the Standing Rock case, a representative from the Sacred Stone Camp, a cultural camp dedicated to the preservation of Indian cultural traditions, clarified that the check-in movement did not originate from the camp, but welcomed the remote check-in tactic acknowledging the law enforcement's act of combing through social media in general (LaCapria, 2016).

Looking at the case of the Facebook remote check-ins to Standing Rock Indian Reservation in fall 2016, this article argues that remote check-ins to political locations can be a manifestation of geotagging counterpublics. Closely analyzing public remote check-in posts to Standing Rock on Facebook and their comment threads during the heated moment of 2016, this study identified themes about why the remote check-ins were made and how the remote check-ins were practiced. The themes suggest that remote check-ins provided users with a discursive space to consider better ways to support protesters and their political

causes, while articulating tactics to turn their collective geotagging activities into a successful countersurveillance strategy. The study concludes that the collective action of repurposing geolocation data could form a networked geotagging counterpublic in the context of online activism.

Repurposing Authenticity of Geolocation Data

Geolocation features of digital platforms postulate that users would check in to their true locations. This is called a "localness assumption," which argues that volunteered geographic information (VGI), such as geotagged tweets, photos, and check-ins, generally reflects the "home locations" of its contributors (Johnson, Sengupta, Schöning, & Hecht, 2016; Kariryaa, Johnson, Schöning, & Hecht, 2018). The concept of a "true location" (Jin, Long, Zhang, Lin, & Joshi, 2016) or authentic location in contrast to a "location fraud" (Carbunar & Potharaju, 2012) is aligned with the assumption. Therefore, the social norm imposed on geotagging practices on digital platforms is to be local and to be true to the places of geotagging. There are some powerful examples where the "localness assumption" played a public role, such as safety check-ins. Facebook introduced its official "Safety Check" feature in 2014, after its users communicated through check-ins with their friends and family in the 2011 earthquake and tsunami in Japan (Chowdhry, 2014). During the 2015 Paris terrorist attacks, more than 4 million people used Facebook's Safety Check feature to mark themselves as safe in Paris (Larson, 2017). Facebook is a popular place to which people voluntarily offer their authentic geolocation data during emergencies.

However, people can check in to a location from remote places as well. A study shows that about 25% of VGI is not holding the "localness assumption" (Johnson et al., 2016). Such "dishonest" or "fake" check-ins may be attempts to receive different forms of rewards for personal interest (Carbunar & Potharaju, 2012). On the other hand, people can use geolocation features for more political reasons. For example, during the 2009 protests in Iran, Twitter users changed their locations to Tehran to confuse the authoritarian government, which allegedly surveilled people in Tehran on Twitter (Elson, Yeung, Roshan, Bohandy, & Nader, 2012). A study on the 2013 Vinegar protests in Brazil found the discrepancy between locations of street protests and locations of users who tweeted about the protests, which implies that the Twitter users remotely engaged in the demonstrations (Bastos, Recuero, & Zago, 2014). But few studies have examined if, why, and how users on social media strategically reappropriate their geolocation data for political causes as in the Tehran case. Humphreys and Liao (2011) pointed out that "mobile geotagging contributes to the social production of public space" as it creates "more contextualized communication" that facilitates the "colocation of information and people" (p. 420). Repurposing geolocation data via remote check-ins can be a specific form of contextualized communication—online activism—through which people redefine the relevance of information based on their ideological closeness rather than geographical proximity.

Online Activism and Countersurveillance

The role of online activism has been studied for almost two decades. Activism using social media has been highlighted in numerous studies including the Arab Spring (Papacharissi & de Fatima Oliveira, 2012), the Occupy Movement in 2011 (Anduiza, Cristancho, & Sabucedo, 2014), and the 2016 Black Lives Matter movement (LeFebvre & Armstrong, 2018), to name a few. Previous studies on these movements substantially attended to hashtags used by social media users in investigating the dynamics and implications

of their networked communication. However, few studies focused on the geotagging practice itself, while the movement hashtags often included location information such as #Egypt or #WallStreet.

Examining the role of geotagging in online activism beyond hashtagging opens up opportunities to explore how the concept of space in political protests is negotiated in line with the spatial information available on social media. Protests could traditionally sustain momentum when people are present at physical sites; social media these days additionally help people support the protests even when the people cannot be physically there. However, critics have labeled a social media user's one-time endorsement of a protest through hashtagging or geotagging as "slacktivism" that hurts "real" civic actions with "the low-cost online action" (Lee & Hsieh, 2013, p. 811). Such criticism over slacktivism can be reconsidered if the online engagements in physical protests are in fact efforts to further strategize countersurveillance, as in the current study of remote check-ins.

Countersurveillance is "intentional, tactical uses, or disruptions of surveillance technologies to challenge institutional power asymmetries" (Monahan, 2006, p. 515). Commercial digital platforms and U.S. authorities are increasingly associated with daily surveillance of citizens in the datafied environment (Dencik & Leistert, 2015; Hintz, Dencik, & Wahl-Jorgensen, 2017). In particular, public or private data surveillance often targets protesters. For example, Geofeedia, a social media intelligence platform, promoted a tool that gleans personal data from social media to aid surveillance of protesters by law enforcement in the United States (Bromwich, Victor, & Isaac, 2016). Moreover, the U.S. Justice Department demanded that Dreamhost, a Web hosting provider, hand over information about visitors of a website that was "used to organize protests during President Trump's inauguration" (Savage, 2017, para 1). Indigenous protesters and environmental movement activists are also exposed to such government surveillance on the pretexts of national security or national interests, such as natural resource extraction (Dafnos et al., 2016; Harb & Henne, 2019; Monaghan & Walby, 2017). The public is thus increasingly aware of the series of government attempts at surveilling citizens on digital platforms.

To counter the surveillance of social media data, citizens, including online activists, may introduce a tactic called obfuscation. Obfuscation produces "misleading, false, or ambiguous data" to confuse an adversary and to add to the cost of detecting good data (Brunton & Nissenbaum, 2011, para. 1). Even though obfuscation can be "ad hoc and contextual" or often "haphazard and piecemeal," it still "constitutes a counter-logic to data gathering and profile generation" (Brunton & Nissenbaum, 2011, para. 63). The obfuscation tactic is a claim for the "right not to be identified" in a world where data surveillance is prevalent, making personal data "unreadable" or useless (Cheney-Lippold, 2018, p. 228). For example, people can obfuscate geolocation data by generating inauthentic check-ins to disturb the authorities' supposed surveillance. The aim is to purposely dump misleading geolocation data on social media to interrupt any possible government surveillance activities, confusing the authorities and adding costs to detecting authentic data.

Counterpublics on Digital Platforms

Individuals networked through collective remote check-ins to a political location can comprise a counterpublic. Fraser (1990) suggested the concept of "competing publics" or "counterpublics" criticizing

the idea of the single bourgeois public sphere described by Habermas (1989). She described a counterpublic as a group of people that elaborates "alternative styles of political behavior and alternative norms of public speech" (Fraser, 1990, p. 61). In a counterpublic sphere, marginalized populations would have "increased public communication" with "wider publics" (Squires, 2002, p. 460). Although the concept of counterpublics predates online communication, scholars have examined varying dynamics of counterpublics in different digital platforms, such as Twitter (Geiger, 2016; Jackson & Foucault Welles, 2016; Kuo, 2018), YouTube (Szostak, 2013), blogs (Eckert & Chadha, 2013), and Facebook (Chan, 2018).

Although most previous studies explored overall messages or specific hashtags of diverse counterpublics, Geiger (2016) interestingly examined Twitter users' deployment of shared bot-based blocklists through which counterpublic groups could collectively respond to (and resist) online harassment in the social media space. This "collective, bottom-up mode" of newsfeed moderation among Twitter users (Geiger, 2016, p. 787), even if it does not pertain to countersurveillance per se, indicates a way to locate values of counterpublics in not only their contents but also their collective tweaking of the architecture of digital platforms.

On a similar note, remote geotagging can be construed as a collective attempt to tweak a digital platforms' architecture that is expected to reflect the physical locations of its users. As geotagging to authentic locations is normalized and encouraged in and by current digital platforms, geolocation data can be collected in a highly standardized manner. This leads to enhanced accessibility that increases the possibility of the data's exposure to surveillance. In this context, people can try to repurpose the norm of geolocation data and disrupt the perceived data surveillance through remote geotagging practices. This happened when people generated a swarm of remote check-ins to Standing Rock on Facebook in fall 2016.

This study examines the Facebook check-in posts to Standing Rock and traces discursive interactions among the Facebook users to investigate the following research questions:

RQ1: Why did Facebook users remotely check in to Standing Rock Indian Reservation?

RQ2: How did Facebook users use remote check-ins as a collective tactic?

Method

This study analyzed Facebook remote check-in posts to Standing Rock generated between October 30 and November 2, 2016. A Facebook post or a series of interactions that the single post creates including likes, comments, and replies are popularly considered as discourse data (Johnstone, 2018). Thus, not only the remote check-in posts but also comments under each post, if any, were included in the analysis of this study. Prior to the full data collection, I regularly retrieved remote check-in posts to assess the representativeness of the search result between late September and early October 2017. Entering the term "Standing Rock" on the Facebook search bar and filtering the results (posted by "anyone," tagged location as "Standing Rock" variations, and date posted as "2016"), it was possible to pull out publicly available check-in posts to Standing Rock (see Figure 1). During the data gathering period, the first top 15 search results were tracked every day for one week; as of 2017, the top 15 posts were visible without an additional

process of scrolling down on a desktop interface. No obvious pattern such as consistent and repetitive results emerged during the week-long period; only once did Facebook provide the exact same result as the previous day's, whereas at other times the search results seemed to be random and irregular. Also, various locations were selected when checking in to Standing Rock: Standing Rock Indian Reservation (McLaughlin, SD), Standing Rock Indian Reservation (Cannon Ball, ND), Standing Rock ND (Fort Yates, ND), and Standing Rock Sioux Tribe (Fort Yates, ND).

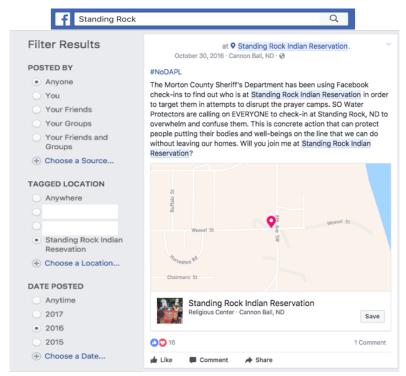


Figure 1. An example of Facebook search and filter results.

Guided by the grounded theory approach (Glaser & Strauss, 1967), the study conducted a qualitative thematic analysis (Braun & Clarke, 2006) on the remote check-in posts with an open coding strategy. I first collected 20 check-in posts, closely read the 20 posts and their comments when available, created themes as they emerged, and categorized the posts and the comments into each theme. This process was iteratively done every 10 posts afterward. In total, 80 remote check-in posts from 80 distinct Facebook users and their available comments were manually retrieved and analyzed. I determined that the data reached saturation, as there were no additional themes that emerged when the number of the posts approached 80.

I do not claim that the data set of this study is representative of the population of check-ins to Standing Rock. Rather, the analysis of the sample of 80 check-in posts aims to shed light on the motivations and practices behind collective geotagging activities through a qualitative examination. Search results were

limited to the posts with a public privacy setting. Information including the date, check-in location, message, media links, comments and replies, and the number of likes was collected. The privacy setting of the post creator's public Facebook profile was also explored for location information, such as hometown or current city. Any identifier of the post creator, such as name or contact address, was not collected. The Institutional Review Board (IRB) of the University of Southern California that I am affiliated with approved the study.

I organized the themes and relevant examples on the basis of the two major purposes of the collective remote check-ins identified in the analysis: (1) solidarity, and (2) countersurveillance (see Table 1). The analysis found that remote check-ins tried to serve two main purposes: (1) expressing solidarity with the protesters on site, and (2) attempting to counter the authorities' alleged surveillance of the protesters' geolocation data on Facebook. In line with the two purposes, remote check-ins were practiced as a tactic to achieve either or both goals: (a) endorsing the protesters and their political cause of protecting the Indian Reservation, and/or (b) obfuscating the geolocation data of Standing Rock available on Facebook. Some participants were educating each other on geotagging practices and on the right privacy setting for successful remote check-ins. Others also expressed doubts on the law enforcement's surveillance or the effectiveness of such collective remote check-ins. To protect the identity of the users who created the posts or comments and any other users who were mentioned in the messages, all the quotes introduced in the study are not presented with their exact dates and names.

Table 1. An Overview of the Themes Emerging From Analysis.

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Purpose	Tactic	Education	Doubts	Target
Solidarity	Endorsement through check-ins	Geotagging	The police do not surveil, but I can express solidarity.	Protesters
Countersurveillance	Obfuscation through check-ins	Geotagging privacy setting	The police are surveilling, but this strategy won't work.	Law enforcement

Results

Expressing Solidarity Through Endorsement

One of the most noticeable themes that appeared as a purpose of the remote check-ins was the participants' expression of solidarity with the protesters. Their posts often used various hashtags stating that they were checking in to Standing Rock for solidarity:

#waterprotectors @standingrocksiouxtribe #StandingRockSiouxTribe #NOdapl #IstandwithStandingRock #waterislife

Protect the protectors. Solidarity #NoDAPL #WaterIsLife #MniWiconi

"Standing with Standing Rock" was a popular phrase that went viral online, showing Facebook users' solidarity. Hashtag #NoDAPL was frequently cited in the posts, meaning "No Dakota Access Pipeline." Checking in to a protest on digital space is recognized as a tool for online observers to spread the word and for online activists to improve publicity of a cause (Rogers, 2016). The solidarity manifested as a purpose of the remote check-ins could be interpreted in relation to these publicity efforts.

Some participants also incorporated additional information about how they could further support the protesters. The post quoted below, for example, links to the website of "Sacred Stone Legal Defense Fund":

Checking in, in solidarity. But also contributing to their Legal Defense Fund, to help the protesters in the fight against the Dakota Access Pipeline and the Morgan County Sheriff Department's brutal enforcement actions.

This post received comments from other Facebook users, one specifically mentioning the positive function of social media in raising awareness of the political cause: "Definitely a very worthy cause. [XXX] posted an address where you can send care packages to as well. I'm glad we have social media." Sometimes, it was the commenters who initiated conversations on the additional resources to help the protesters practically, beyond checking in to Standing Rock on Facebook:

Here is a link to several resources, I've been sharing on the check-ins so that action can continue past Facebook. Whether people are going, or are looking for a meaningful way to contribute from home. . . . It is important to empower individuals to create change [and it] is how we make a difference.

Many of the study sample participants who checked in to Standing Rock from remote locations seemed to understand that their check-in activity was a form of solidarity with the protesters at Standing Rock. By checking in online to Standing Rock, the Facebook users could collectively endorse the cause the protesters were fighting for. Also, some participants acknowledged what constitutes solidarity should extend to providing tangible supports, including donations to protesters. Participants who checked in remotely to express solidarity resembled many previous online activist movements in that they frequently used hashtags to network with people sharing common interests (Rambukkana, 2015). They also focused on the role of social media to raise awareness of the issue (Rogers, 2016).

Still, solidarity through remote geotagging embodies the user's performative emphasis on spiritually being there at Standing Rock with the protesters. As Butler (2015) suggests, assembly of people is a "concerted bodily enactment" and a "plural form of performativity" (p. 8). People who gather as a large group, parking one's "body in the middle of another's action" is an important political manifestation of "popular will" (Butler, 2015, p. 9). In the current study, Facebook users who remotely checked-in to Standing Rock meant to virtually "stand with" the protesters as if they were physically at the protest site as a way to show their solidarity. They could just write a Facebook post using a hashtag, for example, but they specifically decided to use the platform's feature of geotagging instead, which may highlight the value the users tried to put on their spatial presence aligned with the Standing Rock

protesters. The participants of the remote check-ins in this study's sample tried to be local to Standing Rock without being local.

Countersurveillance

The analysis found another theme widely expressed as a purpose of the remote check-ins: countersurveillance. The Facebook users in this study's sample wished to counter the perceived surveillance by law enforcement on Facebook through infusing false check-ins into the platform. The prompt widely shared in posts on Facebook requested people to join remote check-ins as below:

The Morton County Sheriff's Department has been using Facebook check-ins to find out who is at Standing Rock in order to target them in attempts to disrupt the prayer camps. SO Water Protectors are calling on EVERYONE to check-in at Standing Rock, ND to overwhelm and confuse them. This is concrete action that can protect people putting their bodies and well-beings on the line that we can do without leaving our homes. Will you join me in Standing Rock?

The prompt itself was frequently copied, pasted, and shared by participants in the study sample. By sharing a post with the prompt, Facebook remote check-in users may have tried to express their belief in the authorities' surveillance over geolocation data. The prompt was obviously hoping for collective remote check-ins (i.e. "EVERYONE to check-in") so that they can together challenge the perceived online surveillance. The prompt had several variations, and the attempts at countersurveillance were frequently juxtaposed with their expression of solidarity with protesters:

I stand with Standing Rock! [Prompt] #WeStandWithStandingRock
Police are targeting water protectors at Standing Rock by following their Facebook checkins. To stand in the gap . . . , organizers are asking that any who stand with them to *check in publicly in solidarity* (from wherever we may be).

The Facebook users sometimes tagged their friends to the remote check-in posts and encouraged their participation:

Sorry for the random tag, I found out the feds were trying to compile a list of protesters using [F] acebook check ins. Congratulations, you're part of the protest now. You're fighting for life and our environment. . . . The pipeline protesters have asked everybody to flood [F] acebook with checkins [sic] at Standing Rock to keep authorities from using [F] acebook checkins [sic] to compile a list of protesters.

The posts were often followed by supportive comments from the tagged friends: "I'm glad. I want to be part of this." Facebook users who showed their belief in the authorities' surveillance over geolocation data tended to be familiar with not only geotagging but also tagging practices in general.

The users' obfuscation tactic, if successful, was expected to generate the "network effect" suggested by Brunton and Nissenbaum (2011). Brunton and Nissenbaum explain that cooperative obfuscation becomes more valuable when more people join, thereby generating the "network effect." In this study's case, the increasing number of Facebook users who remotely checked in to Standing Rock was supposed to make each remote check-in more valuable, as the geolocation data would become mixed with the false data. If the law enforcement was actually gleaning the check-ins, it may have been troublesome for them to figure out trustworthy information. Thus, the collective remote check-ins were attempts to obfuscate the geolocation data tied to Standing Rock, fighting against the alleged police surveillance over check-ins on Facebook.

This obfuscation tactic used by Facebook remote check-in participants provides insights into the public distrust of authorities when it comes to their denial of surveillance activities. In the Standing Rock case, local law enforcement officially stated that they were not gleaning social media data to identify protesters. Nonetheless, users in the study sample still checked in to Standing Rock on Facebook. The Facebook users' persistent response to the authorities' alleged surveillance in the lack of official accounts may be because the police's announcement was contradicting the users' general awareness of the ubiquitous government surveillance. One of the well-known recent cases before the year of 2016 when the Standing Rock remote check-ins were generated was Snowden's disclosure of surveillance programs run by the NSA, an intelligence agency of the United States Department of Defense, which became known to the public worldwide in 2013. Such a contradiction between the publicized evidence of pervasive government surveillance and the verbal refusal of surveillance by local law enforcement could have led the Facebook remote check-in participants to believe in the government's surveillance over geolocation data on social media. Thus, despite the lack of official accounts of surveillance by the government, the Facebook users in the study sample organically joined the collective remote check-ins, educated each other on tactics, and generated inferences of its effect.

Education on Geotagging

Various remote check-in posts were further turned into an educational discursive space for the post creators and commenters. First, the Facebook users who checked in to Standing Rock often taught others how to practice geotagging on Facebook. For example, a remote check-in post that suggested others to check in to Standing Rock for countersurveillance was commented by another Facebook user who asked, "How do I do it?" The original post creator then replied to the comment:

You start a new status on your profile. When you click in the box to type, you'll see options at the bottom. One of them is to "check in." A box will pop up for you to type in the location, which is Standing Rock.

This exchange shows that some Facebook users had never used the check-in feature of the platform before and were educated about it for the first time through the discourse around the remote check-ins to Standing Rock. The Facebook users' different levels of familiarity with geotagging practices suggest that the collective remote check-in was a comparatively new tactic. The users voluntarily

educated each other about how to generate geolocation data on the platform as they shared a common interest in joining the movement.

Yet there was sometimes confusion about where to check in. Some Facebook users checked in to "Standing Rock, New Mexico," for instance, instead of appropriate locations in Dakota. Checking in to wrong locations can happen if Facebook users are not knowledgeable enough about the Standing Rock protest. Or it may be that users know very well about the protest itself, but are not familiar with where it is exactly. It can be also because they did not carefully double-check the location and selected what Facebook suggested with auto-completion when they typed in "Standing Rock." It might also be possible that the users still lacked familiarity with the geotagging feature of Facebook. Facebook users often corrected those check-in posts that were geotagged to the wrong Standing Rock by leaving comments: "[Y]ou selected the wrong standing rock—the protest is in North Dakota where oil pipelines and an oil refinery are already on the Missouri River near enough to Standing Rock."

Despite all the confusion, Facebook users were actively teaching each other to better practice remote check-ins. On the one hand, these mistakes may be considered as an evidence of "slacktivism"—people feel good about joining the collective action without even knowing the exact location to geotag. On the other hand, many committed activists who are engaged in the issue in other ways may not be familiar with enough Facebook, thereby generating wrong check-ins. In either case, remote check-ins would then inevitably fail as a strategy for the purpose of countersurveillance, as wrong check-ins to Standing Rock cannot obfuscate the authorities' online surveillance as planned. However, it is critical to note that the Facebook users were still meaningfully engaging with each other through such educational interactions, improving their familiarity with geotagging and the workings of geolocation data on the digital platform. That is, the collective remote check-ins to Standing Rock may have enhanced the users' literacy of geotagging and geolocation data, a skill and a type of information the users can benefit from knowing better. Squires (2002) explained that in a counterpublic sphere, people can test strategies in wider publics. In the Standing Rock remote check-ins, people were also going through trial and error, and the educational experience was an integral part of the process.

Education on Privacy Setting

The Facebook users further taught each other how to manage the privacy settings, especially for their collective obfuscation. Facebook provides its users with four privacy settings—public, friends, friends of friends, and only me—and the settings can be customized. The key in the Standing Rock case was whether the posts were "public" (see Figure 2). Whenever a user created a "public" remote check-in post, accessible by anyone, including law enforcement, the user was expected to generate a separate "clarification post" that would be available to only his or her Facebook "friends" (Owen, 2016).

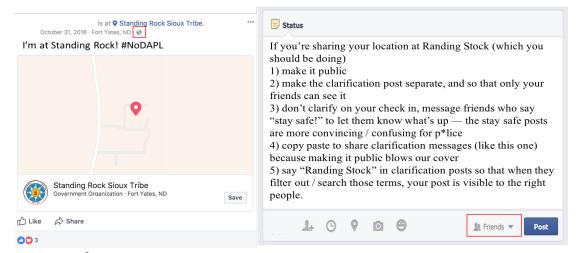


Figure 22. Examples of a "public" post (left) and a private "clarification" post (right).

As specified in the guideline in Figure 2, the Facebook users needed to be cautious about the privacy setting of the check-in posts. They believed that the authorities who allegedly watched geolocation data could glean public posts, and that remote check-ins would be successful if only they made their posts public while not disclosing the real purpose behind such collective check-ins. There were often comments made by other users under the remote check-ins that urged the post creators to adjust the privacy setting, saying "You have to make it public [XXX]."

Another interesting element in the guideline is that it asked for using "Randing Stock" instead of "Standing Rock" in the clarification posts. The intentional misspelling was to hide the purpose of remote check-ins to the authorities who may filter out such data. It is not a new strategy, as people have used subversive or circumventive hashtags to talk about censored topics (Zidani, 2018). For example, in the Chinese #MeToo discourse in 2018, Chinese netizens came up with the characters "rice bunny" or corresponding emojis, pronounced "mi tu" in Chinese, to get around government censorship (Dixon, 2018). Likewise, law enforcement in the Standing Rock case was not supposed to comprehend that people were checking in, in the same manner as searching for the location of Standing Rock. The real purpose was to be shared only among the users who knew the alternative "Randing Stock" term. The Facebook users were aware of the importance of tactful negotiations between the private and the public, when tackling the surveillance of geolocation data.

However, some Facebook users were confused about how to manage privacy settings. Many clarification posts were set to "public," when they were supposed to remain "private," according to the circulated guidelines. Commenters tried to correct the posts' privacy setting. Again, because posters were seemingly ignorant about how to use the correct privacy settings, the collective remote check-in seems to

² The examples are imaginary and presented here to help understanding. The red boxes highlight different privacy settings: the left one is publicly available and the right one will be only visible to the user's friends.

be an evolving tactic for obfuscation of geolocation data. Also, it is possible that the architecture of Facebook might have fueled the users' confusion. Despite the privacy options Facebook provides to users, it has increasingly set its features' privacy settings to "public" by default (McKeon, 2010), and has implemented too many complicated changes (Keys, 2018). It is not always clear to Facebook users how to best manage their privacy settings, including the geotagging feature. In the Standing Rock case, despite these challenges, the Facebook users still managed the geolocation's privacy setting data by learning through interactions among the remote check-in participants.

Doubts and Debunking

Not every Facebook user in this study's sample, however, was firmly convinced by the remote check-in movement. Some users doubted whether law enforcement was really surveilling the geolocation data on Facebook. They tried to debunk what they thought was a rumor—that the authorities were gleaning the geolocation data of the Standing Rock protesters. Nonetheless, the posts continued to recognize the importance of expressing solidarity and raising awareness of the political cause through remote check-ins:

First of all. We all should check in to Standing Rock. Why not? It raises awareness and [it] shows support. However, \dots this movement [does] not confuse the police. They are not tracking check ins [sic]. \dots What I do find interesting is that now the media is paying attention. \dots But because people are on Facebook checking in. If that starts the conversation between the public and the media and the government so be it but \dots it really is telling about what the media won't cover.

Shoutout to all the people on my Facebook feed showing solidarity with the Standing Rock. . . . However, checking in to Facebook will not actually "thwart" police, who are not using FB to track protesters (and remote check-ins wouldn't help anyways).

The Bottom Line: If the protesters at Standing Rock are feeling empowered by the massive support of so many people pretending to be at Standing Rock, I am more than happy to give them the benefit of my support.

Several comments, while agreeing with the doubts, showed their ongoing willingness to express solidarity: "Thank you. I've been wondering (and then decided to throw my hat in anyway, because why not try right?)." The debunking remote check-in posts usually included links to news articles as outside sources to back up their arguments too. The articles ranged from those published by traditional news outlets, such as *The New York Times* (Rogers, 2016) and the *Los Angeles Times* (Pearce, 2016), to a fact-checking website, *Snopes* (LaCapria, 2016).

Doubts were also brought up in the comments under the remote check-in posts, sometimes alluding to the potential problem of the remote check-in's falling into slacktivism:

In short, neither the Morton County's Sheriff's Department nor representatives for a large camp believed the viral Facebook status meme was either impeding law enforcement or meaningfully aiding the protesters (although the spread of the message was welcomed by the latter group). Spreading the message certainly didn't harm anyone or thing, but it also enabled a feeling one had acted without anything other than words offered [to] the protesters.

Besides such concerns over slacktivism, as said at the end of the quote above (i.e., enabling "a feeling one had acted without anything other than words"), other Facebook users were further suspicious of how effective their collective remote check-ins could be for countersurveillance:

Hmmm. . . . Some options to ponder . . .

- A) Maybe this check-in option really is a hoax?
- B) or maybe it's actually working really well, and the Sheriff's office is trying to convince the public that it's NOT working, just so they could re-gain that advantage?

I honestly don't know.

In this example, it is noteworthy that the user suggested a possibility in which the collective remote check-ins were unsuccessful, as people started to believe the Morton County Sheriff's claim that they were not surveilling check-in data. If the Facebook users halted obfuscating check-in data, then authorities could have obtained the "advantage" of being able to glean clean and authentic geolocation data of the protesters at Standing Rock again. In another post, a Facebook user doubted the success of the specific remote checkins to Standing Rock, but still confirmed his or her remaining belief in the authorities' surveillance of social media data in general. The user said, "While the check-ins won't thwart police, you know police are using social media. They use it for everything."

The doubts identified in this study imply that Facebook users' perspectives on geolocation data surveillance were constantly negotiated through the discourse around Standing Rock check-ins. Some did not believe the active surveillance of check-ins by law enforcement, but they still agreed with the check-ins' goal of expressing solidarity. Others believed that the police were combing through the Facebook check-in data in the Standing Rock case and that the authorities are generally using social media to surveil citizens.

A Networked Geotagging Counterpublic

The themes identified in the analysis offer insights as to why Facebook users remotely checked in to Standing Rock (RQ1) and how they used the remote check-ins as a collective tactic (RQ2). In terms of the motivations, the findings suggest that the collective remote check-ins tried to serve dual purposes, targeting two possible audiences: (1) expressing solidarity to the protesters on site, and (2) attempting to counter the law enforcement's alleged surveillance. Delving into the details of the remote check-in practice, I also found that users educated each other about how and where to check in and that they paid attention to the privacy settings of their posts for successful collective obfuscation. There was still some confusion among the users, but the concerns were addressed through their educational interactions. Even though some remote check-in participants were not entirely sure of the government's surveillance of the geolocation data on Facebook, the

users overall could contemplate how to collectively tackle the perceived censorship in the discursive space the remote check-ins shaped.

I argue that Facebook users in the Standing Rock case could form a networked geotagging counterpublic through unified remote check-ins. First, participants from different geographical backgrounds collectively shared their understanding of geolocation data and its surveillance on social media. There were varying degrees of familiarity with geotagging practices. Also, some people firmly believed that the government was surveilling geolocation data, but others were not strongly convinced. Diverse users used the same "check-in" feature, even from remote places, to engage in the conversations around Standing Rock Indian Reservation, using the geotag "Standing Rock" as a virtually networked site.

Moreover, by joining the collective remote check-ins, Facebook users were forming a public against two-folded dominances: (a) the authority who was arresting the protesters when the issue at stake was to protect the Indian Reservation from environmental and cultural risks, and (b) the authority whose alleged surveillance over citizens was encompassing social media data. Both the contents and the style of the remote check-ins fit into the definition of counterpublics. As the marginalized Indian population's political cause of protecting their community received wider support from the public through "increased public communication" (Squires, 2002, p. 460), the Standing Rock remote check-ins could serve as a counterpublic sphere. Also, the Facebook users chose to use an "alternative style" (Fraser, 1990, p. 61) of geotagging: They checked in to Standing Rock from remote locations instead of creating authentic check-ins, as is generally encouraged by the platforms and expected by regular users. Humphreys and Liao (2011) claim that mobile geotagging produces a public space, and it was a counterpublic sphere in the Standing Rock case.

This geotagging counterpublic is an evolving form of geotagging publics. I theorize that there are two kinds of geotagging publics: (1) the publics whose geotags reflect both authentic locations and messages (e.g., safety check-in publics whose check-in reflects the local place affected by emergencies with the shared purpose of indicating one's safety), and (2) the publics whose geotags do not necessarily reflect authentic locations (e.g., Facebook publics who post about a local news from a remote place through geotagging to spread information about it). The geotagging publics are like "hashtag publics" (Rambukkana, 2015), as they share ideas through networked communication; but, they are also different from the "hashtag publics," as they prioritize spatial information in connecting with others, either sticking to or shying away from the notion that physical proximity to the geotag is an indicator of the relevance of information. Going one step further, this study focuses on geotagging counterpublics whose geotags share the same political cause while strategically creating false location data, as in the case of Standing Rock. Geotagging counterpublics seek for obfuscated visibility of their geolocation data, as shown in remote check-ins.

Conclusion

This study analyzed the 2016 Standing Rock remote check-ins that were joined by more than a million Facebook users. Social media platforms are flooded with geolocation data that are voluntarily created by the users. Yet the power of the geosocial aspect of social media was not explored enough by previous studies as to how the users perceive and negotiate their geolocation data in the context of online activism and data surveillance. I believe that this study offers valuable insights at the intersection of "mobile geotagging" as a

social construction of public space (Humphreys & Liao, 2011) and the "localness assumption" of geotagging practices (Carbunar & Potharaju, 2012; Johnson et al., 2016) in terms of political protests (Bastos et al., 2014). Public-convening functions of social media based on the users' locations call for further in-depth examination.

Although this study contributes to understanding the underresearched area of geotagging publics and counterpublics, it has a few limitations. In terms of sampling the public remote check-in posts, there is an inherent possibility of a sampling bias. The exact logic of how Facebook returns search results remains in the black box, as Facebook algorithms are proprietary assets that are not required to be transparently shared with public. Even though Facebook explains that it considers personal context, social context, and global popularity in its search queries (Wable, 2010), it is not clear in which way Facebook showed the search results in the current study when I entered the term "Standing Rock" on the Facebook search bar to collect check-in posts. However, the limitation of not knowing 100% how the sample data set of this study was solicited by Facebook algorithms was a strategic trade-off. This study attempted to qualitatively look at discursive interactions and closely examine each post and comment via sampling posts, instead of mining millions of public posts on Facebook. Moreover, Facebook does not offer public APIs, making it hard for researchers to crawl the data, even if they wanted to. The study also examined one case of Standing Rock on Facebook in 2016, and future studies could enrich the current study's findings by exploring similarities and differences in additional remote check-in cases.

This study nevertheless suggests the concept of geotagging counterpublics by delving into the case of Standing Rock, where Facebook users collectively made sense of their geolocation data and the perceived surveillance on social media. They showed solidarity with the protesters via remote check-ins and hoped that their collective check-ins would improve the public awareness of the political and environmental issues surrounding indigenous communities. They also negotiated strategies to counter the surveillance over geolocation data. Digital platforms are frequently promoted as intermediaries that connect people beyond physical boundaries by the industry, but the users' geolocation data are mostly encouraged to be bounded by true locations for algorithmic identification. The study's findings suggest a possibility that users may repurpose this social norm with agency and reshape the spatial dimension of social media for political causes in new ways.

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