

---

# Live Stories: The Ethics of Researching Ephemeral Content During Emergent Events

**Taryn Bipat**

University of Washington  
Seattle, WA 98105, USA  
tbipat@uw.edu

**Tom Wilson**

University of Washington  
Seattle, WA 98105, USA  
tomwi@uw.edu

Paste the appropriate copyright/license statement here. ACM now supports three different publication options:

- **ACM copyright:** ACM holds the copyright on the work. This is the historical approach.
- **License:** The author(s) retain copyright, but ACM receives an exclusive publication license.
- **Open Access:** The author(s) wish to pay for the work to be open access. The additional fee must be paid to ACM.

This text field is large enough to hold the appropriate release statement assuming it is single-spaced in Verdana 7 point font. Please do not change the size of this text box.

Each submission will be assigned a unique DOI string to be included here.

**Abstract**

Ephemeral forms of social media are increasing in popularity. However, studying ephemeral data shared during an emergent event raises unique ethical challenges. In this paper we describe the particular ethical challenges faced when studying the use of Snapchat during the inauguration of the 45th President of the United States. Through observing emergent events through news outlets, social media platforms, and Snapchat, we documented key events on the ground from a variety of perspectives. As ephemeral coverage of large breaking news events becomes more popular, we suggest initiating a discussion regarding how to work within the restrictive terms and conditions of various social media platforms, and how to ethically capture and research ephemeral content.

**Author Keywords**

Snapchat; ephemeral content; social media; ethics; emergent events; breaking news events.

**ACM Classification Keywords**

H.5.m [Information interfaces and presentation (e.g., HCI)]: Miscellaneous; K.4.1 [Computers and Society]: Public Policy Issues | Ethics

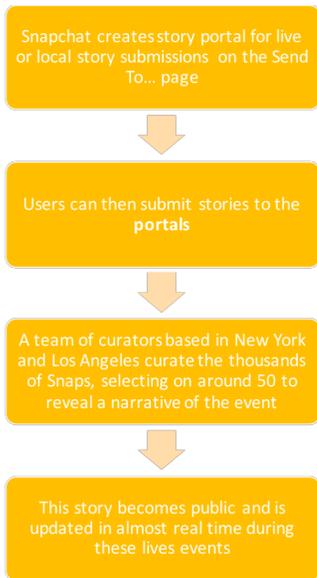


Figure 1. The flow of information for Snap Inc. and the Snapchat users during the process of creating and sharing a Live Story with the public.

## Introduction

Recently there has been a shift in user preferences regarding social media, from content that is archived by social media platforms to content that is more ephemeral—lasting for a very short time. As a consequence, applications such as Snapchat, Yik Yak, and Instagram Stories adopt the notion of ephemeral “self- destructing” content as part of their platforms.

The rise in popularity of ephemeral content has been attributed to a variety of factors. First, ephemeral content gives individuals more control of their own digital footprints. Applications that support ephemeral content allow individuals to communicate with friends without having these interactions archived on the servers of large social media companies. Users may take comfort in the knowledge that their personal content is kept away from the prying eyes of government agencies [9], or that something they are documenting themselves doing today will not be available tomorrow [5]. Lowering privacy-related concerns induces trust that is critical to successful online interactions [2]. It has also been shown that ephemeral content on applications such as Snapchat facilitates positive affect among users. The rejuvenation of interactions that mimic synchronous face-to-face interaction allow for users to benefit from a larger emotional gain [1]. Furthermore, Snapchat researcher Nathan Jurgenson argues that the elusive nature of ephemeral content, in particular photographs, make them “feel more like life and less like its collection” [5].

Despite the increase in ephemeral content and applications that support it, there are limited studies of ephemeral content on social media, and ethical issues surrounding its use in research are emerging and thus

need to be addressed. In order to address these issues, we present a case study of the 2017 USA Presidential Inauguration as presented on the mobile application Snapchat and various other news sources. Our findings were limited due to ethical concerns surrounding the storage of ephemeral content from Snapchat. Although we were able to gather observations, our findings did not include concrete evidence that is often associated with social media metadata, such as usernames, timestamps, and geotags. As HCI researchers, we believe it is important for us to bring these issues to the CHI community so that we are better equipped to research ephemeral content and help improve its use during emergent events. In this paper, we focus on the ethical implications of researching ephemeral content created and shared using the Snapchat during a breaking news event.

## Case Study

The ephemeral content gathered for this case study originated from the mobile application, Snapchat. Although Snapchat’s parent company, Snap, brands itself as a camera company, Snapchat also provides users with private messaging capabilities with other Snapchat friends. Multimedia messages—known as *snaps*—can be privately sent to selected Snapchat users in one-to-one or one-to-many interactions. When sent privately between Snapchat friends, *snaps* are ephemeral—once they are opened by the receiver, Snaps are available for between 1 and 10 seconds, as determined by the sender. Snaps can also be shared to semi-public *Personal Stories* which are visible only to the user’s friends for 24 hours after posting by the author. Public *Live Stories* are collections of curated snaps from specific events. Snapchat users can submit



Figure 2. Four researchers, live-streamed news from the BBC, used another screen used to pick up Periscope and Facebook Live Feeds, and had access to personal computers to follow events on Twitter and Facebook, and smartphones for Snapchat.

photos to a *Live Story* but there is no guarantee it will be selected. The collections of snaps that make up a Live Story are selected and curated by Snapchat. *Live Stories* can be accessed by all users of Snapchat, are not ephemeral to the same degree and may be more persistent. Unlike other platforms, Snapchat is exclusively a smartphone application, available for Apple iOS and Google Android devices only, and not accessible through a web browser. The combination of location-awareness, ephemerality, and widespread adoption by millennials distinguishes Snapchat from other social media and messaging platforms.

#### *Event Background*

In this case study, we analyze ephemeral content, of the inauguration of Donald J. Trump as the 45th President of the United States of America on January 20th, 2017. The official events scheduled for inauguration day included the swearing-in ceremony, the departure of the President Obama, a congressional luncheon, the presidential parade, and the inauguration ball. We chose this event because of the current controversies surrounding the election as documented by the media in the run up to inauguration day. The inauguration was protested in Washington, DC and across the United States. Many large news organizations used social media feeds such as Facebook Live and Periscope, to provide full coverage of the protests that were occurring in parallel to official inauguration events.

#### *Methods (all times in PST)*

Four researchers adopted an ethnographic approach to explore the media coverage of the 45th Presidential Inauguration. The observations began at 08:00 and

continued till 19:30 on January 20th, 2017. Personal computers, a desktop computer, a tv screen and personal phones were used to observe a variety of news outlets and social media platforms. The inauguration was covered by many large news organizations through live streams. We chose BBC News as the 'official' mainstream narrative of the proceedings, using other news channels such as Fox News, NBC News, and BuzzFeed News as supplementary sources. During the event, each of the four researchers frequently followed updates of the inauguration as presented through Snapchat *Live Stories* and other forms of live social media including Periscope and Facebook Live. Through this ethnographic based approach, all updates to the currently available Snapchat *Live Stories* were documented—including the title of the Live Story, the time of access, and a Snap-level account of the content describing the image, the use of captions, and filters. Each researcher also spent some time immediately after data collection to reflect on what they had observed, the process they had followed, and the event as the whole. Since we did not store or record the Snapchat *Live Stories* that we watched, the following observations are based upon the notes we took to describe the *Live Stories*.

#### *Observations*

There were three Snapchat *Live Stories* on inauguration day:

1. Anti-Trump Protests: This story began at approximately 08:11 and was still being updated at 19:30, when we ended our observations. The content of this *Live Story* depicted anti-Trump protests starting in Washington DC and then expanding to show other

demonstrations and marches across the US. The tone of this *Live Story* was certainly anti-Trump and showed both peaceful and violent protests. At 19:30, this *Live Story* contained more snaps than the other two inauguration *Live Stories* described below.

2. Inauguration Watch Party: This story began at approximately 08:42 and contained student reactions to the inauguration. The story was not updated after 10:00 at which point it contained 26 Snapchats from 20 US universities. The tone of this *Live Story* was somewhat balanced, with 8 snaps taking a pro-Trump stance, 12 taking an anti-Trump stance and 6 adopting a stance that we could not determine.

3. Official Inauguration Day Watch Party: This *Live Story* began at 09:00, reflecting the actual start time of the swearing-in ceremony in Washington DC. The content of this *Live Story* mirrored the events of the inauguration similar to the regular cable news feeds. For example, the 45th President contributed to this Live Story showing his journey down The Mall. Various members of congress and reporters from NBC and CNN also contributed snaps to this *Live Story*.

Based upon data collection and reflection on the event, we observed the following:

The Snapchat stories were synchronized with when events were happening in real time. For example, protests began before the actual inauguration events and that was reflected in the timeline of the *Live Stories*. We also observed that the Women's March Live Story began on January 20th, 2017, the night before the actual march, which was scheduled for Saturday January 21th, 2017. This is interesting since it reflects

that a large population of Snapchat users had begun preparation for the march.

The distribution of pro- Trump and anti-Trump snaps in the Inauguration Watch Party Live Story was balanced (6 were ambiguous) perhaps illustrating that Snapchat attempted to adopt an unbiased voice.

Snapchat *Live Stories* are curated by Snapchat. In all of the stories, there were captions/filters that were created specifically for the *Live Stories*, providing additional detail about the content. For example, in the Official Inauguration story, there was a Snapchat filter that announced when the first cabinet members were chosen. The caption read "*1st Cabinet Picks Confirmed: The Senate confirms Trump's selection for the secretaries of defense and homeland security*". This gives it more of a reported, documented feel that is similar to live streams and traditional news reports.

Can *Live Stories* be considered a more true form of media? We observed that the majority of the larger news organizations focused on the official events of the inauguration, neglecting simultaneous events such as protests that were happening in Washington DC and across the United States. Only BuzzFeed News and Snapchat were telling this 'alternative'.

## Discussion

Conducting our study of ephemeral content on Snapchat during the 2017 inauguration raised several ethical concerns that we as researchers feel need to be addressed. The broad question raised was: *What are the ethical issues surrounding the storage and analysis of content that the original author believed to be ephemeral?* Here we unpack this question and present

three topical areas for discussion surrounding the ethics of working with ephemeral data.

#### *Consent to Research Personal Information*

An ethical principle in many of the social sciences is the requirement for informed consent—the written agreement of the participants in a study, defining what their data and content can be used for. It is commonly understood that web-based applications like Social Networking Services (SNSs) and blogs are all electronic documents [4]. Research involving such public web documents without contacting their authors is not considered human subjects research [3] and therefore not necessarily subject for consideration by a university Institutional Review Board (IRB). In our case study, we observed picture and video data that would not be classified as SNSs or blogs. What Snapchat content actually *is* needs to be defined, and then we must determine if it is deemed human subjects research and should therefore be subject to review by IRB.

#### *Access to Content and Privacy*

According to Snapchat's terms and conditions, if you submit content "...to one of [Snapchat's] inherently public features, such as Live, Local, or any other crowd-sourced service, [Snap Inc.] may retain the content as long as necessary..." [7]. Snap Inc. has permission to retain the content as long as necessary but this does not grant researchers the same rights. Unlike other forms of social media such as Twitter, Snapchat has no API and thus no specific terms and conditions for researchers who may wish to scrape and retain Snapchat content for further analysis. In this case, we assume that researchers have the same rights as any other users of the Snapchat application. This brings up

further questions of copyright, privacy and how much access to data researchers have.

In another section of the terms and conditions, Snapchat states that users may not use any of its services "*in a manner that violates or infringes someone else's rights of publicity, privacy, copyright, trademark, or other intellectual-property right*" [7]. Based on Nissenbaum's theory of contextual integrity, we could evaluate the privacy issues using moral frameworks. Nissenbaum, in reference to SNSs argues that "*users have had unpleasant surprises due to their personal information being broadcast more widely than they deemed appropriate for context (e.g., Facebook's news feed feature) or used for purposes that they did not like (e.g., used for targeted advertising)*" [6,8]. While users posting to Snapchat understand their content will be broadcast to a wide population, there may be more direct impact on privacy if researchers are using their data for purposes they did not deem appropriate. Research of the controversial events such as the 2017 Inauguration could lead to resistance from Snapchat users that did not agree with the views of the researchers. Based on the theory of contextual integrity [6,8], this would mean that the researchers are breaching their privacy.

#### *Anonymity*

All content in Snapchat is tied to some personal information (e.g. audio and video of the user) so there is no way for researchers to disaffiliate the content from demographics of the users, particularly if geotags denote the geographical location of the snap. This raises the ethical questions of how researchers can uphold anonymity of Snapchat users in research studies in accordance with the standards of the IRB.

Within the inauguration Snapchat *Live Stories*, especially in the protest stories that featured large crowds of people in a localized area, the snaps contained the image of many other people that were unlikely to have provided consent for their likeness being recorded. This raises further ethical questions of how researchers can access this content without violating the anonymity of ambient participants. The observations of this case study illustrate that questions remain to be answered to ethically research and analyze ephemeral content. Furthermore, the limited amount of prior research means it is a difficult task to assess all of the ethical issues.

### Conclusion

In this paper, we provide a case study that illustrates our preliminary reflections on the ethical challenges faced while trying to research ephemeral content during emergent events. Due to ethical concerns we did not store or record any of the content from the Snapchat *Live Stories*. Rather we watched, observed, and took notes to describe the *Live Stories*. While we were able to gather many critical observations, we were unable to gain concrete evidence that is often obtained from metadata, such as timestamps and geotags. By presenting this case study we raise our ethical concerns to initiate discourse among the HCI research community. Through discussing the ethical dilemmas raised in this paper, will we be better equipped as researchers and able to further and more concretely explore ephemeral content. As HCI researchers it is critical for us to understand how this new form of social media is used so that we can improve how this content is created and shared. We sincerely hope to contribute to the discussion surrounding the ethics of studying

ephemeral content, in particular focusing content that may impact large crowds during emergent events.

### References

1. Bayer, J. B., Ellison, N. B., Schoenebeck, S. Y., & Falk, E. B. (2016). Sharing the small moments: ephemeral social interaction on Snapchat. *Information, Communication & Society*, 19(7)
2. Coppola, N., S. R. Hiltz, and N. Rotter (2004) "Building Trust in Virtual Teams," *IEEE Transactions on Professional Communication* (47) 2, pp. 95-104
3. Enyon, R., Schroeder, R., & Fry, J. (2009). New techniques in online research: Challenges for research ethics. *Twenty-First Century Society*, 4
4. Ess, C., & Committee, A. E. W. (2002). Ethical decision-making and Internet research. Recommendations from the aoir ethics working committee. Retrieved April 17, 2008, from <http://www.aoir.org/reports/ethics.pdf>
5. Jurgenson, N. (2013) *Pics and it Didn't Happen*. *The New Inquiry*. Retrieved January 27 2017 from: <http://thenewinquiry.com/essays/pics-and-it-didnt-happen/>
6. Nissenbaum, H. (2004). Privacy as contextual Integrity. *Wash. L. Rev.*, 79, 119.
7. Snap Inc. Terms of service. (2017, January 10). Retrieved January 26, 2017, from Snap Inc., <https://www.snap.com/en-US/terms/>
8. Wilkinson, D., & Thelwall, M. (2011). Researching personal information on the public web: Methods and ethics. *Social Science Computer Review*, 29(4).
9. Varin, V. 2014. "Ephemeral Data Is the Future": The Rise of Self-Destructing Social Media. *Perspectives on History: The American Historical Association*. Retrieved January 26, 2017 from: <https://www.historians.org/publications-and-directories/perspectives-on-history/march-2014/the->