

Share First, Save Later: Performance of Self through Snapchat Stories

Sarah McRoberts

University of Minnesota
Minneapolis, MN, USA
mcroberts@cs.umn.edu

Haiwei Ma

University of Minnesota
Minneapolis, MN, USA
maxxx979@umn.edu

Andrew Hall

University of Minnesota
Minneapolis, MN, USA
hall@cs.umn.edu

Svetlana Yarosh

University of Minnesota
Minneapolis, MN, USA
lana@umn.edu

ABSTRACT

As the third most popular social network among millennials, Snapchat is well known for its picture and video messaging system that deletes content after it is viewed. However, the Stories feature of Snapchat offers a different perspective of ephemeral content sharing, with pictures and videos that are available for friends to watch an unlimited number of times for 24 hours. We conducted an in-depth qualitative investigation by interviewing 18 participants and reviewing 14 days of their Stories posts. We identify five themes focused on how participants perceive and use the Stories feature, and apply a Goffmanesque metaphor to our analysis. We relate the Stories medium to other research on self-presentation and identity curation in social media.

Author Keywords

Snapchat; ephemerality; social media; millennials; presentation of self.

ACM Classification Keywords

H.5.3. Information interfaces and presentation (e.g., HCI): Group and Organizational Interfaces

INTRODUCTION

With over 100 million daily users, Snapchat is one of the most popular mobile apps [37]. It is best known as a picture and video messaging app that allows users to limit how long the receiver can view a message before the content is removed. Since its release in September 2011, the app has added and adjusted a number of features as its popularity has grown. One such feature added in recent years is Snapchat Stories, which allows users to post pictures and no more than 10-second-long videos, called snaps, which can be viewed, as a series, an unlimited number of times within a 24-hour window from when they are posted.

In August of 2016, Instagram unveiled Instagram Stories, notably similar to the Stories feature from Snapchat. The

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for components of this work owned by others than ACM must be honored. Abstracting with credit is permitted. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee. Request permissions from Permissions@acm.org.

CHI 2017, May 06-11, 2017, Denver, CO, USA
© 2017 ACM. ISBN 978-1-4503-4655-9/17/05 \$15.00
DOI: <http://dx.doi.org/10.1145/3025453.3025771>

move towards these “ephemeral timelines” could indicate a new genre of affordances in social media. Yet, little work has been done to understand the use and opportunities of this emerging communication style.

Our study is motivated by the following research questions:

1. What do people share on Snapchat Stories?
2. Who is the intended audience of Snapchat Stories?
3. Why do they choose Snapchat Stories over other media?

In investigating these questions, we aim to understand opportunities for social media to incorporate ephemeral timelines in a way that encourages a flexible presentation of self and challenges current technical norms. To address these questions, we present an inductive analysis of 18 interviews and content analysis of 330 snaps.

In the following sections, we introduce Snapchat Stories and situate this work in the existing body of research on social media for creative self-expression and ephemeral social media. We elaborate on our methods for conducting interviews, collecting snaps, and analyzing this data. We report our findings and discuss them in the context of other social media and Goffman’s theory on Presentation of Self. We relate these arguments to future challenges and opportunities in this style of communication.

SNAPCHAT & THE STORIES FEATURE

In this section, we introduce Snapchat and explain the difference between the Chat and Stories features. When a picture or video is created in Snapchat it can be shared in a variety of ways. Snapchat allows for both direct and broadcast content sharing, which are then accessed through “Chat” and “Stories” windows, respectively. Chat allows users to share snaps with friends on the app for a maximum of 10 seconds. The Chat feature also allows for text chat conversations, where text disappears after both users leave the conversation, and voice and video calling. This work will reference Chat features only as they relate to the Stories feature or a holistic Snapchat experience, since the Chat feature has been addressed in previous research (e.g. [2,21,25,30]). The Stories feature allows users to create and to view snaps in a temporal sequence (aka “Stories”). Stories may be posted by company sponsors, from thematic Snapchat-organized events, and by other Snapchat users. Apart from company designed Stories, each users Story snap is collected in one unified sequence, attributed to the user, functioning as an ephemeral timeline. The snaps on

these Stories can be viewed any number of times within 24 hours of when they were posted. During this 24-hour period, the sharer also has the opportunity to download any individual snap or the entire Story pieced together as a video. Although on Snapchat one can never see how his or her Snapchat friends are interacting with others (such as seeing a friend “like” another friend’s post on Facebook), the app offers a deeper view of how friends interact with one’s own Stories by indicating to the author when any friend has viewed or captured a screen image of a snap. This relative opacity of Snapchat plays a nuanced role in the experience of Stories, which is discussed further in this paper.

RELATED WORK

Because of the uniqueness of Snapchat Stories in comparison to other social media, we first consider the growth of online video among younger audiences. Then we position our work in existing research on Snapchat and, finally, Presentation of Self in social computing.

Online Video Sharing

Photo and video sharing online is a significant context of Internet use, particularly among young adults [22]. YouTube was one of the first online communities to foster a culture where broadcast video content was not only consumed, but also created by the users [8,10]. A diverse set of other design approaches have considered how video sharing could be leveraged to support connectedness, from synchronous videochat [7], to live-streaming events [28], to asynchronously sharing short video fragments [9]. Some of these systems are explicitly designed with a young audience in mind (e.g., [28]), while others are appropriated by youths for their own self-expression and social connectedness needs (e.g., [19,35]). As emerging adults, people in their late teens and twenties are especially likely to be in a time of changing self-identities and experimental self-expression [1]. Designers have considered a number of possible interventions to support a reciprocal, productive communication practice with media messaging, including requiring a video response to received messages [31] or asking the users to share a video everyday [23]. However, in many of these cases such sharing becomes burdensome or overwhelming for users [23,31]. Snapchat is a design intervention originating in industry that takes an alternative approach to empower the users to connect by sharing rich media; in the next section, we further examine research of Snapchat’s usage.

Snapchat, Selfies, and Self

With over 100 million daily users [37], recent research has been quick to investigate Snapchat’s particular usage. While there are many features that play a role in deciding which social media technology to use for a particular purpose (e.g., [11,29]), snaps seem to hold an important role in the social media ecosystems of many users. One investigation combined interviews and “in-the-wild” experience sampling to find that Snapchat use was associated with more positive affect than other social networks, because it supported lightweight sharing with close friends [2]. An-

other interview investigation highlighted similar reports of benefits, finding that Snapchat encouraged playfulness, everyday sharing, and privacy-conscious social norms [34]. Unlike other social networks, surveys have found it to be used much more to reinforce existing strong tie relationships than to build relationships with weaker ties [21]. Also, recent research highlighted that young adults perceive Snapchat’s ability to contextualize text messages in pictures provides more congruent communication than other social networks [30]. This congruence specifically comes from the common practice of sending selfies along with a conversation. Surveys and interviews found that Snapchat allows even people who are restrictive of their sharing practices on other social media, can feel comfortable sharing selfies as part of a Chat conversation with friends, and exploring their identity as they reinforce connections and shared memories with friends [14]. Indeed, this has been supported in other work as Xu [34] and Bayer [2] more explicitly connect the playfulness and sense of lower pressure on Snapchat with Goffman’s theory of Presentation of Self. Snapchat is a place to let others peek behind the curtain into a backstage view of the sharer. However, this existing body of work primarily describes the use of Chat, which gives users specific control of their audience. While on the other hand, snaps shared on Stories are potentially subject to a similar context collapse as other social networks [6,13]. Relatively little is known about how Stories—a potentially less ephemeral and directed feature—is appropriated by users. In this paper, we address this gap through a qualitative investigation and also consider Goffman as we compare this medium to Snapchat Chat and other social media.

Presentation of Self in Social Computing

Snapchat is far from the first social media to be considered with Erving Goffman’s *The Presentation of Self in Everyday Life* and its dramaturgical approach [12] to social behavior. Through blogging, users have the chance to take more specific control of how they share private information about themselves in a public space [5,18]. Fashion blogs also offer bloggers a space to push against norms and carve their own sense of fashion and identity [24]. In the photo-blogging world of Instagram, a content analysis of Instagram posts and descriptions of professional athletes found that these athletes were actually less likely to post a selfie in lieu of sharing the greater context of their lives [27]. Perhaps Snapchat Stories would offer the same chance for users to share beyond the selfies of chat, and offer all of their friends a broader image of their lives. Facebook especially garners a lot of applications of Goffman’s theory in that its multifaceted and highly social nature shows opportunities to maintain a more nuanced control their self-expression [3,15,36], but with the complications of managing the social interactions that exist alongside their content [17,33]. Indeed, presentation on Facebook creates a more complicated view of audience, as the imagined audience can be specifically sought out [15,16]. However, in actually estimating this imagined audience, many Facebook users have

an incorrect understanding of who sees their content [4]. This prompts the specific phenomena of a trend towards “lowest common denominator” in what people share online [13]. As Presentation of Self has been applied to explain it, the ease with which we offer exhibitions of ourselves to a broad audience, comes with the cost of feeling compelled to appease, or at least not upset, that broader audience. While Snapchat Stories offers a similar scenario to many social media, it offers key differences in the ways that the audience is incorporated, which is yet to be explained in the perspective of these other media. Additionally, Snapchat’s Stories feature appears particularly suitable for a dramaturgical interpretation, thus in this paper we use Goffman’s Presentation of Self as a theoretical lens for interpreting our research and analysis.

METHODS

We conducted in-depth interviews and followed the participant Stories for 14 days. We did a data-driven inductive analysis to analyze the interviews and snaps.

Recruiting and Participants

We recruited participants through flyers on bulletin boards and online. The flyer was shared on Facebook, Craigslist, University bulletin boards, and at nearby coffee shops around campus. Our recruiting process used a self-selecting, convenience sample of people around a Midwest American university, although 5 of the participants were not students. Because the majority of Snapchat users are 18-34 [37], we intentionally directed our recruitment to places that would skew our participant sample for this younger audience. We followed 19 participants on Snapchat for two weeks and interviewed 18 of them (p12 dropped out before the interview but after consenting that we follow her account).

Collecting Snapchat Content

In order to get a specific understanding of what participants shared on their Stories, we created a lab Snapchat account to follow all of our participants’ Snapchat accounts for 14 days prior to the interview. We took a screenshot of every Story snap and every snap sent directly to our lab account. While we expected the study to influence the number of snaps that people shared, we did not want participants to feel pressured to post Stories, so we allowed participants who regularly sent group Chat snaps to also send us those snaps as Chat. During this 14-day period, our participants shared 330 Snaps ($M = 17$, $SD = 20$). Our participants were 50% female, ages 18-31 ($M = 22$, $SD = 3$). All participants had Snapchat installed for at least one year, and used the app daily. Most participants considered the snaps recorded in their “following portion” to be typical of what they normally share. The recorded pictures were referenced frequently throughout the interviews by the participants as examples of their typical usage and preferences.

Interview Procedure and Analysis

After this two-week “following portion” we met the participants for an hour long, in-person interview. We had partici-

	Sex	Age	# of Snaps Recorded	Agreement with, "I am an avid smartphone user."
P1	F	23	15	agree
P2	F	23	10	agree
P3	M	18	5	neutral
P4	M	23	7	strongly agree
P5	M	26	82	strongly agree
P6	M	24	29	strongly agree
P7	M	18	16	strongly agree
P8	M	31	57	neutral
P9	F	24	9	agree
P10	M	22	9	agree
P11	F	23	9	strongly agree
P12			17	
P13	M	20	14	agree
P14	F	18	13	strongly agree
P15	F	21	1	agree
P16	M	23	5	disagree
P17	F	20	4	strongly agree
P18	F	19	24	strongly agree
P19	f	24	4	agree

Table 1. Participant demographics and number of collected snaps. We also asked participants on a 5-point scale to rate how much they relate to the statement “I am an avid smartphone user.” Note P12 gave us permission to complete the “following portion” but did not complete the interview.

pants fill out a short questionnaire about their demographics and social media usage. Interviews lasted an average of 55 minutes ($SD = 9$). In the interviews we asked about a range of Snapchat related questions and reviewed the pictures from the “following period” to reflect on the snaps.

We used a constant-comparison, data-driven approach to inductively analyze our interviews and recorded pictures (inspired by the Grounded Theory Method, as described in [20]). All interviews were audio recorded and transcribed by the authors. These transcripts were then read and open coded by the lead author resulting in over 900 open codes from the 18 interviews. Two authors then analyzed these open codes, through a constant-comparison affinity mapping approach. We open coded the snaps and qualitatively analyzed them in the same way. This paper will discuss themes from the interviews and content analysis in the Results.

Limitations

This is an exploratory, qualitative investigation of Snapchat and its Stories feature. We focused on the perspectives of emerging adults [1] as the primary user base, and incorporated the voices of our participants as active user opinions of the medium, rather than as a representative sample of all

Snapchat users. While participants reflected in the interviews that they felt their content shared was no different than normal during the “following portion,” one participant reported sharing more because of the study (P10), and one (P15) apologized for not happening to share as much. While the study was taking place, Snapchat modified a number of its features, so this work will not talk specifically to any features or content that changed after the study began. Similarly, considering over a third of our recorded content came from two users (139 snaps from P5 and P8), our content analysis is skewed by these participants. A larger scale study of Snapchat Stories would better reflect the quantity and specific types of content shared by users.

RESULTS

Our findings from the qualitative analysis of 18 interviews and 330 snaps revealed that Snapchat Stories allows people to share quotidian & out-of-the-ordinary activities to experiment with self-presentation to a self-selecting audience (of both close ties and acquaintances) without needing to maintain a consistent presentation of self.

Narratives in Stories

Five participants said that their favorite part about Stories is the ability to craft a narrative and combine a series of snaps. P8 especially, leveraged Stories in this way. As he said, “I’ve been told there’s a narrative to my Stories [...] and I like movies. I really love movies so I like making short little movies mostly.” The content analysis revealed that it was a common practice to post consecutive, related snaps as part of the Stories feature (e.g. Figure 1). Specifically, 190 of the 330 snaps recorded were thematically related to the snap before it, creating a narrative in the Stories. Even if users were not explicitly thinking about structuring a narrative, the relation between a series of snaps frequently created a narrative-like experience for the viewer.

Participants also mentioned that they enjoyed watching

these series of related snaps. P1 and P6 mentioned that if when they first watched a person’s Story they noticed that this person had started a series about a day long activity, like a hike at a national park, then they would make sure to check back at that person’s Story later in the day to see the rest of what happened.

Sometimes I’ll check back to see if they’ve contributed more. If a friend is at the state fair, or on a hiking trip, I might be like, “Oh, I want to make sure I open the app in the next 24 hours to see what else is added.” (P6)

Stories are a rare medium where isolated parts of a narrative can be crafted as they happen, but viewed as a coherent whole. Considering how common narratives were in our collected snaps, this specific use of Stories demonstrates how people can use ephemeral timelines to create a narrative without the front stage pressure of live streaming nor the meticulous crafting of traditional video creation.

Save the Selfies for Chat

Our participants were hesitant to include selfies in their Stories, even though selfies served an important utility in Chat (as shown in previous work [2,14,21,30,34]). However, participants did explain that sometimes selfies are inevitable in a Story. For example, P8 considered selfies a “necessary evil” in service of telling a better narrative in Stories:

I think some people abuse it, but you know, I think it’s a necessary evil. [...] You know, there’s not always someone there to take your picture is there? You kind of have to take measures into your own hand ... I don’t take a selfie just for selfie’s sake necessarily. [...] I like to include the people I’m with though, that’s more interesting. (P8)

This perception of selfies as a storytelling tool in Stories, contrasted with the utility participants described for this genre in Chat. It was understood across the participants that Chat required some level of reciprocity for sending selfies

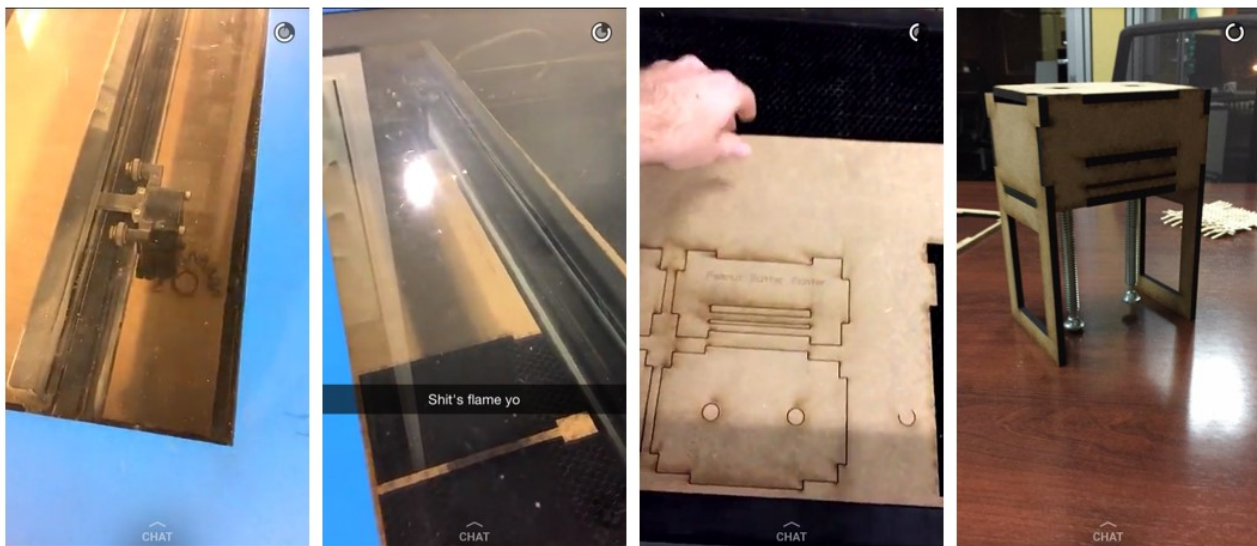


Figure 1. P13 documented the creation of his design project. This collection of snaps is an example of a natural narrative in a Story.

with messages and that selfies could aid in clarity. As P2 explained, “*I feel like it's the better way to see what the people are actually meaning, and stuff. With text it's so hard sometimes to tell if someone's being sarcastic or not.*” Selfies can be an important part of communicating, but what makes selfies so important for Chat makes them feel inappropriate for Stories.

I think when they are sent to and from people individually, it makes sense. But when it is selfies on their Story, just of them, not with anybody else, it is kind of weird. Unless there's some context behind it, and it has a funny message—I don't know. I just think they're kind of weird on a Story. (P14)

Four participants explicitly volunteered these self-made guidelines between selfies for Chat or selfies for Stories. However, these unspoken rules were also clearly reflected in the Stories collected, only 56 (17%) of the snaps were selfies (and all of these either included other people, were taken to demonstrate a fashion choice, show something around the face, or to serve a punch line to a joke). As, P9 also explained sharing *just* a picture of her face is not something that she really wants to do with the broader audience of her Stories viewers:

Because it feels very personal for me to be sharing my face, and some of the people I'm Snapchat friends with I don't feel like I need to present them with that. But I don't know, it's my way of distancing, keeping my way of being too personal for everyone ... because I'm not that close to everyone that is a Snapchat friend. (P9)

This brings up an important distinction between Stories and Chat. People frequently use Chat to share specifically with close ties, but snaps on Stories are available to a comparatively much broader audience for many users. Snapchat is strongly associated with sharing selfies to communicate effectively between close ties [2,21,30,34], but Stories showed that participants are more aware that they are presenting themselves to a wider audience. To make the cut, selfies needed to contribute to a larger narrative. The next section discusses how other content are influenced.

Quotidian Snaps vs. Noteworthy Experiences

Participants used Stories to share content that they thought was noteworthy. However, the Story watching preferences of participants suggest that the line between quotidian and out-of-the-ordinary can be different between viewers and sharers.

When we talked to participants about their Story posting practices, none of our participants described their snaps as mundane (despite suggestions from existing research [2,21,34]). Rather, they talked about sharing content that they found to be funny or interesting and relatable to their friends. P14 explained, “*How I figure out if it goes to my story is that I think a lot of people relate to that. Instead of sending it to most people in my list, I just post it on my story.*” While P16 liked posting, “*things that people don't normally see.*” However, as the participant who posted by far the most of this study (82 snaps out of the 330 collect-

ed), P5 explained that he posted so much because he developed a “kneejerk reaction” to decide what to post.

You know, you might not have really been doing anything but at some point that not doing anything or not experiencing anything was punctuated by something that you thought was worth publishing, at least on Snapchat, and if you're prone to that kneejerk reaction you'll end up posting a lot of stuff. (P5)

So how do people decide what content is interesting enough to be worth viewing on Snapchat? When it came to watching Stories, four participants said they try to keep up with all of their friends' stories, but the rest gravitated towards wanting to focus on the uncommon or interesting snaps and Stories from uncommon/interesting people. For example, P17 wanted to focus on Stories of people who posted infrequently. P6 said he prioritized watching Stories of people who he thought were interesting. P5, P7, P8, P18, and P19 all expressed similar viewing preferences. P3 explained how he prefers watching Stories on the weekends, when more interesting Stories may happen from everybody.

I watch people's snap Stories too, [...] if I have time, I look at people's snap Stories. Usually in the weekends, because people post funny things in the weekends, they are most meaningful. The rest are friends studying in a room, I don't care about that much. (P3)

However, when P3 decided what to post for himself, he said he would often post on the weekends when he was with friends, but any day he would also post things that he thought were “*pretty cool, like a nice skyline.*” Although, with most of his contacts living in the same city as he does, it is possible that his skyline pictures may not hold the same meaning to his audience. P14 also mentioned trying to understand what her friends would find interesting, but ultimately explained that she focused on what was meaningful for her: “*I just assume, if I think it's funny, my friends ... I just assume they'll find it funny too.*” During our interviews a very specific example came up to demonstrate that content is first captured according to the sharers interest. That example is pet pictures and videos. P9 used Stories to share snaps of her cat's antics. Which, to her, are noteworthy experiences. However, she acknowledged that other people might not find it as noteworthy as she does. She mentioned appreciating the opportunity to post these as Stories rather than deciding which friends would make a good audience for these particular posts:

Not everyone wants to look at that, and if people don't want to see that they don't have to linger over it. They can just skip it and be like, “Ugh, another cat picture.” (P9)

So while Snapchat snaps have been associated primarily with quotidian content [2,21,34], our participants wanted to post content that is interesting. However, participants were not concerned with sharing content that everybody would find interesting, but rather what they found to be personally noteworthy. Users could develop themselves and their preferences as they felt inspired, without any specific planning. Stories were, in a way, an improvisa-

tional performance constructed out of life's moments. The following section further explores participants' limited considerations for their imagined audience on Stories.

The Self-Selecting Audience

Participants used Chat to send messages to an author-selected audience, but Stories to share with a wider, self-selecting audience. This audience could range from close ties to complete strangers. While most participants were contacts with friends and some acquaintances, P8, P11, P13, and P18 had contacts on Snapchat that they had not met face-to-face. P8 especially took a relaxed attitude toward his Story followers. He described being followed by people he did not know in real life, "So there has been a few and it just started happening. I don't know who these people are." However, he did not express concern about this development. He did not see harm in people watching his Stories, the same way that he did not mind if people avoided his stories when they did not want to watch them. He claimed that he primarily snaps to entertain himself and others that also find it entertaining, rather than to fulfill the needs of any particular audience:

You don't have to watch it, and I'm not imposing myself on anyone. That's what's nice about it. You don't have to watch it. You can choose to watch it. You can skip through it. I don't care. It's for my own entertainment, and whoever else likes it. (P8)

In fact, several participants mentioned that they appreciated how people were not specifically expected to watch Stories.

The Story feature, I first thought it was silly, unnecessary and contentious in nature, but it's a cool way to share most things that are happening in your life. People are not forced to receive it. They have put in just enough effort to watch it where they care enough that they wanna see that versus, when you scroll through your Facebook newsfeed, you can see a bunch of shit you don't care about. It's stupid versus. Snapchat you are like 'Oh, I wanna watch this person's Story.' (P13)

In contrast, users who were more concerned about audience, chose to directly, mass disseminate their posts outside of the Story feature. P2 and P16 did not end up sharing any snaps to their Stories, but chose to include us in "mass snaps" sent to the majority of their friends on Snapchat. P2 explained the reason she rarely posts to Stories is because she does not want all of her Snapchat friends to be able to see her life, but it would be too awkward to unfriend them on the app. P16 on the other hand, does not like posting to Stories because he does not consider the content he shares to be anything that anybody would need to view more than once. So we see that the openness of Stories availability can still temper a user's sharing.

While much of deciding why or why not to share on Snapchat Stories relates to who should *be able to* see a post, participants also discussed the idea of *making sure* that a particular user sees posted content. It is also possible to post a single snap simultaneously in Stories and directly send it via Chat, but we found that this practice is considered a

norm violation. "Why both?" asked p17, as it seems to violate the idea of self-selecting whether or not to watch a Story. While ten participants said that they never post a snap to their Story and send it to somebody in Chat, five participants reported that they have at least occasionally done this (but with some hesitation). They may see it as necessary if the person receiving it directly is someone who rarely checks Stories, but for those that do it can make the sent snap seem less special:

I know when I receive a Snapchat that is also posted on their Story, that makes me feel way less special about receiving that Snapchat, and so I don't really do that as much unless there's something that I post on my story and also a specific person needs to see. But I won't do it a ton just because I feel posting on Story and targeting at someone is redundant. (P13)

Snapchat's variety of communication channels allow for various levels of control of self-presentation to occur, and especially to occur after recording the content. In offering both Chat and Stories for sharing, our participants had varying attitudes to their privacy and friendships. While our findings replicate previous work showing that Snapchat Chat is primarily for connecting with close ties (e.g., [2,34]), Snapchat Stories has a different approach to audience. Stories were intended to be available to a wide self-selecting audience and participants felt hesitant to act in ways that violated this arrangement (e.g., by posting something "private" to Stories, or by pushing the Stories content directly at a person through the Chat channel).

Share First, Save Later

As previous themes have uncovered, Snapchat allows users to create pictures and videos before considering with whom the content will be shared. Stories takes this emphasis on creation first a step further as it offers users the chance to reflect on what they shared over the 24 hours and determine if what they shared is something they would like to save or post again. As P5 explained, the ephemerality of Stories has "an arcade mentality to it," since posts go away after 24 hours. If he is not proud of a particular story, then he has a fresh slate to try again the next day. P5 also explains that this has changed how he thinks about recording content.

I instantly think, 'I'm gonna post this,' and if it's decent I think, 'I'm gonna save it.' It's a reversal right? You know traditionally you would take a picture and you save it and you would evaluate that and think, 'Is this worth sharing?' but with Snapchat, if your go-to is, 'Let's snap that and then see if it's worth saving,' well and you can go back to your Story and download it and you have this 24 hour buffer, this 24 buffer of content you thought was worth at least capturing and maybe even saving. (P5)

P1, P9, and P18 also said that they enjoy reflecting on their recent Stories, and potentially saving them. All participants said that they at least on occasion save snaps to potentially use on other social media.

Despite this low-risk way of sharing, users still cared about the way their content was received by the audience. All

participants who posted to Stories stated that they appreciated that they could see who looked at each post (and this was information they actively sought out). This gave a chance for reflection on the content. But since Snapchat does not prove a way for friends to respond to specific snaps (e.g., “likes”), participants described a diverse set of strategies for deciding whether participant content was successful enough to warrant saving. P18 judged this success by whether Stories were viewed by one specific audience member—her crush. P9 measured the success of her snaps by whether any of her friends took a screen shot of the content to save for later. Four users specifically mentioned returning to old Stories to see who has viewed them since. These workaround solutions allowed participants to get a pulse on the otherwise self-selecting invisible audience to reflect which Stories warranted archiving for the future.

The core mechanic of Stories is that they can be posted and reflected later over the 24 hours, and privately evaluated as a user chooses. They do not have to be created with the intention of archiving every one, nor with the intention of achieving any specific approval from peers (as there were very few ways of measuring this approval).

DISCUSSION

In this section, we reflect on our findings of how Snapchat Stories was used and appropriated by our participants. We compare and contrast this medium to other social computing technologies, provide a dramaturgical metaphor for understanding its use, and discuss how this can inform future research and design in the HCI community.

Snapchat Stories as Distinct Social Media Genre

Snapchat Stories is a medium for sharing that is distinct from existing social media. Unlike Snapchat Chat, Stories is not used for reinforcing existing bonds with closer connections [2,21,30,34], but rather an ephemeral timeline that allows users to self-present to whomever is interested. While Stories afford some level of ephemerality and ability to reconsider one’s self-presentation day to day, they are not truly “back stage” since they do not have affordances for anonymity the way services like Whisper does [32]. The ephemeral timeline is different from “front stage” temporally-ordered presentations in blogs, Facebook timelines, or Instagram, because Stories does not technically afford curating a persistent exhibition or archive of self [24,27,36]. Stories are different from Vine [35], because although individual posts are 10 seconds or shorter, the combination of posts into a collected video supports recounting a more complex narrative that is constructed over up to 24-hours rather than in a single session. Stories sets itself apart from live streaming video, like Persicope or Meerkat, in that the resulting video need not contain the continuous stream of an event [28], but rather sample the moments throughout the day that seem noteworthy and contribute to a narrative. All of these affordances contribute especially to the relationship which exists between the user and their audience.

The imagined audience contributes to unexpected norms in social media [15], but Snapchat incorporates the audience in a way that merits specific attention. While people consider their imagined audience when deciding whether or not to share a snap in Chat or Stories, they do not necessarily consider their audience when initially deciding to share the content, further contributing to this “share first” mentality. While some people may also have an interest in specific people viewing their Story, users largely posted content that they found interesting enough to record, but not specifically relevant for any audience. Other social media may require specific strategies to catch the right audience [15,16], but Snapchat Stories generally exist beyond such active positioning. While this would seem to imply content suitable for the lowest common denominator of audiences, users saw it more as an opportunity to represent the “greatest common divisor” —themselves, their interests, and their inspirations. Another part of this freedom is also because no contacts had to look at any specific Stories unless they wanted to, and those Stories would only last for 24 hours. Finally, unlike other social media [4], Snapchat users can have an exactly quantified understanding of their Story audience as the application offers a tallied list of the viewers of each Story snap. The specific combination of affordances in Snapchat Stories set it apart from existing social media. In the next section we consider how Stories are set apart from existing metaphors of social media.

A Dramaturgical Metaphor for Snapchat Stories

To better understand how Snapchat Stories are useful to participants, we apply Goffman’s dramaturgical interpretation of self-presentation to the observed and self-reported participant behavior. With careful consideration of the ways that Presentation of Self applies to social media, we position Snapchat stories as a unique alternative. While Goffman would view every front stage situation as a potential back stage and rehearsal for a later front stage, Snapchat Stories do not have a clear place in this chain of front and back stages. While users are still performing a presentation for an audience, it is not guaranteed that this performance is necessarily a polished front stage situation, nor a clear back stage to other social media.

Also, while Hogan asserts that most social media consists of curated exhibitions [13], Snapchat Stories challenge these boundaries. Snapchat Stories curation is noticeably different from “social curation” [26] since content shared on Snapchat Stories is content which was recorded in the app. Artifacts must be created for Snapchat rather than incorporated from a separate feed. Also, the ephemerality of content means that items collected only last for 24 hours at a time, so an intentionally crafted collection (videos and pictures from a day-long hike) may only last as a complete collection for a few hours, before the earliest snaps are removed. In this way these performances are subject to the sequence they happen in, the way a theatrical performance would be.

Snapchat Stories is neither a space for connection nor a stage for a rehearsed performance, but rather an experimental or improvisational performance studio focused first on the content before necessarily considering the audience. Stories' authors capture exciting adventures in the world or collect notes of everyday life in the hope that something interesting will emerge. The audience seeks out uncommon voices and the uncommon stories. The audience is expected to self-select and so attendance is entirely optional. Some authors have open studios, inviting any potential audience member in (at their own risk). Others are more careful about who is invited (but were in the minority in our participant group). The performance is understood as still being in progress and changing over time—the script is not yet saved, but maybe one that will solidify after an opportunity for reflection or some evidence of audience enjoyment.

Informing Future Research and Design

This metaphor supports some interesting directions for researchers and technologists in HCI.

The first of these is the importance of a “experimental studio space.” Digital presentation of self is more prevalent and impactful than ever, since any piece of digital content may be saved forever and virally distributed beyond its intended audience. People (especially young people) need a place to “rehearse,” try things out, and figure out whom they want to be when they present themselves through a more permanent digital medium. This is an important niche for technology that has been seized by Snapchat Stories and the more recent Instagram Stories feature.

Taking the “experimental studio space” metaphor can also guide the future technologies we design in this space. As users craft their experience into narratives, we can provide more opportunities for creators to iterate on their stories and story-telling style. Snapchat Stories demonstrates two ways that designs can encourage these types of social medias: by helping content creation feel more lightweight and consequence-free and by encouraging a more open-ended definition of successful creations. Our study revealed that Stories authors used both internal (e.g., self-reflection) and external (e.g., screenshots, views) metrics of their creation's success to decide what to save and how to present themselves later. Opportunities for additional constructive feedback from the audience (especially if that feedback is formative rather than exclusively quantitative) may support the authors in understanding external measures of Story success. Prompts to reflect (e.g., by replaying older stories for the author only weeks or months after the event) may support the authors in calibrating internal metrics of quality. Alternatively, future technologies may help the authoring process in more explicit ways. In our study authors sometimes struggled with creating content that would be interesting to the audience, so another opportunity may be in treating narrative construction as a skill that can be refined and taught. We can help guide narrative construction by suggesting interesting structures for content and help authors reflect on what has

worked well in the past for them and others. Some potential structures could be prompts to contribute to a narrative sequence of posts representing a beginning, middle, and end or simple question prompts like, “What's happening today?” or “What do you want to remember about right now?” Finally, future research should consider how specific aspects of social media, such as audience, impacts the stage in which users are presenting. Snapchat Stories offered an experimental space that fit somewhere between a rehearsal back stage and a polished front stage. A large part of this was due to how the performers considered their audience secondary to the creation of content in the first place. Perhaps more social media could find itself better suited to consider how certain affordances contribute to a spectrum of self-presentation.

CONCLUSION

Our findings from the qualitative analysis of 18 interviews and 330 snaps revealed that Snapchat Stories allows people to share quotidian & out-of-the-ordinary moment to experiment with self-presentation to a self-selecting audience (from close ties to strangers) without needing to maintain a consistent presentation of self. We interpret this finding through a Goffmanesque metaphor of creation, where performers can simultaneously rehearse and perform their self-presentations to a self-selecting audience. This frame of thinking leads to design implications that encourage lightweight creation and that still provide room for feedback and reflection.

ACKNOWLEDGMENTS

We thank our participants for sharing their thoughts and snaps with us, and our reviewers for their helpful feedback. A portion of this work was funded by USDE GAANN: p200A100195 and NSF Awards: 0964695, 1218826, 1111201, and we offer our thanks for this support.

REFERENCES

1. Jeffrey Jensen Arnett. 2000. Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist* 55, 5: 469–480. <https://doi.org/10.1037/0003-066X.55.5.469>
2. Joseph B. Bayer, Nicole B. Ellison, Sarita Y. Schoenebeck, and Emily B. Falk. 2016. Sharing the small moments: ephemeral social interaction on Snapchat. *Information, Communication & Society* 19, 7: 956–977. <https://doi.org/10.1080/1369118X.2015.1084349>
3. Natalya N. Bazarova, Yoon Hyung Choi, Victoria Schwanda Sosik, Dan Cosley, and Janis Whitlock. 2015. Social Sharing of Emotions on Facebook: Channel Differences, Satisfaction, and Replies. In *Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing (CSCW '15)*, 154–164. <https://doi.org/10.1145/2675133.2675297>
4. Michael S. Bernstein, Eytan Bakshy, Moira Burke, and Brian Karrer. 2013. Quantifying the Invisible Audience in Social Networks. In *Proceedings of the SIGCHI Conference*

- ence on Human Factors in Computing Systems (CHI '13), 21–30. <https://doi.org/10.1145/2470654.2470658>
5. DENISE SEVICK BORTREE. 2005. Presentation of self on the Web: an ethnographic study of teenage girls' weblogs. *Education, Communication & Information* 5, 1: 25–39. <https://doi.org/10.1080/14636310500061102>
 6. danah boyd and Nicole B. Ellison. 2007. Social Network Sites: Definition, History, and Scholarship. *Journal of Computer-Mediated Communication* 13, 1: 210–230. <https://doi.org/10.1111/j.1083-6101.2007.00393.x>
 7. Tatiana Buhler, Carman Neustaedter, and Serena Hillman. 2013. How and Why Teenagers Use Video Chat. In *Proceedings of the 2013 Conference on Computer Supported Cooperative Work (CSCW '13)*, 759–768. <https://doi.org/10.1145/2441776.2441861>
 8. Jean Burgess, Joshua Green, Henry Jenkins, and John Hartley. 2009. *YouTube: Online Video and Participatory Culture*. Polity, Cambridge ; Malden, MA.
 9. Pablo Cesar, Dick C.A. Bulterman, David Geerts, Jack Jansen, Hendrik Knoche, and William Seager. 2008. Enhancing Social Sharing of Videos: Fragment, Annotate, Enrich, and Share. In *Proceedings of the 16th ACM International Conference on Multimedia (MM '08)*, 11–20. <https://doi.org/10.1145/1459359.1459362>
 10. Clement Chau. 2010. YouTube as a participatory culture. *New Directions for Youth Development* 2010, 128: 65–74. <https://doi.org/10.1002/yd.376>
 11. Katherine L. Derby. 2013. Social Media: Multiple Channels to Capture Multiple Audiences. In *Proceedings of the 41st Annual ACM SIGUCCS Conference on User Services (SIGUCCS '13)*, 159–162. <https://doi.org/10.1145/2504776.2504799>
 12. Erving Goffman. 1959. *The Presentation of Self in Everyday Life*. Anchor, Garden City, N.Y.
 13. Bernie Hogan. 2010. The Presentation of Self in the Age of Social Media: Distinguishing Performances and Exhibitions Online. *Bulletin of Science, Technology & Society*: 0270467610385893. <https://doi.org/10.1177/0270467610385893>
 14. James E. Katz and Elizabeth Thomas Crocker. 2015. Selfies| Selfies and Photo Messaging as Visual Conversation: Reports from the United States, United Kingdom and China. *International Journal of Communication* 9. Retrieved January 5, 2017 from <http://ijoc.org/index.php/ijoc/article/viewFile/3180/1405>
 15. Eden Litt. 2012. Knock, Knock. Who's There? The Imagined Audience. *Journal of Broadcasting & Electronic Media* 56, 3: 330–345. <https://doi.org/10.1080/08838151.2012.705195>
 16. Eden Litt and Eszter Hargittai. 2016. “Just Cast the Net, and Hopefully the Right Fish Swim into It”: Audience Management on Social Network Sites. In *Proceedings of the 19th ACM Conference on Computer-Supported Cooperative Work & Social Computing (CSCW '16)*, 1488–1500. <https://doi.org/10.1145/2818048.2819933>
 17. Eden Litt, Erin Spottswood, Jeremy Birnholtz, Jeff T. Hancock, Madeline E. Smith, and Lindsay Reynolds. 2014. Awkward Encounters of an “Other” Kind: Collective Self-presentation and Face Threat on Facebook. In *Proceedings of the 17th ACM Conference on Computer Supported Cooperative Work & Social Computing (CSCW '14)*, 449–460. <https://doi.org/10.1145/2531602.2531646>
 18. Karen McCullagh. 2008. Blogging: self presentation and privacy. *Information & Communications Technology Law* 17, 1: 3–23. <https://doi.org/10.1080/13600830801886984>
 19. Sarah McRoberts, Elizabeth Bonsignore, Tamara Peyton, and Svetlana Yarosh. 2016. Do It for the Viewers!: Audience Engagement Behaviors of Young YouTubers. In *Proceedings of the The 15th International Conference on Interaction Design and Children (IDC '16)*, 334–343. <https://doi.org/10.1145/2930674.2930676>
 20. Michael Muller. 2014. Curiosity, Creativity, and Surprise as Analytic Tools: Grounded Theory Method. In *Ways of Knowing in HCI*, Judith S. Olson and Wendy A. Kellogg (eds.). Springer New York, 25–48. Retrieved September 18, 2016 from http://link.springer.com/chapter/10.1007/978-1-4939-0378-8_2
 21. Lukasz Piwek and Adam Joinson. 2016. “What do they snapchat about?” Patterns of use in time-limited instant messaging service. *Computers in Human Behavior* 54: 358–367. <https://doi.org/10.1016/j.chb.2015.08.026>
 22. Lee Rainie, Joanna Brenner, and Kristen Purcell. Photos and Videos as Social Currency Online. *Pew Research Center's Internet & American Life Project*. Retrieved June 17, 2015 from <http://www.pewinternet.org/2012/09/13/photos-and-videos-as-social-currency-online/>
 23. Sean Rintel, Richard Harper, and Kenton O'Hara. 2016. The Tyranny of the Everyday in Mobile Video Messaging. In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems (CHI '16)*, 4781–4792. <https://doi.org/10.1145/2858036.2858042>
 24. Agnès Rocamora. 2011. Personal Fashion Blogs: Screens and Mirrors in Digital Self-portraits. *Fashion Theory* 15, 4: 407–424. <https://doi.org/10.2752/175174111X13115179149794>
 25. Franziska Roesner, Brian T. Gill, and Tadayoshi Kohno. 2014. Sex, Lies, or Kittens? Investigating the Use of Snapchat's Self-Destructing Messages. In *Financial Cryptography and Data Security*, Nicolas Christin and Reihaneh Safavi-Naini (eds.). Springer Berlin Heidelberg, 64–

76. Retrieved June 17, 2015 from http://link.springer.com/chapter/10.1007/978-3-662-45472-5_5
26. Joyce Seitzinger. 2014. Curate Me! Exploring online identity through social curation in networked learning. *International Conference on Networked Learning 9*: 7–9.
27. Lauren Reichart Smith and Jimmy Sanderson. 2015. I’m Going to Instagram It! An Analysis of Athlete Self-Presentation on Instagram. *Journal of Broadcasting & Electronic Media* 59, 2: 342–358. <https://doi.org/10.1080/08838151.2015.1029125>
28. John C. Tang, Gina Venolia, and Kori M. Inkpen. 2016. Meerkat and Periscope: I Stream, You Stream, Apps Stream for Live Streams. In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems* (CHI ’16), 4770–4780. <https://doi.org/10.1145/2858036.2858374>
29. Sonja Utz, Nicole Muscanell, and Cameran Khalid. 2015. Snapchat Elicits More Jealousy than Facebook: A Comparison of Snapchat and Facebook Use. *Cyberpsychology, Behavior, and Social Networking* 18, 3: 141–146. <https://doi.org/10.1089/cyber.2014.0479>
30. J. Mitchell Vaterlaus, Kathryn Barnett, Cesia Roche, and Jimmy A. Young. 2016. “Snapchat is more personal”: An exploratory study on Snapchat behaviors and young adult interpersonal relationships. *Computers in Human Behavior* 62: 594–601. <https://doi.org/10.1016/j.chb.2016.04.029>
31. Gina Venolia, John C. Tang, and Kori Inkpen. 2015. SeeSaw: I See You Saw My Video Message. In *Proceedings of the 17th International Conference on Human-Computer Interaction with Mobile Devices and Services* (MobileHCI ’15), 244–253. <https://doi.org/10.1145/2785830.2785847>
32. Gang Wang, Bolun Wang, Tianyi Wang, Ana Nika, Haitao Zheng, and Ben Y. Zhao. 2014. Whispers in the Dark: Analysis of an Anonymous Social Network. In *Proceedings of the 2014 Conference on Internet Measurement Conference* (IMC ’14), 137–150. <https://doi.org/10.1145/2663716.2663728>
33. Allison Woodruff. 2014. Necessary, Unpleasant, and Disempowering: Reputation Management in the Internet Age. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (CHI ’14), 149–158. <https://doi.org/10.1145/2556288.2557126>
34. Bin Xu, Pamara Chang, Christopher L. Welker, Natalya N. Bazarova, and Dan Cosley. 2016. Automatic Archiving Versus Default Deletion: What Snapchat Tells Us About Ephemerality in Design. In *Proceedings of the 19th ACM Conference on Computer-Supported Cooperative Work & Social Computing* (CSCW ’16), 1662–1675. <https://doi.org/10.1145/2818048.2819948>
35. Svetlana Yarosh, Elizabeth Bonsignore, Sarah McRoberts, and Tamara Peyton. 2016. YouTube: Youth Video Authorship on YouTube and Vine. In *Proceedings of the 19th ACM Conference on Computer-Supported Cooperative Work & Social Computing* (CSCW ’16), 1423–1437. <https://doi.org/10.1145/2818048.2819961>
36. Xuan Zhao, Niloufar Salehi, Sasha Naranjit, Sara Alwaalan, Stephen Volda, and Dan Cosley. 2013. The Many Faces of Facebook: Experiencing Social Media As Performance, Exhibition, and Personal Archive. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (CHI ’13), 1–10. <https://doi.org/10.1145/2470654.2470656>
37. Ads • Snapchat. Retrieved September 19, 2016 from <https://www.snapchat.com/ads>