

Interfaces as Rhetorical Constructions: reddit and 4chan During the Boston Marathon Bombings

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ABSTRACT

In this paper, we describe the rhetorical construction of two community sites and analyze how these sites support the information sharing practices of these communities. By examining activity on web-based discussion boards reddit and 4chan, we show how these spaces are developed and shaped over time by participants making rhetorical moves in order to share content within these ecologies. During the 2013 Boston Marathon bombings, we show how these spaces can be altered, disregarding the more typical practices on these sites. When community members embrace or reject these uses, it is as much a reaction to the content as it is to the cultural misuse of the community. In the case of reddit and 4chan, this acceptance and rejection is especially true when the makers and maintainers of the system are participants themselves. Through this examination, we conclude that it is important to understand the rhetorical construction of these systems as reflections of the cultures they support.

Categories and Subject Descriptors

H.5.2 Information Interfaces and Presentation: User Interfaces – user-centered design

Keywords

User experience; interface design; digital culture; social web; reddit; 4chan; bulletin boards; disaster; terrorism; digital rhetoric; information design; participation

1. INTRODUCTION

When examining interfaces and discussing their rhetorical structure, information design experts look at issues of usability, playability, accessibility, and other factors when trying to ascertain whether or not a system meets the needs of whatever user group it is trying to support. Similarly, researchers examining the rhetorical implications of design tend to look across activities, systems, and networks [30, 45, 53, 57].

Much of our work as communication design researchers and practitioners lacks a solid understanding of how interfaces are cultural and how participants structure their interactions, much less research on how interfaces are constructed rhetorically.

In this paper, we examine interfaces as rhetorical constructions. Our argument is that interfaces, by their forms of delivery (technology type), memory (recall), arrangement (structure), and style (of content) are rhetorically constructed and impact the methods participants use to share information. We illustrate this in Table 1 by comparing the interface characteristics to the five canons of rhetoric. Used primarily in rhetorical analysis of text and images, these canons serve as a way to analyze interfaces, user experiences, and digital culture.

Table 1. Interface Characteristics and the Five Canons

Delivery	Memory	Arrangement	Style
Platform	Affordance	Layout	Text
System	Meme	Template	Images

Keeping in mind these features listed in Table 1, we can begin to discuss how we are at a point in the design of communication where rhetorical implications are embedded in these interfaces. It is not by accident that there are rhetorical terms in this chart; much of what we teach in our own communication design classrooms is based on these rhetorical terms, which are even more useful when discussing how these choices are reflections of larger rhetorical moves within a given community.

It is important to recognize these spaces as cultures, rhetorically constructed by their communities. When we discuss culture, we are including language, inside jokes, mores, values, and habits within these spaces. We are also pointed to how these spaces are developed and crafted by participants so that they can make certain kinds of rhetorical moves. Rather than seeing these structures as restrictive, we can also observe them as empowering for a given community. How do these structures empower certain kinds of communicating, sharing, and knowledge work?

By examining these spaces, we can discover how new systems, redesigned systems, and other kinds of designer interventions must first begin by conducting community research of these spaces. This kind of research can dig into the surfaces of these spaces in ways in which the interactions of their users will be better contextualized and thus understood.

In his 1997 book *Interface Culture*, Stephen Johnson [31] argues how interfaces shape how we interact with each other. His central argument could be interpreted as deterministic, rather than symbiotic or even empowering. Rather than expecting interfaces to shape behavior, it is possible that communities encourage interfaces to develop in certain ways in order support of these cultures. This development could be deep in the code itself or through shard conventions for using the system, such as how to structure free-form content, use links, embedded certain types of images, etc.

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In this paper, we illustrate how the interfaces of reddit and 4chan are an integral part of their cultures, enabling them to make these rhetorical choices to share information. The structure and form of these spaces was developed not as a reaction to these cultures but to support them. As an example of these behaviors, we discuss how participants on these two sites responded to the Boston Marathon bombings. In doing so, we can analyze how participation is structured because of their interface cultures.

2. ABOUT REDDIT AND 4CHAN

In the wake of the Boston Marathon bombings, images, links, and information quickly moved from 4chan and reddit to Facebook and eventually the mainstream media [56]. This was one of the first crises where both spaces were highly visible to those outside of their communities. By examining these spaces as cultures whose interfaces are integral to the construction of their communities, we can begin to see how such communication flourishes, for better or worse.

Reddit and 4chan are not Facebook and Twitter in terms of presence in the media and numbers of participants. For example, the kinds of images shared on reddit and 4chan are often meme-driven. Many images are labeled as not safe for work (NSFW) or not safe for life (NSFL). These are not the same images that often show up on Facebook and Twitter, where people might post pictures of their children and daily life. Which is to say, reddit and 4chan are not normally thought of as places where much mainstream attention, participation, or even academic research takes place.

It is only recently that we are beginning to see a stronger focus on academic research and mainstream interest in these sites. For example, the 2011 paper published by the MIT Media Lab won the Best Paper award at the International Conference on Weblogs and Social Media for its detailed research of this site [6]. While attention is being paid to these systems, more work is needed to understand how the rhetorical design of these interfaces is key to understanding the cultures in these spaces. These sharp contrasts in memory, arrangement, and style are reasons why reddit and 4chan are useful spaces for examining interfaces as cultures.

Table 2. Interfaces of reddit and 4chan and the Five Canons

Delivery	Memory	Arrangement	Style
reddit	Sources, Links	Threaded, Upvoting	Evidence
4chan	Images, Text	Threaded, Bumping	For the lulz

The information in Table 2 illustrates how these cultures are expressed in terms of language and design on reddit and 4chan. This table contains the rhetorical terms and key examples of how these cultures are constructed through these interfaces. Specifically, we will use this table as we discuss these spaces further, looking at how both are constructed and their use during the Boston Marathon bombings. Across both spaces, the ways in which structure is presented is considerably different. While participants discuss topics by providing links to source material and previous threads, participants on 4chan tend to share images and text as a way of communicating and invoking memory of prior cultural material to create memes, a form of cultural memory for these spaces. As for arrangement, the two systems are considerably different in how content is structured in individual topic posts. Reddit's interface arranges content in a hierarchy, while 4chan's arrangements is much more chaotic. The sites are

equally different in style, with 4chan being more focused on their version of entertainment and humor, while redditors are much more sarcastic and value evidence of some kind (links to primary sources, photographic proof, etc.) to support thread comments.

In discussing these two spaces, in particular their use during the Boston Marathon bombings, we can begin to see how their value as locations of culture can get us to rethink our notions about interface determinism and humanistic agency. It might help communication designers to pinpoint how these spaces are enriched by participants who make these rhetorical choices to accommodate their needs. This kind of research presents us with another reason to value and understand the cultures of our users as we engage in redesign work. In the next section, we will go into greater detail about each platform, describing it in detail to illustrate how interfaces are cultures and cultures are visible within their interfaces.

3. REDDIT

Launched in 2005, reddit is described as “source for what's new and popular on the web” [49]. The form of delivery on reddit consists of a social news website, using a bulletin board style interface. Although it is not as well-known to mainstream internet users the same way that Facebook is known, reddit has seen a huge upswing in popularity. To give a sense of activity on this website, in April 2013, reddit had 69,964,577 unique visitors and over 2.4 million logged in redditors, who cast over 20 million votes [48]. Purchased by publisher Condé Nast in 2006, reddit now operates independently as a subsidiary [40].

3.1 Overview

Reddit is a website where the delivery format, memory devices, arrangement of discussion threads and categorization, and content style all work towards building a distinct culture of sharing information. Halavais refers to reddit along with sites such as StumbleUpon and Digg as spaces where participants are “concentrating attention on sites that have been identified collaboratively” and thus one way to help search work better by locating this content [23]. This concept of locating and sharing content is a core cultural value on reddit.

The reddit interface supports their cultural values by providing ways to for participant to make rhetorical moves. Users on reddit, referred to as redditors, vote on posts made by other redditors in various forums, or subreddits. If a post increases in popularity through the increase of “up” votes, the post can then show up on the front page of reddit. These upvotes is the main form of arrangement across the site. Within these posts, redditors are able to add links within their posts. They do so as a method for referencing source materials, such as news articles, other reddit posts, images, videos, or other materials. This rhetorical move to include references to other material is a key element in using memory and style to reinforce reddit's culture.

Although reddit describes itself as a “type of community where users vote on content” [48], others have described it as a “community of communities” [20]. These communities are referred to as subreddits, and there are over 5,200 active subreddits [48]. There are subreddits devoted to such topics as computer programming, Doctor Who, religions, science, and current events. Each subreddit has a creator who may also be a moderator of that subreddit, regulars who post to the subreddit, and their own culture that may extend into regular jokes, writing patterns, or Rickrolling specific to that subreddit in addition to what already is commonplace on reddit.

3.2 Interface

The interface of reddit is hierarchical and ordered, with discussion threads (or “stories,” as reddit’s management refers to these posts) moving up or down in ranking, depending on whether the content is voted up or down by other redditors. The same is true for comments posted within a discussion thread; the more popular the comment, the higher it rises to the top of the comment heap. To vote on content, redditors simply click on the up or down arrows located to the left of the post (see Figure 1). If content receives enough votes, it has a chance at making it to the front page of reddit.

As seen in Figure 1, the rhetorical structure of reddit is reflected in the interface with regards to the arrangement of content and the information structure. Posts are made within a subreddit (such as /r/news), and comments are made for those posts. The listings of posts and comments is very hierarchical, in that they can be read from top to bottom. While some discussion posts may rank higher than others, the format of comments remains the same and the comments stay with the original post. Users of the site can expand or collapse different comment threads, moving through the comments easily.



Figure 1. reddit interface.

To navigate the comments, users can sort by a number of different sort types [50]. All of these rankings are based on how other redditors ranked the content using the voting mechanism. There is “top” to sort by the highest ranked comments, “new” lists the most recent comments, “hot” is a combination of the “top” and “new.” The “best” sort order is based on an algorithm that attempts to list the best comments first; “Controversial” has a similar algorithm. Regardless of the sort, the comments will be ranked in descending order by whatever sort type the user selects. Thus, their cultural value and rhetorical move of sharing information is evident in the interface, allowing them to rank, sort, and view content based on their collective preferences.

When discussing different issues in a thread, redditors will often submit links in their post to refer to other material. Linking to source material is one of the distinguishing rhetorical choices that redditors make in their posts. The ability to add links in these posts empowers redditors to use memory as a device for linking to relevant material. They accomplish this by using links to add to the conversation. These links may lead to previous posts, memes, images, articles, or other materials. This material typically refers to source material, shares an emotional reaction, or builds upon the argument in the thread. Source material can refer to prior posts, news articles, scientific articles, or other sources. Such activity works towards exchanging information, engaging in the conversation, and participating in the collective rhetorical structure of reddit.

3.3 Culture

Overall, reddit describes itself as “a pretty open platform and free speech place” [51]. Reddit lists five rules that all redditors must follow while on the site [51]. Perhaps the most relevant to the Boston Marathon bombings issue is the “Don’t post personal information” rule. This rule lists additional content to describe what reddit means by personal information: Facebook profile links, full names, real-life details, employer names of other redditors.

On reddit, participants have created their own way of enacting their culture through various rhetorical moves. Reddit contains many subreddits on various topics such as geek culture, science, and technology. Every week, another scientist [10], celebrity [4], political figure, everyday person, etc. will post a question and answer session referred to as an AMA (ask me anything) [26]. Their random acts of kindness include sending pizza to those in need, enough so that there is a subreddit dedicated to it [47]. Although there is diversity across reddit, this community inspires a sense of place and unity. In the words of one reddit, “I thought of community as one of those words where it involved everyone but me, and for some reason, reddit just feels like the opposite” [58]. By using various rhetorical moves such as inside jokes, repeated stories, sharing of past threads, and a special tenor in the language, reddit has created a culture that is distinct from other online communities.

Reddit is an open source community, meaning that the software that runs the reddit site is open to updates by reddit participants. The open source philosophy is one in which an ethos of cooperation, freedom, and innovation is held in high regard by redditors. Reddit describes this work as a space in which “community members are constantly tinkering and contributing features, bug fixes, and translations back to the site” [48]. The emphasis on using sources and links for memory, categories for threads, and hierarchies in arrangement in the delivery of reddit are all reflective of these social values.

4. 4CHAN

4chan is an imageboard site created in 2003 by a teenager named Christopher Poole, also known as moot [2]. Originally conceived as a space for anime fans to share and discuss images, 4chan has now has “22 million page impressions every day and 9.5 million unique users each month” [6]. Participants on 4chan are mostly anonymous, meaning that there is no username or user account connected to their posts. The IP address for the computer that any content is posted from is not made public, but it can be seen by the 4chan administrators [1].

Though 4chan consists of many image boards, one in particular stands out from the rest: /b/, the random board. In the space of /b/, the culture is characterized by a distinct rhetorical structure: image-based threads and a chaotic, fast-paced delivery of information. The use of images is the main way in which 4chan enacts its style.

4.1 Overview

4chan consists of six sections: Japanese Culture, Interests, Creative, Adult, Other, and Miscellaneous. One board under the Miscellaneous section, known as the random board /b/, has gained a negative reputation on the Internet. There are few rules on /b/, and the ones that exist state posting anything that violates the law is forbidden and minors should not view mature material [1]. Otherwise, anything can be posted. There are approximately 35,000 threads and 400,000 posts per day on /b/ [6]. Given that

the average life of a thread is 3.9 minutes and the median of time a post stays on the first page is 5 seconds [6], the chaotic delivery of information is a constant. It is the birthplace of many popular Internet memes such as LOLcats and Rickrolling, and is supposedly the origin of the group Anonymous [2]. It has been described as “anarchic” [33], a “high school cafeteria” [3], and “a court jester” [33]. A closer look at the interface shows how these descriptions reflect the chaotic, “for the lulz” culture of the site. “For the lulz” is a statement associated with trolling. Trolling is defined as posting “deliberately incendiary content to a discussion forum or other online community . . . for no other reason than to stir up chaos and outrage” [60]. The “lulzs” is the pleasure a troll gets from the act of making people angry. To say that something is done “for the lulz” means that it is done for the personal pleasure of causing anger and discontent in people.

4.2 Interface

4chan is an image board, which is a type of Bulletin Board System [59]. Participants on 4chan are free to post and share pictures in an environment that does not require any login or password. Participants are not restricted from starting threads or commenting upon them, but any time a new thread is started it must have a picture [3]. Each thread is started with a post and accompanying image. Other participants can reply to the post, sometimes with images or sometimes with text. The participants’ emphasis on the image is tied to the rhetorical canon of memory, with participants using images to show a collective production of discourse.

The arrangement of this interface structure is unique, if not confusing and chaotic. There are 15 pages on /b/, and as a new thread is started, it is pushed down the line of pages. Any time a thread is commented upon, it is *bumped*, or moved back to the start of the first page. When a thread reaches the bottom of the 15th page it is deleted, or 404’s. The threads are not nested; rather, they are arranged chronologically. The page needs to be refreshed before seeing new posts. Each post is assigned a number, and when it is referred to in another post its number appears on the new post. Figure 2 shows a several screenshots of a thread. The first screenshot is of an original post. The second screenshot is of a reply to that post. The number 483489093 (OP) indicates the post that is replied to, and the OP stands for “Original Poster.” The last screenshot shows what happens to the interface when the number is hovered over. The number turns red and the post that is referred to pops up.

Although 4chan lacks “robust methods for moving information around” [30] in this system, how different threads are organized do seem to work for this community. Conversations are started, always with an image attached, sometimes these conversations spiral off into other topics, some responses to comments are given in the form of images and others in text. Eventually the conversations die without any kind of record. The delivery, memory, and arrangement of the information is fast-paced and chaotic, thus the information that is shared takes a similar turn.

4.3 Culture

4chan’s /b/ is notorious; it is not uncommon to see images depicting gore, nudity, and racism, among others. For example, “subject threads range from the mundane to the disturbing—everything from bike-shorts recommendations to found footage of people getting hit by cars or gruesome photos of body parts found in the wreckage of the September 11 attacks” [35]. In the past, /b/ has been cited for a number of negative actions, but it is also responsible for a number of positive actions, such as identifying a woman who was responsible for drowning puppies in a river [9]

and getting a campaign started to send birthday cards to a WWII veteran [28].



Figure 2. 4chan interface.

The MIT Media Lab study of 4chan pinpointed two contributors to the culture of /b/: anonymity and ephemerality [6]. Since the site does not require a login or a password, much of the postings on /b/ remain anonymous. As a result, much of the content that passes through /b/ is uncensored. The anonymity is a stark contrast to many of the social spaces that currently exist because whatever is said or done in these spaces is traceable. Part of the allure of /b/, it seems, is that nothing that posted can be easily traced, so people feel more free to post content that may be questionable elsewhere [6]. The traditional rating systems that exist in social sites are also not present on /b/, thus reputation is not of particular concern [6]. The fast-paced nature of the site also ensures that content is chaotic, meaning that the content is jumbled and of a questionable nature. The lack of a reputation system suggests that the content is what drives the site; therefore, content needs to be eye-catching, shocking, or grab attention. Threads that are not commented upon within a particular timeframe disappear, and archives do not exist. All of these factors work into the delivery of information on the site and contribute to its chaotic culture.

5. USE DURING THE BOSTON MARATHON BOMBINGS

On Monday, April 15, 2013, two bombs exploded within seconds of each other at 2:49pm near the finish line of the Boston Marathon [41]. Three people were killed and 282 were injured, and Boston became the site of a manhunt as the Federal Bureau of Investigations (FBI) and local authorities searched for the bombing suspects [34]. The manhunt for the suspects lasted several days. During that time, the suspects killed a police officer and were involved in a shootout that resulted in the death of one of the suspected terrorists. Later on the evening of April 19th, the second suspect was taken into custody after he is found in a residential neighborhood.

Across the social web, people were actively trying to share information about the terrorist attack and the subsequent manhunt. During that week, the FBI asked the public for help. They wanted people to send in any photos or videos of the Boston Marathon and its aftermath [14]. Participants across these sites were locating photos and information in an effort to track down the suspected terrorists. Across reddit and 4chan, activity picked up as these users became more active in information gathering, along with photo sharing sites such as Flickr and Imgur [24, 27]. Although it is not clear whether these sites helped or hindered the investigation, our initial research indicates that the interfaces and cultural norms of these spaces helped drive methods of content creation and curation.

5.1 4chan

The same day that the Boston Marathon bombings occurred, a number of articles appeared online that identified two websites—4chan and reddit—as online communities trying to identify who the bombers were. 4chan, while recognized as a site trying to do the same as reddit, was mostly footnoted or mentioned in passing. However, 4chan did play a part in the hunt for the marathon bomber [13, 29, 37]. Examining how the participants on 4chan interacted with one another through the fast-paced space to identify the bomber reveals the chaotic interface culture of the site.

Not long after Boston Marathon bombings, threads started appearing on 4chan that contained images of possible suspects in the crowd. Many of the images, as shown in Figure 3, had arrows and lines drawn around them with accompanying text declaring how the person in the image could be the bomber. Many of the suspect images showed backpacks, which the participants on 4chan used as a springboard to identify the suspects. These images were collected and archived in a post on Imgur, which will be discussed in the next paragraph. The style of sharing information—via image—shows that participants relied more on visual methods of sharing information; the rhetorical memory of the site is rooted in image as opposed to text.

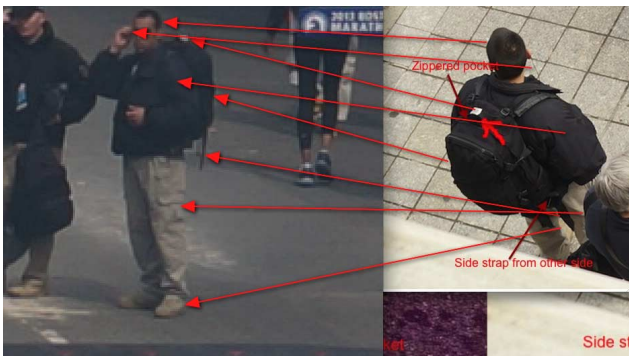


Figure 3. One of the “Think Tank” 4chan Images

On picture-sharing site Imgur, images from 4chan were posted about the bombing. Imgur is a site that “can be used to share pictures with friends, as well as post images on message boards and blogs” [27]. Like 4chan, participants can post and remain anonymous. The 4chan Think Tank was a post made on the same day as the Boston Marathon bombings. It contains 57 images of possible suspects. The images contain the lines and circles that serve as the arguments why these people are suspects, and some have text, like the one shown in Figure 3. The page has over 4 million views [27]. These images appeared in news articles, some of which are about 4chan trying to find the bombers [25, 55]. The

use of Imgur also verifies the image-driven nature 4chan’s culture, but also serves as the only archive of the deliberations of who the Boston Bomber may have been.



Figure 4. “Can You Identify This Man?” Fake Poster on 4chan

However, what occurred in the threads also warrants some examination, particularly with the style participants use to communicate. Figure 4 shows a fake poster made by a participant that asks, “Can You Identify This Man?” with an email address across the bottom. A version of this poster, with the text cut out, also appeared in the 4chan Think Tank Imgur post. Participants in the thread do not take the poster seriously, commenting, “You’re either incredibly [expletive] new, or slower than slowpoke,” and “I see the FBI is rocking MSPaint for their wanted signs these days” [5]. Both of these comments suggest that the timing of the post and the composition of the poster are poor, therefore the poster is fake.

Some participants argued about whether the person in the image was the bomber. Others discussed different topics, such as the bombings in Iraq and possible conspiracy theories. It was difficult to follow any kind of linear conversation in the threads, and there is no organization to the posts; they are organized and arranged by timestamp. The disarray of the delivery makes finding any useful information difficult, and when coupled with the “for the lulz” style participants have employed to share information, it is hard to discern what information is genuine or not.

5.2 Reddit

In the wake of the Boston Marathon bombings, activity on reddit largely focused on the delivery and curation of news content [32], sharing information on how to support the victims [7], and sending pizza to local police as a sign of support [46]. The news postings were quite lengthy, updating fellow redditors on what was happening in Boston in the wake of the bombings (Figure 5). The style and delivery of this content followed reddit’s typical rhetorical structure created for a current event. This rhetorical structure takes advantage of the delivery, memory, arrangement, and style of reddit’s community. seen in Figure 5 illustrates how new edits are made to catalog the events as they happen, with participants adding timestamps and short notes as events unfold.

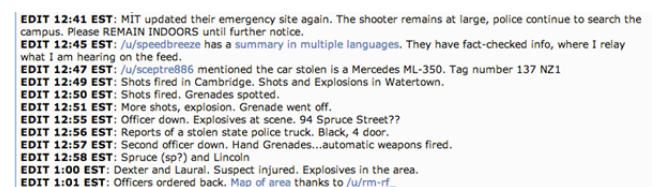


Figure 5. Clip of a news posting on reddit.

While much of this activity was typical reddit behavior, with redditors using its interface to participate in social sharing, it was a newly created subreddit that deviated from this rhetorical structure that garnered considerable attention from the mainstream media. On the FindBostonBombers subreddit, participants were focused on tracking down the suspected terrorists. Before the subreddit was shut down by reddit's leadership team [19], the participants in this subreddit had wrongfully named several innocent people as terrorists [16, 17].

While some participants in this subreddit were aggressively trying to locate the terrorists by combing through images freely available online [14], other participants were calling out their peers for going after innocent bystanders [18]. These posts lacked the kind of proof that other subreddits would encourage, short of trying to link together different images. Pushing away from the style of reddit, this new subreddit divided some of the community, as they questioned the subreddit's use.

The leaders of this subreddit stated that their goal was to support the FBI. One of the moderators of the subreddit stated that he was "inspired by all the people who ran straight toward the blast in the video, trying to help out. This subreddit is kind of like that; it's the human spirit fighting back" [54]. In the past, reddit has participated in smaller scale events and there is a subreddit devoted to crowdsourcing investigations [52].

While the participants wanted to find the "bad guys," it was the behaviors and tone of many of the posts that led to false accusations affecting people outside the community. Participants shared public, personal information about whom they suspected, including photos and Facebook profiles. While this move of sharing material is an attempt to use memory and style, it deviated from the rhetorical structure of the community. Such sharing of personal information is against the rules on reddit. While this could be seen as a cultural shift, the response to these actions by the larger reddit community and their management shows that these behaviors were unwelcome.

The material in this subreddit went viral, leaving reddit and moving across other social web sites and to the mainstream media. One article by *The New York Post* contains some of the pictures that were also in the 4chan Think Tank and declares that authorities are circulating the photos [8]. It is unclear whether they grabbed these images from reddit, 4chan, or Imgur. After the men in the photos were cleared, *The New York Post* received a large amount of criticism [21]. Some in the mainstream media accused the participants in FindBostonBombers of vigilantism [36], while at the same time printing material that they found on reddit as if it were news.

As a result of the issues surrounding the FindBostonBombers subreddit, the leadership of reddit posted an apology on their blog [12]. They reasserted the rhetorical structure of their community. The creator of the subreddit also did an AMA post (ask me anything), where other redditors angrily confronted him. When asked whether or not it was worth it, he replied "not even slightly" [43]. He has since deleted his account on reddit. The subreddit itself still exists, although it seems to be on permanent lockdown as seen in Figure 6 [19].

While many media outlets reacted negatively to the manhunt on reddit [37], other journalists felt that the apology was unnecessary because none of the major media outlets that used reddit's content apologized and they were equally at fault for spreading misinformation [11, 29]. Redditors worked to bury earlier posts



Figure 6. FindBostonBombers subreddit.

that contained this inaccurate information by upvoting information that vindicated the accused. In that aspect, the culture of reddit was well represented by this use of their interface. One reporter from Slate stated "there's no denying that a few professional media outlets have demonstrated far less of a conscience than the users and moderators of findbostonbombers" [44], showing that in spite of the larger impression that reddit was a vigilante mob, there was strong activity to set the record straight.

Overall, the efforts and attitudes in *FindBostonBombers* are not indicative of reddit as a whole, as evidenced by the behavior after these events. On reddit, there was a sense of regret and anger over what occurred on in *FindBostonBombers* [43]. The rhetorical structures of the culture of reddit, with its need for evidence, hierarchy information flows, and link structure, is not a good fit for the kind of activity that went on in FindBostonBombers. It will be interesting to observe how their interface might change further to support these cultural beliefs about these kinds of activities, namely manhunts, in the future.

6. CONCLUSION

In 1998, Robert R. Johnson asked us to "rethink the user as being an active participant in the social order that designs, develops, and implements technologies" [31]. On reddit and 4chan, this active participation can be seen in the interfaces and the rhetorical practices of image sharing, attitudes towards evidence, and link activities among the participants. While many accused the two sites of participating in a dangerous form of citizen journalism, many on reddit and 4chan had the admirable aims of trying to track down the terrorists. The execution of it was problematic at best and destructive at worst.

It is difficult to pinpoint 4chan's goals for finding the bomber, given their chaotic culture. Participants analyzed various images, but due to the fast pace and chaotic culture of the site—information became jumbled and lost. The participants' attitudes, both towards each other and the images shared, were reflective of the site's interface: swift, hectic, and volatile. The priority of the images, coupled with the attitudes of the participants, did not match the seriousness of the topic at hand, but the mainstream media took the efforts seriously, commenting that the result of such crowdsourcing efforts were either helpful or a "witch hunt" [42].

Redditors in FindBostonBombers emphasized that their participation was "playing detective" [39] rather than more typical

reddit activities such as news curation, information gathering, or image sharing. In her early work on technologically mediated communication, Gurak noted a similar issue in a forum she was researching where participants experienced an ethos “composed in large part of hyperbolic statements and inaccurate information” [22]. Many of the posts in FindBostonBombers were similarly situated. Those participants were working outside the mores and rules of reddit. In the end, they received negative feedback from their peers and the management of reddit because of how they disregarded their community’s values to support their activities.

Examining these spaces as rhetorical constructions, we can see how the forms of delivery, memory, arrangement, and style of these systems led to a variety of different types of information gathering. The design of these systems lent themselves to collecting and distributing information, as evidenced by the high rate of production of text and links on reddit and images on 4chan. However, it was not as good at controlling where that information went. While Monroy-Hernández, et.al. have pointed out that “social media creates an alternate “user-generated” channel of communication that can address weaknesses in information flow,” [38] they also acknowledge, like we do, that there are major challenges with regards to misinformation. Looking specifically at these two communities, we propose that further research should be done on how these spaces are rhetorically constructed and what happens when those constructs are disregarded.

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