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# Considering Corrective Behaviors in Conceptualizing, Creating, & Controlling Constructive and Controversial Comments

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## Introduction

I study how people exchange informal news using social media in the context of crisis events such as earthquakes and bombings. I began this work in the winter of 2014 in collaboration with Dr. Kate Starbird and several junior researchers with a grounded theory based exploration into social media users' experiences and concerns when it came to correcting misinformation during two crisis events. At this year's CSCW conference, I am presenting the second publication that has resulted from this project [1]. The paper is about social media users' self-correcting behaviors on Twitter with respect to online rumoring during crisis events.

In the course of doing this work, I have observed recurring interview statements from some participants that suggest that they are trying to improve their own practices around social media in order to make more constructive comments during crisis events. To furnish some concrete examples, one participant shared that reflecting upon his posting of unverified or false information had helped him learn to be more focused on verification next time. Another participant stated

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that by reflecting upon her emotional state during the crisis event, she learned that she needed to take breaks in order to avoid making mistakes in such circumstances.

These kinds of interview statements have helped me see that social media in this context can function as a site of informal learning for some people. I find this idea interesting from several perspectives. From a technology studies point of view, it can remind us of historian Francois Sigaut's law of the 'irreducibility of skills' in which he argues that "the entire history of techics might be interpreted as a constantly renewed attempt to build skills into machines by means of algorithms, an attempt constantly foiled because other skills always tend to develop around the new machines" [4]. In this case, the speed and reach afforded by social media presents people with yet another mental demand in modern life - that of learning the skills needed to be an effective citizen journalist/information worker during periods of collective stress and uncertainty.

On the other hand, as an educator, I wonder about why we might want to support this kind of learning without necessarily trying to formalize it. I suspect that informal and self-motivated learning might actually represent a certain kind of opportunity in the context of social media and crisis. Firstly, its situated and personal nature means that this kind of learning can help individuals craft an approach to these social media tools that satisfies their own unique needs, and their own cognitive and emotional makeup. And in the course of such learning, individuals could get a clearer sense of what their own needs, makeup and habitual patterns of behavior are. The second reason why this kind of learning might be important is because it moves

beyond being told how to behave during crisis events. While there are many online articles that state what the best course of online action might be for social media users during various circumstances, this approach of 'I know what's best for you' simply might not substitute for the discoveries that users themselves make, and therefore come to own.

Finally, as a student of crisis informatics and design, I am curious about how we might effectively support this kind of learning and skills development because of its potential as a pathway towards improving the benefits that social media tools can have for collective and adaptive sensemaking during times of crisis. Since social media users are increasingly being exhorted to be more intentional and aware in how they post, evaluate and correct information, it makes good sense that we study how they are currently learning to do that (or what stands in their way) in order to design tools that can help them.

To sum things up and link my interests to the goals of this workshop, I can say that I am interested in helping social media users create constructive comments during crisis situations or when they believe they are trying to serve the public cause. Naturally, I believe that this also involves having conversations around what it means to be constructive or controversial when one comments (and help commenters think about what those things mean in their personal context).

### **Experiences as a commenter**

While I currently maintain a Twitter account to gain a deeper understanding of my primary site of study, my most extensive participation in an online community has been as a member of an internet forum since 1998

that currently has about 190,000 registered members. In my time with this community, I have enacted three different roles: lurker (someone who reads but does not post); poster/commentator (contributing to existing threads of discussion and authoring new ones); and moderator (with the authority to ban or probate posters in the political debate & discussion section of the forum).

My experiences have shaped my research in a number of subtle ways. For instance, as a poster, I became consciously aware of what information overload feels like to me in the context of fast-moving threads and I like to think that I bring some of that empathy with me when interviewing social media users about their public comments during a crisis event. Once I took on the role of moderator (and had access to moderator only discussion threads), I realized that there can be a great deal of learning and conversation with regards to how individuals can manage large numbers of comments without feeling overwhelmed. Even today, moderators on my forums continuously engage with each other to try and talk about 'burnout' and figuring out issues like what the best practices of good moderating are and when to improvise.

I also learned that facilitating constructive comments isn't just about the technology; it's about culture and people. I remember when the forum I moderated received a software update that allowed ordinary users to report comments that violated the forum's rules. That required drafting new rules and norms about when a user should or shouldn't report a comment (the number one cause for probating a user nowadays is because of misuse of the reporting function since users have to learn that trolling is not the same as

disagreeing with what is being said). Overall, I would say my experiences have led me to really appreciate how charged, personal and complicated the notion of constructive and controversial commenting can get.

### **Research Questions**

The first question that I would like to tackle during the workshop touches on the theme of commenting behavior. This question relates to unpacking corrective behaviors in the context of social media comments. A social media user who realizes that they might have posted unconstructive information can try to rectify the situation using a number of different strategies, which are in turn shaped by the affordances of the platform they are using. For instance, a user might edit their comment (a feature that is absent on Twitter, for example). Or they might delete their original post which might open them up to accusations of being inauthentic (and this speaks to the social costs of corrections). Alternatively, they might post a follow-up message that corrects the original comment, while still leaving the original unconstructive message visible (and this can be problematic depending on how the platform curates content). They might even simply stop posting which I would argue is a type of corrective and constructive behavior in some contexts.

Similarly, there can be a great deal of nuance to the strategies that a user might turn to when it comes to correcting others. During the workshop I believe that it might be interesting to pick a subset of corrective behaviors and try to study them in the historical reddit.com dataset that we will be working with. For instance, we could start by asking ourselves the question, "What is the prevalence of different self-correcting behaviors in the dataset?" I can imagine

attempting to answer this by using a number of complementary methods. For instance, we could begin with writing scripts or queries that help us quantify and study comments that were flagged for deletion, or the users who edited a large number of their comments. In conjunction with this, we might try devising a rough and ready qualitative coding scheme to guide a content analysis that can surface interesting themes for the workshop.

The second question that I would enjoy working on with others during the workshop is focused on the theme of design. Here my question would be, "How might we design a system that can help social media users reflect on how they might make more constructive comments?" This question is motivated by the notion that although technology has made it remarkably easy for us to publically comment on a variety of topics and thus provided us with new opportunities to learn how to do that effectively, it has not actually yet been used to support that learning directly. As a starting point, I can imagine leveraging one or two theories of reflection to constrain our design space in some way, such as Schon's theory of reflection-in-action [3] or Dewey's theory of reflection-on-action [5]. For instance, if we pick the former we might collectively brainstorm and sketch out designs for interfaces that can nudge users to think about what they are feeling doubtful about before they make a comment. Alternatively, we might look into how we might design a conversational UI that can act as a kind of 'critical friend' that prompts users to reflect on some aspect of their commenting behavior after the fact.

## **Collaboration**

I consider myself a mixed-methods researcher with a slant towards using qualitative methods. My first paper at CSCW was about combining different approaches when studying rumor dynamics on social media [2]. My work frequently begins with a quantitative approach that involves activities like writing Python or R scripts to surface interesting patterns in social media data and then moving on to qualitative coding or interviews in order to help me interpret and theorize around the phenomenon in question.

Experience with these types of research activities and my educational background in Computer Science and English Literature have all helped me become more effective when collaborating with other researchers who might have more firm methodological and/or epistemological commitments. I feel like I can try and facilitate cross-method connections in two primary ways. First, I can try and be the person in the room who raises the need for such connections by stepping 'outside' of the dominant ways of knowing in a group and trying to bring a critical perspective or new questions into the conversation. Secondly, if a group of researchers do want to make such cross-method connections but feel like they lack the theories, or methodological tools to do so, I can try and be the person who fills in that gap. For instance, I can be the person who crunches numbers or makes network graphs and presents that information in a team that is comprised primarily of qualitative researchers; or I can be the person who does a quick content analysis of key-nodes in a network graph that is devised by other researchers.

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