AOIR ETHICS PANEL 2: PLATFORM CHALLENGES

Michael Zimmer
Marquette University, USA

Ylva Hård af Segerstad
University of Gothenburg, Sweden

Panel Rationale and Organization

Since its inception, the Association of Internet Researchers (AoIR) has fostered critical reflection on the ethical and social dimensions of the internet and Internet-facilitated communication and interactions. The AoIR Ethics Working Committee has been committed to not only ensuring the AoIR Ethics Guidelines remain helpful and relevant to researchers and ethical review committees, but also to ensure high-quality research focused on ethics is shared at the annual conference. This panel is one of two sessions organized by the AoIR Ethics Working Committee to highlight recent research engaging with the complexities of addressing ethics in our domain from various disciplinary perspectives, methods, and platforms.

This panel collects five papers exploring a broad (but in many ways common) set of ethical dilemmas faced by researching engaged with specific platforms such as Reddit, Amazon's Mechanical Turk, and private messaging platforms. These include: "Reddit Research And Reflexivity: A Situated Ethics Framework For Publicly Available User-Generated Data" by [redacted] that studies people's online conversations about health matters on Reddit in support of a proposed situated ethics framework for researchers working with publicly available data; "Ethical research and the practice and efficacy of masking Reddit sources" by [redacted] that explores the sourcing practices among Reddit researchers to determine if their sources could be unmasked and located in Reddit archives; "Addressing Ethics in Reddit Research: A Systematic Review" by [redacted] which provides a broad systematic review of over 700 research studies that used Reddit data to assess the kinds of analysis and methods researchers are engaging in as well as any ethical considerations that emerge when researching Reddit; "The "Original Sin" of Amazon Mechanical Turk for Academic Research" by [redacted] which provides a critical examination of the use of Amazon's Mechanical Turk for academic research; and "Ethical Approaches to Closed Messaging Research: Considerations for Democratic Contexts" by [redacted] which investigates current

practices and ethical dilemmas faced when researching closed messaging applications their users. Taken together, these papers illuminate emerging ethical dilemmas facing researchers when investigating novel platforms and user communities; challenges often not fully addressed–if even contemplated–in existing ethical guidelines.

If presented live, the panel will be moderated by members of the AoIR Ethics Working Committee and will include a respondent from that group to spark further discussion across the contributors and among virtual attendees.

Simon Rogerson, Chief Editor *Journal of Information, Communication and Ethics in Society* (JICES) notes his publication aims to "…promote thoughtful dialogue regarding the wider social and ethical issues related to the planning, development, implementation, and use of new media and information and communication technologies." The *Journal* thereby offers "necessary interdisciplinary, culturally and geographically diverse works essential to understanding the impacts of the pervasive new media and information and communication technologies." These papers fit this objective, and are among those under consideration for publication in a special issue of the JICES) associated with the AoIR Ethics Working Committee and AoIR2021.

REDDIT RESEARCH AND REFLEXIVITY: A SITUATED ETHICS FRAMEWORK FOR PUBLICLY AVAILABLE USER-GENERATED DATA

Martyna Gliniecka
Western Sydney University, Australia

Introduction

Publicly available user-generated data sparks a heated debate among Internet researchers. According to Stommel and Rijk (2021) and Taylor and Pagliari (2018), studies often don't discuss ethical considerations or briefly mention ethics committees' approvals and approach to informed consent. Many scholars apply for an exception from the human research ethics review. When the exception is granted, researchers' engagement with the ethics of the study ends. Two main strategies of addressing ethical concerns are to draw upon guidelines (from associations like AoIR and similar studies) or dismiss ethical obligations due to working with publicly available data. Another way to engage with research ethics in online research is to consider a situated ethics approach guided by the particular project and researcher's reflexivity. This paper describes the process of assembling situated ethics approach for my study about young people's online conversations about health matters on Reddit and proposes a situated ethics framework for researchers working with publicly available data.

Overview of the study

In my study, I examine young people's peer-led discussions about health on teen-oriented subreddits on the user-led platform Reddit. I am interested in conversations' practices and the discourse of youth health matters. I investigate discussions represented by textual data and their contextual, interactional and semiotic dimensions. I utilise the unobtrusive digital ethnography with collecting naturalistic user-generated content of original posts and replies. For analysis, I introduce a situated methodological toolkit with multiple methods adjusted to particular discussions' examples. While preparing my research design, I had to consider human ethics review. I have decided to request an exemption from human ethics review due to the public and non-identifiable data which I was granted. However, this decision has pushed me towards applying the reflexive and situated ethics approach.

Addressing ethical issues

According to most privacy laws, public data does not require means to protect the confidentiality, but some users consider their posts aimed at private friends' circle. Data derived from social media can be non-identifiable, but some profiles include personal information. Some platforms such as Reddit are anonymous/pseudonymous, and users don't share private details. These issues cannot be solved by a one-size-fits-all approach (Steinmetz, 2012). Procedural ethics expect to identify all risks before commencing research (Roberts, 2015) and sustain a coherent ethics approach throughout the process (Webb et al., 2017). Such attitude doesn't recognise unforeseen ethical issues and contextual forces that shape specific projects. The situated ethics approach unpacks the advantages and limitations of research by observing its process

and address the complexities of interrelations of people, platforms and places (Collin et al., 2020). Situated ethics also encourage reflexivity on the researcher's position and identifying potential biases (Hine, 2015). The non-linear ethics approach balances between the pragmatism of conducting research and protecting the users from unexpected harm.

Situated Ethics Framework

I attended the ethics of my research in a reflexive, situated and practice-based way. The key ethical dilemmas I considered were public/private debate, anonymity and traceability, consent, data collection and storage, and youth/health vulnerability. I was guided by the online research guidelines, privacy and human research ethics laws, ethics committees' policies, studies on Reddit, users' recommendations, and the young people's advisory board. What emerged from this process was a situated ethics framework and its dimensions – online/digital context, perceptions/beliefs/attitudes, and project specificity. All of them share the principle of fluidity, situatedness and participatory approach.

The online/digital context dimension in this study addressed circumstances specific to Reddit: platform's size and structure, availability and accessibility, user's anonymity and identity, and third-party data policy and terms and conditions of use. These factors could guide future researchers to incorporate the platform-specific lens into ethical decisions. It is particularly helpful in investigating under-researched or new platforms, as guidelines and ethics committees are limited by the novelties in the digital environment and lack of existing research on particular platforms. In this project, I have focused mainly on the platform context, but there are broader online/digital context implications, for example, economic or political, that could inform ethical challenges.

Perceptions/beliefs/attitudes from users included incorporating the "indirect" and "direct" participatory research approach. As an "indirect" input, I considered peer guidance from the literature review. Two topics that can help researchers in their ethical decisions are studies on attitudes towards using social media posts for research and the previous ethical approach in research on the specific platform. I also incorporated "direct" participatory research by seeking opinions from platform users and targeted group (youth advisory board). A participatory approach is challenging with projects dealing with user-generated data, especially if conducted without direct contact with content producers, but, as this project shows, can be done otherwise.

The last dimension – project specificity – is often overlooked if researchers follow general guidelines for general "social media" data. In my case, I have considered whether my research is leaning towards text or human orientation, what are the data characteristics and data collection process, whether I can seek informed consent, and what are the issues specific to the targeted group. Every project has specific theoretical, methodological and analytical factors that can influence the ethics approach. The data we aim to obtain can guide us significantly, as there is a difference in its numbers, types, accessibility and ownership. Practicalities of conducting the study while minimising risks and inconvenience for the users can't be assessed without reference to the particular project.

Conclusion

Online research on user-generated data emerge as problematic addressed with procedural, risk-management and guidelines-informed ethics. Dynamically evolving platforms affordances, users' behaviours, and particular project orientation and design require customised, fluid, and situated approaches to ethical dilemmas. Working with publicly available and non-identifiable data does not waive the responsibility of conducting the study ethically. The situated ethics approach aims not to resolve the ethical dilemmas but to help surface and support working through them. The framework I propose here can be applied to future study designs that seek to trial and test it. Reflecting on dimensions of online context, user's attitudes and research design in one's ethics considerations embeds more reflexivity into the ethics process and tailor it to the specific project.

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DISGUISING REDDIT SOURCES AND THE EFFICACY OF ETHICAL RESEARCH

Joseph Reagle
Northeastern University, USA

Introduction and Background

While planning for a project about online advice forums, I wondered if should I mask such sources by eliding usernames and altering quotations? Advice about health and relationships are sensitive topics, even if shared in public via pseudonyms. Looking at recent research on Reddit, I noted different approaches to my quandary. I set out to do a systematic analysis of recent Reddit research reports by characterizing their sourcing practices, testing if their sources can be unmasked and located on Reddit or its archives, and interviewing the authors.

When it comes to researchers limiting the exposure of online sources, we might speak of anonymizing (Ohm, 2010), fabricating (Markham, 2012), de-identifying (Haimson et al., 2016), UnGoogling (Shklovski & Vertesi, 2013, p. 2172), and obfuscating (Brunton & Nissenbaum, 2015, p. 1). I follow the path of Bruckman (2002), who helpfully described a continuum of *disguise,* from none, to light, moderate, and heavy.

As far back as the 1990s, King (1996) faulted Finn & Lavitt (1994) for disguising sources' names, but not that of the sexual abuse forum or the date and time of posts. More recently, Zimmer (2010) critiqued researchers for creating a "Tastes, Ties, and Time" Facebook dataset that was improperly — perhaps impossibly — "anonymized." Journalists, too, sometimes participate. At the *New York Times*, Barbaro & Zeller (2006) reported on — and confirmed — the potential to unmask sources in an AOL dataset. A decade later, in the same newspaper, Singer (2015), wanting to speak to a source in a research study, was able to identify, contact, and interview the source.

The present work systematically investigates the disguising and subsequent locating of online sources. That is, *can the original message reported by a researcher be located?* If so, *what can be done to improve research disguise*?

Method

I searched for research reports from the last five years about Reddit using keywords such as "privacy," "verbatim," "fabrication," and "AoIR guidelines" (Franzke et al., 2020). I found three reports using verbatim phrases and three using reworded phrases. I collected phrases of more than ten words from each because any less than that is too short for meaningful searches.

I then set about locating Redditors' phrases in the six reports. Identifying the phrases and conducting the searches was an *idiosyncratic* process: intensive, manual, and subjective. I made no effort to personally identify Reddit users. However, locating sources, as I attempted, *could* be the first step in the distinct process of re-identifying users via digital forensics.

After my initial analysis, I emailed the research reports' authors and asked if they would speak with me. Three agreed to do so and completed the consent form. I asked a handful of questions about their practice, rationale, influences, and thoughts about my efforts.

Though I used public research reports and their own Reddit sources in my analysis, none of this is identified or quoted. Interviewees were allowed to review my characterization of their work and our discussion.

Analysis and discussion

There are three major indexes by which to locate sources on Reddit: Reddit itself, Google, and RedditSearch. Reddit is excellent at finding verbatim content from a post but does not support searching for the comments that follow a post. Google can search posts and comments and was useful for non-exact (non-quoted) searches; it inexplicably failed to find any verbatim quotes from one report. RedditSearch, a human-friendly interface for Pushshift's index and API, is the most potent tool, enabling sophisticated searches, including copies of messages that have since been edited or deleted. Less well-known or private archives could also exist given Reddit's public nature.

I found descriptions of research practices that were confusing or inconsistent with practice. In two cases, issues arose during the review and editing process (V3 & R2). In the other cases (V1), I suspect it was an oversight in data collection. Researchers (V2) can also be unaware that posts by pseudonyms might still be thought sensitive by their authors given Redditors subsequently delete their posts.

Masking sources, the highest level of disguise that elides usernames and alters prose, can be effective (R1). This is especially so when the altered phrases are tested against search engines — the practice of one interviewed researcher (R3).

Research reports and results (+ = strength; - = weakness).

report	approach	sources	located	note
V1	verbatim	18	17	- leaked non-throwaway accounts
V2	verbatim	17	15	- didn't account for deleted posts
V3	verbatim	6	6	- inconsistent description/practice
R1	reworded	2	0	+ preferred interviews to posts
R2	reworded	5	5	- posts found via thread title
R3	reworded	8	0	+ maskings tested by researchers

There is no single research policy appropriate to disguising online sources. My interviewees shared how their practices changed relative to their research sites (i.e., how sensitive the topic), the larger cultural context (e.g., the rise in online harassment of sources), and researchers' influences (i.e., conferences and papers) and experiences (e.g., seeing other researchers' sources exposed).

The different approaches we see in reports, however, are not necessarily the result of a consistent policy (i.e., from conception to publication), fully cognizant of technical affordances (e.g., RedditSearch and Pushshift), and users' wishes (e.g., when users delete posts from throw-away accounts). The research community can improve on this, though, via site-specific investigations and practical guidelines that inform the conception, execution, and review of research.

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ADDRESSING ETHICS IN REDDIT RESEARCH: A SYSTEMATIC REVIEW

Casey Fiesler
University of Colorado Boulder, USA

Michael Zimmer
Marquette University, USA

Nicholas Proferes
Arizona State University, USA

Sarah Gilbert
University of Maryland, USA

Naiyan Jones
UK Office for National Statistics, United Kingdom

Introduction

Reddit is one of the most prominent social platforms on the web with over 52 million daily active users (Reddit.com, 2020) and over 138,000 active topical "subreddit" communities (Marotti, 2018). Reddit has also been home to a number of prominent and controversial events, such as attempts to identify the Boston-city bombing terrorists (Starbird et al., 2014); a massive leak of hacked celebrity photos (Marwick, 2017); the coordinated attempt to take on short-sellers of the GameStop stock (Roose, 2021); as well as sometimes racist (Mittos et al., 2020), sexist (Farrell et al., 2019), and vitriolic political discourse (Mills, 2018). Because of its prominence, influence, and history of controversy, it has also become a valuable data source for internet researchers.

While Twitter has been described as the "model organism" (Tufecki, 2014) for academic study because its content is predominantly publicly visible and has provided useful APIs for researchers, Reddit has increasingly been turned to by researchers seeking to gain access to streams of textual data. For example, Reddit's topic-specific subreddit structure provides a focused means of locating relevant research data, and an expansive dataset of conversations, discussions, and debates to mine and analyze.

However, working with Reddit data also presents novel ethical complications for internet researchers. For example, Reddit also offers a large degree of anonymity, and one-time use accounts are not uncommon. Because users may feel as though they can speak fairly freely on Reddit as a result of relatively permissive content policies and the anonymity afforded, researchers may be collecting–and perhaps quoting–sensitive content that users might not have contemplated would be collected for analysis outside of the norms built around a particular subreddit community. While discussions on Reddit are primarily public in that anyone, with or without a Reddit account, can view the content (with the exception of private subreddits), questions around the ethics of using

public social media data have led researchers to question how users' feel about their data being used for research (Fiesler and Proferes, 2018).

Building from Zimmer and Proferes (2004) review of Twitter studies, we engaged in a systematic overview of 727 research studies that used Reddit data published between 2010 and mid-2020. This analysis offers insights into the subreddits and topics frequently studied, the kinds of analysis and methods researchers are

engaging in, and most importantly, the kinds of ethical considerations that emerge when researching Reddit.

Methodology

We built our corpus of Reddit studies by systematically searching the ACM, EBSCOhost, EconLit, PLOS One, JStor, SCOPUS, and Web of Science databases for manuscripts that have the term "Reddit" in their title, abstract, or keywords. After removing duplicates, inaccessible materials, materials not written in English, dissertations, and books (but not book chapters), we were left with a total corpus of 727 manuscripts.

We coded each manuscript for variables including bibliographic data, author information, and study data, such as the type and amount of Reddit data used, which subreddits were studied, and the methodologies utilized. We also coded ethics-related elements, such as whether the manuscript included direct quotes from Reddit content or usernames, whether any mention was made regarding obtaining consent to use Reddit content, or whether an institutional ethical review board was mentioned.

Summary of Findings

Germaine to this paper, 832 unique subreddits were named as data sources (1,773 times). Politics and news discussion, such as r/politics, r/worldnews, and r/The_Donald (a community that was banned by Reddit in 2020 for inciting harassment) were prominent data sources; as were subreddits focusing on sensitive content and vulnerable populations–such as r/depression, r/SuicideWatch, r/bipolarreddit, and r/opiates.

We looked at each manuscript for mentions of an IRB or similar ethical review process (even if the mention was "we did not seek IRB review"), finding 101 studies (13.9%) mentioned the term "IRB" or e.g. "ethics review" and 626 (86.1%) did not. Of the 101, 23 of the papers used interviews or surveys, methods more regularly requiring ethics-body approval. The vast majority of the remaining 78 papers mentioned ethics review while noting an "exempt" review status (e.g., "was exempt from ethics approval" or "approved under exempt review"). However, it is impossible to know in many cases whether "exempt" was an official designation given by a review board or whether the authors made this judgment themselves.

We further examined each manuscript for whether or not the authors indicated they had some kind of consent-seeking process. Many (though not all) ethics-review bodies

would likely view most Reddit data as "public" and therefore not require researchers to seek consent (see Vitak et al., 2017). However, ethics bodies would be likely to require consent for surveys, interviews, or the use of data from closed

communities. Further, some researchers may choose to seek consent for the collection of public data out of their own concern outside of any formal requirement, particularly if they seek to build connections with a community. Forty-four of the papers (6.1%) mention seeking consent as part of their data collection process, while 683 (96.0%) did not. Thirty-one of those mentioning consent utilized user surveys or interview methodologies, leaving 11 which sought consent for other reasons.

We also analyzed the corpus to determine whether or not researchers used specific and identifiable Reddit usernames or direct quotes from Reddit users in their publications. Sixty-eight manuscripts (9.4%) explicitly mentioned identifiable Reddit usernames in their paper and 659 (90.7%) did not. Two hundred and seven papers (28.5%) used direct quotes from users as part of their publications, 18 papers used paraphrased quotes, noting they were paraphrased (2.5%) and 502 (69.1%) did not include direct quotes.

Further analyses and implications for future research relying on Reddit data will be provided in the conference presentation.

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THE "ORIGINAL SIN" OF AMAZON MECHANICAL TURK FOR ACADEMIC RESEARCH

Huichan Xia
Peking University, China

Introduction

Amazon Mechanical Turk (MTurk) has been popular among academic scholars to recruit participants and collect research data. Since its inception, many scholars have praised MTurk's validity and data quality as comparable and even superior to the other conventional recruitment venues such as professional panels and student samples (Buhrmester et al., 2011; Kees et al., 2017; Jensen-Doss et al., 2021). However, in this article, I want to present my critique of leveraging MTurk for academic research purposes. My critique focuses on MTurk's "original sin" in three fundamental problems on its born and development, which engendered various ethical flaws for academic research on this platform. More broadly, I propose that academia should be more cautious about the ethics of crowd work-based research.

MTurk's fundamental problem #1: "Human-as-a-service"

Jeff Bezos's position of "Human-as-a-service" on MTurk has a lasting ethical impact on academic research. "Human-as-a-service" might sound exciting for business but is ethically problematic to the academic standard. Scholars have critiqued this slogan as a commodification of crowd workers (Aloisi, 2015; Bergvall-Kåreborn & Howcroft, 2014) and the origin of exploitation in crowd work (Irani & Silberman, 2013; Silberman et al., 2018). I argue that it is also an inherent ethical taint on MTurk for academic research. First, it is quite a dehumanization claim of MTurk. Positioning MTurk workers as a "service" implicates that they are merely means to serve and satisfy requesters' ends, such as reducing data collection costs and expediting research progress. MTurk workers' ends, no less than their self-fulfillment and welfare, are ignored by Amazon and might be dismissed by requesters as well. From a Kantian perspective, it is morally wrong to treat some persons, i.e., MTurk workers, as means to fulfill others', i.e., requesters' ends. Second, "Human-as-a-service" induces ethical concerns about MTurk workers' voluntary research participation and autonomy since it has imposed unbalanced power dynamics between MTurk workers and requesters, suggesting as if MTurk workers were servants and requesters were masters. Under such power dynamics, MTurk workers' voluntary and autonomous decision-making to participate in an academic research task are at stake because to provide a good service and receive compensation, presumably servants would cater for requesters' preference and calculate compensation fairness. Thus, less likely, they would focus or ponder whether their participation decision is voluntary or whether they may have exhibited any social desirability biases.

MTurk's fundamental problem #2: The confusion of terminology

Amazon implicates that MTurk "workers" are in a sort of employment relationship and are wage earners, but it also describes MTurk workers as "independent contractors," which confuses MTurk workers' position and identity. Independent contractors are between employees and research volunteers. If researchers treat MTurk workers as doing a job on MTurk, they should pay them with a wage standard. However, it would trigger IRB's ethical concern about undue influence on MTurk workers. If researchers treat MTurk workers as volunteers, they should not pay them a minimum wage because that is not fit for an employment relationship and could also be unduly influential since a minimum wage standard is usually much higher than the average payment rate on MTurk. On the other side, if IRBs treat MTurk workers as "employees," they would not approve most academic research unless the research is about MTurk workers because researchers should not employ research participants. If IRBs treat MTurk workers as research volunteers, they will discourage or minimize the payment to avoid coercion, but some researchers might worry about exploitation. These intertwined ethical issues largely stem from Amazon's confusion of terminology. Meanwhile, although academic researchers constitute a large portion of requesters (Hitlin, 2016), Amazon describes MTurk as a "marketplace" and never elevates academic requesters' status on par with their business counterparts. Hence, it is an ethical dilemma that academic researchers and IRBs expect to recruit from a pool of research volunteers, but in fact, they are relying on a marketplace purported for business clients.

MTurk's fundamental problem #3: The abdication of responsibilities

The third fundamental problem of MTurk is Amazon's abdication of responsibilities. First, Amazon has no mandate to prohibit or penalize fraudulent or intrusive activities. Many MTurk workers have reported that requesters would blatantly trespass MTurk's policies (Xia et al., 2017). MTurk earns commission from requesters, not workers, which renders it a natural tendency to lean toward requesters and evade the responsibility to MTurk workers' interests and welfare. Second, even though academic researchers have constituted a large portion of requesters on MTurk, Amazon targets MTurk for serving business requesters and has barely made any policy updates for academic researchers. Academic requesters are like "undocumented immigrants" in a marketplace competing with business requesters like protected citizens of MTurk. Finally, MTurk requesters do not bear any responsibility on the workers and can accept, pay, or reject MTurk workers at their discretion. Reversely, MTurk workers do not charge much responsibility to ensure their data quality either. Amazon creates no screening mechanism to filter good quality data from spam. Consequently, MTurk, MTurk workers, and requesters have loose responsibilities with each other, making their mutual accountability frivolous. Thus, various ethical issues could occur either on requesters' side, e.g., exploitation and arbitrary rejection or on MTurk workers' side, e.g., cheating and fraud.

Implications for ethics in academic research on MTurk

Some scholars might have neglected the dark sides of MTurk for academic research. MTurk's convenient sampling, cheap compensation, and satisfactory data quality on the surface are certainly alluring for administering large-scale surveys and experiments.

Nonetheless, we must be conscious and alert about the costs of these benefits. As multiple prior studies indicate, MTurk workers' primary motivation is to earn money (e.g., (Alkhatib et al., 2017; Durward et al., 2016; Lee et al., 2014)), and social desirability has been an issue on MTurk since its early time (Antin & Shaw, 2012). Thus, beneath the veil of "decent" data quality could be seasoned survey-takers and desperate money-seekers. Also, paying MTurk workers with a low compensation may be exploitative but paying them a minimum wage may also be unduly influential. Hence, I propose that academic scholars must consider the teleological difference between MTurk and academic research. The telos or the ultimate purposes of MTurk and academic research are intrinsically different. MTurk is not designed for academic requesters but business clients; academic research, on the other hand, aims to develop or contribute to generalizable knowledge. When both academic researchers and business requesters publish tasks on MTurk, it becomes essentially challenging to distinguish between academic tasks and non-academic tasks or between MTurk workers primarily motivated by research and those primarily motivated by financial incentive. Academic requesters can never be sure whether their MTurk participants are authentic research volunteers, or they check the consent form only for the sake of money. These are the ethical challenges for academic research on MTurk since its origin.

Conclusion

It may seem implausible to curl the trend of hailing and harnessing MTurk for facilitating academic research. Despite it, I find it necessary to remind scholars about some inherent ethical conundrums in MTurk for data collection and recruitment. To some extent, Prolific's development and popularization may have manifested academia's concerns about relying on a commercial crowd work platform like MTurk. Still, the ethical issues in crowd work-based research more broadly deserve further investigation and deliberation.

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ETHICAL APPROACHES TO CLOSED MESSAGING RESEARCH: CONSIDERATIONS FOR DEMOCRATIC CONTEXTS

Connie Moon Sehat
Hacks/Hackers

Tarunima Prabhakar
Tattle

Aleksei Kaminski
Independent Researcher

"Closed" messaging apps such as WhatsApp, Signal and Telegram have grown in reach and adoption in recent years and have transformed elections-related communications. However, understanding their impact upon larger public discussion poses a conundrum for researchers. On the one hand, widely accessible conversations of public importance exist in these spaces, but on the other, message encryption challenges existing professional ethics of access and collection. In order to study what messages are flowing through these channels, analysts and researchers must join potentially private chat groups. This raises the question: What considerations should be taken into account when conducting research into closed messaging spaces within democratic contexts, in which the individual right to privacy also prevails?

Thinking about the technical points spotlights the larger conundrum: In addition to the designs for privacy, closed messaging spaces have public elements as well. Closed messaging technologies are in fact designed to be *social* — they allow their users to open these spaces up to more public visibility and impact. Acknowledging that the line between public and private conversation within these applications is explicitly blurred, some less than others, is critical to thinking through the problem.

To better understand the decisions that researchers face, this paper presents research practices taking place within these applications. It focuses on projects with election-related themes that parse the content of messages. Two investigating groups are of interest: *public-interest organizations* focused on human rights, democratic elections, and fact-checking that seek real-time or more immediate impact based upon their findings, and *academics* who want to provide longer-term, systematic analysis of the political dynamics created by these closed conversations. Sometimes these groups work in collaboration with each other as well as with other types of researchers, such as those based at technology companies.

When it comes to studies involving the systematic collection of message data, there are at least four models of research practice we have observed:
- Baseline model: Smaller Investigations under Informed Consent
- Model 1: Voluntary Contributions (e.g., tiplines)
- Model 2: Joining Groups through Invitation with Public/Publicized Purpose
- Model 3: Joining "Public" Groups Without Disclosing Research Intent
- Model 4: Joining "Public" Groups While Disclosing Research Intent

First, we share background about the reach of closed messaging applications and the motivation for these research efforts. Based on the models, the second half of the paper offers a set of questions to help clarify the ethical tensions based on public parameters, participant safety, and researcher obligations:

- Parameters: When exactly is a closed message chat "public"?
- Parameters: Who does the data belong to?
- Security: What is the plan for storing closed messaging data in a secure fashion?
- Security: How might the research project affect group members and their conversations?
- Obligations: What are the obligations for research disclosure and informed consent?
- Obligations: When should researchers inform or report back to the groups involved?

From descriptions of research studies about closed messaging spaces we covered, there is evidence that many investigators try to follow ethical practices established by their various professional communities. They do this for example by taking steps to protect the identities of chat participants. They also include considerations of possible and future harm upon those observed. In recent years, expectations and requirements related to personal data collection and online storage have risen overall (e.g. the Common Rule in the United States), making some obligations clearer for researchers across the board.

The challenge, however, for closed messaging is that both the technology and its ethics are still emerging. As the technology continues to evolve, we offer these reflections upon current practices to contribute to the continued development of ethical research approaches in messaging spaces.

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