#PutYourSticksOut: Public Expressions of Grief on Twitter about the Humboldt Broncos Accident

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On April 6, 2018, after a playoff game in the amateur Saskatchewan Junior Hockey League, a bus carrying members of the Humboldt Broncos hockey team collided with a semi-truck when the driver of the truck failed to yield at a flashing stop sign. Fourteen people on the bus died, two others critically injured died later in hospital, and thirteen were injured. While tributes occurred locally, individual performances of public grief were shared by over 30,000 Twitter users in the week after the accident, many by people who had no direct connection to the team or that region of Canada.

Social media offers powerful ways to document, share, and mobilize social movements such as Black Lives Matter, Occupy, and Me Too. In addition to large, powerful movements and events, much of social media's content is concerned with commerce or the minutiae of everyday life. A significant aspect of social media is sharing, which includes the positive and negative aspects of life (Christensen and Gotved 3). Social media allows people from around the world to associate with others who share the same interests, creating new virtual social networks of people (Sanderson and Cheong 328). This new network of online communities enables social media users to share grief with others and create new mourning rituals (Christensen and Gotved 4; Pantti and Sumiala 120).

Death is an inherently social phenomenon (Christensen and Gotved 1). The increased prominence of speaking to physical death online is growing interest in online memorial culture (Christensen and Gotved 2). Because so much of everyday life is shared online, this may be a reason why discussion of death and grieving seems more prevalent in social media platforms than in our daily lives offline (Christensen and Gotved 4). Some of the literature about performance of grief

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online has focused on mourning for an individual with whom the person had a direct, interpersonal relationship (Sanderson and Cheong 328). Researchers are also paying increasing attention to the mourning of celebrities online (see Klastrup 1; Radford and Block 137; Sanderson and Cheong 328) and the practice of mourning parasocial relationships on social media for individuals (or groups of people) who are not celebrities (Burroughs et al. 4; Hjorth and Kim 554; Klastrup 2; Pantti and Sumiala 119).

How was grief about the Humboldt Broncos accident performed on the social media platform of Twitter? What types of performance of grief were done? Where were these Twitter users located? What may be some of the factors that prompted people to participate in this sharing of grief? The author assessed tweets to identify the attributes of the Twitter users who participated in this activity and examined the content of their posts for patterns in the performance of grief. While analyzing hashtags and mentions does not give a complete picture of any event or movement, in this case it offers a look at the ways people are creating new rituals connected to the performance of grief online. It is important to note that the phrase "performance of grief" that does not imply the person's emotions were not sincere. Sharing grief on social media allows individual expression and at the same time uses boundary markers to reinforce social connections to the imagined community.

The Cultural Importance of Sport

Sports are culturally important because they are interconnected with many parts of everyday life, including entertainment, personal expression, family, work, and social relationships (Gruneau and Whitson 28), as well as technology (Andrews 5). Sports are big business (Andrews 6). Part of the commercialization of sport includes mass media (Andrews 8). Sports influence society through interconnected media systems, including social media (Billings and Wenner 9). Sports are then reflected by fans, teams, and leagues in social media. In the twenty-first century, sport as a culture industry is as influential economically and socially as the Hollywood film industry was at its height in the 1930s and 1940s (Andrews 42). Sports' symbolic meaning is important as it provides a structure for reflecting, explaining, and interpreting social life (Real and Mechikoff 337). This symbolic meaning includes how to react to and perform grief.

Identifying as a fan of a specific sport or team helps mark a person's place within society and is incorporated into a person's values and self-identity (Billings

and Wanner 4). Fans consider themselves a unique social group with group identities which can be performed in social media (Radford and Block 139). While fans experience these identities as individuals, they express them communally (Real 35). Sport is seen as having the ability to foster community, either through participation or viewing (Butterworth 203-4). Sports events are part of society's common culture. Sports can also help create and nurture communal identities (Butterworth 204). Games and related events help define a person's fan membership and become part of the cultural memory for many, not just the most rabid fans (Billings and Wenner 3).

Sports fans are not passive vessels who only receive entertainment. Some participate as players at different skill levels, others as advocates for sports recreation, as volunteers for teams, as collectors of memorabilia or sports related literature (Gruneau and Whitson 22-23). In the past, sports fans were able to participate as callers on radio shows (Gruneau and Whitson 22); sports fans now can also participate in online blogs, social media (Andrews 42), and webcasts. Audiences of sporting events are both objects and subjects of sports production through the commodification of audience participation in social media (Gruneau and Compton 44). Hockey today is a globalized sport, with connections to international commerce and entertainment (Gruneau and Whitson 32). At the same time, sports can be a national cultural signifier which is tied to a country's sense of identity (Andrews 113).

Sports and Performances of Grief and Memorialization

Sports' role in large- and small-scale community memorializing in the U.S. expanded after the September 11, 2001 attacks (Burroughs et al. 4). It increased because sports began to carry more weight in popular culture and were thought of as being part of shared social experiences (Burroughs et al. 3). While issues such as commercialization and displays of shallow emotional healing are part of sports memorialization events, sports can also provide a sense of renewal after a crisis (Burroughs et al. 15). Sports and ceremonies associated with them can offer some communal healing (Butterworth 203). The professional sporting events that resumed one week after the attacks on 9/11 were seen at the time as healing and unifying events in the United States (Butterworth 209).

Sports teams at the major (professional) levels, as well as minor league and junior teams, are considered expressions of regional identity (Burroughs et al. 3).

Because of these associations, sports teams and leagues can be leaders in healing a community, and the public sphere of the arenas and stadiums are places recognized as being part of the community. In addition to the purpose of promoting a sense of community and honoring others, sports teams and leagues consider expressions of memorializations part of team branding and positive public relations (Burroughs et al. 4-5). The public memorializations by sports teams help foster connections between the team and local fans. But teams also must juggle the issues related to their being part of a larger corporate structure which has a reach outside their region (Burroughs et al. 10). Sports teams have used hashtags in their social media responses to tragedies (Burroughs et al. 6).

After the mass shooting in Las Vegas in October 2017, the recently formed Las Vegas Knights hockey team connected itself to the hashtags of #VegasStrong and #VegasBorn throughout their inaugural season in 2017-2018 (Burroughs et al. 11). The use of the two hashtags became a way for people to have a sense of helping and recovering from the shootings, despite the limited number of ways that people could contribute to community healing (Burroughs et al. 13), aside from financial donations. When it became difficult to find public rituals and spaces for public memorialization elsewhere in Las Vegas, the Las Vegas Golden Knights hockey team performed public memorializations and gave the community space to perform mourning rituals within the commercial space of the hockey arena throughout their season (Burroughs et al. 1, 12). The arena became a space for mourning the October 2017 shooting. At the same time, the team did not encourage activism or discussion of the many underlying issues which enabled the shooting to occur, nor of the difficulties of recovering. But this generalized mourning message appealed to a wide range of their fans (Burroughs et al. 12). One negative aspect of the Las Vegas Golden Knights', or any team's, public memorializing is while it creates a sense of belonging, it is often within a context of limited membership (Burroughs et al. 14). A negative perspective of sports' ability to create community can be viewed in Butterworth's (2014) analysis of the tenth anniversary commemoration of 9/11 in professional sporting events, which emphasized nationalism and militarism (204).

The Cultural Importance of Hockey within Canada

Modern hockey's development is traced to nineteenth-century Canada; however, the sport has roots in several sport activities found in North America, including games played by Indigenous (First Nations) cultures, as well as a number of

different games played with sticks and balls on ice by immigrants to North America from England, Ireland, and the Netherlands (Gruneau and Whitson 32). Games which influenced hockey include field hockey, hurley, lacrosse, rugby, and shinny (Gruneau and Whitson 32, 39). Formal rules were established for hockey games in the 1870s in Montreal, with standard rules spreading to Quebec and Ottawa in the 1880s (Gruneau and Whitson 38-9). Larger towns in Canada started their own teams and leagues by the mid-1890s (Gruneau and Whitson 45). Hockey and other amateur sports were thought to encourage people from different economic and ethnic backgrounds to interact in a way that promoted health and good behaviors. In reality, in the nineteenth and early twentieth centuries, access to these sports opportunities was determined by members of the higher economic status groups (Gruneau and Whitson 46).

Within Canada, hockey is often idealized and romanticized, as well as being thought of in terms of a past which no longer exists (Gruneau and Whitson 25). In Canada, hockey can mean different things to individuals: an amateur sport which helps educate; community identity; informal play; or an opportunity to socialize, drink, or gamble. It can inhabit more than one of these meanings at the same time (Gruneau and Whitson 27). Radio broadcasts of Canadian hockey games began in 1923. In the twenty-first century, television viewership of NHL games in Canada is considered family entertainment (Shoalts 48) and continues to have high ratings even as other types of television shows have lost viewers (Shoalts 44).

For many people in Canada, participating in or watching hockey games is a nostalgic part of their childhood (Gruneau and Whitson 1). For some, watching the nationally televised games on Saturday nights give a sense of being part of a national hockey community and a Canadian identity (Gruneau and Whitson 2-3). Because hockey occurs at different levels of play (from childhood to professional) in Canada and receives significant media coverage across the country, even people who are not hockey fans are aware of the sport (Gruneau and Whitson 3). At the same time, it is also important to acknowledge that while hockey is idealized and romanticized as part of Canadian identity in the past and present, it is a sport which has not been available to everyone (Gruneau and Whitson 7).

In the imagination of many in Canada, hockey players start as young men who learn to play hockey on frozen ponds in rural areas. In reality, for most players hockey is an indoor, suburban game (Gruneau and Whitson 158). In Canada there are childhood hockey leagues and organizations, which provide space and equipment as well as training for hockey players of different ages and genders

(Gruneau and Whitson 155), although the number of male players exceeds women (Gruneau and Whitson 154).

Hockey Canada organizes minor and junior league hockey organizations. These minor and junior teams are a focus of community spirit (Gruneau and Whitson 154). Minor and junior team games are more affordable and accessible than NHL games (Gruneau and Whitson 164). Canadians demonstrate an interest in the community owned amateur teams at the junior level, as a push back against the U.S. business model of the NHL and the increasing influence of U.S.-created popular entertainment (Gruneau and Whitson 24). While media can amplify mega-sporting events and increase awareness of them in the general public, the wide range of different media (tv, radio, social media) means that smaller regional events, such as the junior league hockey championships, also receive much more media attention than in the past (Gruneau and Compton 43).

The Humboldt Broncos are part of the Saskatchewan Junior Hockey League, which consists of thirteen teams, with players between the ages of sixteen to twenty. The league does not pay players, so they can be considered amateurs. Participation in the league may help players become athletes at the college level and to possibly play in the minor or major leagues or gain job opportunities in or outside of sports (SJHL Education).

Twitter and Hashtags

The author used hashtags to locate postings about the Humboldt team accident on Twitter. Twitter is a microblogging social media site which started in 2006. It allows users to post messages consisting of 280 characters, called "tweets." While Twitter started with "tweets" of 140 characters, including spaces, punctuation, and emojis, the platform expanded the size of messages in 2017 (Larson). Individuals and organizations, including businesses, can create accounts. Similar to Facebook, users can view Twitter chronologically in a linear timeline or in order via "top tweets" as determined by an algorithm from the company that operates the platform, which is also called Twitter. A person with an account can reply to or repost (referred to as retweeting or RT) what is posted on open, publicly available accounts (Zomguamg et al. 1399). Users can also create a closed account where the Twitter user must approve everyone who follows them; closed accounts do not allow reposting. This analysis did not use any closed accounts. Twitter and most other social media sites earn money from ads (Cann 113), which appear alongside

Twitter timelines or as promoted tweets in the timeline.

Twitter users choose to follow other accounts based on perceived associations or interests (Feelon et al.). Hashtags on Twitter are labeled with the # (pound sign) to call attention to a word or phrase. Twitter user Chris Messina first suggested use of hashtags in 2007, to find tweets related to wildfires in California (Filadelfo; "Twitter Hashtags"). In addition to locating information on Twitter, hashtags enable tweets to be grouped by user assigned words. Hashtags can be used to network and create community connections, with users purposefully following and interacting with others who have the same interests. It is possible to see through time how participants use and interact with a hashtag (Burroughs et al. 6). One or a limited number of users might create a hashtag that is not shared widely (Cooper), whereas other hashtags such as #TBT for Throwback Thursday or #BlackLivesMatter have become widely popular (Filadelfo; "Twitter Hashtags"). In the U.S., the hashtag #BlackLivesMatter was started in July 2013, but it was not widely used until August 2014 during the Ferguson protests (Feelon et al.).

Within Twitter, people often identify as members of informal groups. Anyone can claim membership in a group through tweets, although a person may get negative responses by others who also self-identify if the user's content seems not to fit the group or if the posts are abusive. This is a form of self-policing of online social groups, similar to the self-policing described by Jenkins (472) in the discussion of *Star Trek* fan fiction writers. Only the user's connections and interests limit a person's knowledge of other Twitter communities.

Within many, but not all, Twitter groups, people often refer to the group membership as a whole as "family" or "friends." A tweet may be addressed to: My Reylo family or My hockey friends. When tweets of this type occur, they show the user considers their informal social media group to be part of their community and sometimes a support network of people. Fans can create as well as consume their fandom online (Radford and Block 151). While social media are capitalist media, they are located in the public sphere. Rather than being only passive consumers, users create unique messages and meanings. Users can break through and create meaningful socio-cultural roles as members of a group (Fuchs 77) and give their world meaning by using social media (Fuchs 66).

The Use of Hashtags as a Signal of Support

How did Twitter users react to the death of sixteen people on a highway in Canada?

On the day of the accident, April 7, 2018, the team's official Twitter account www.twitter.com/HumboldtBroncos posted three tweets, each providing additional information. That account posted several tweets in the following days with information about press conferences and crisis services for people in the Humboldt area. On April 11, 2018, the team first used the #HumboldtStrong hashtag. However, people not officially part of the hockey team began using #HumboldtStrong one day after the accident on April 8, 2018.

The use of the hashtag #PlaceNameStrong first reached national prominence after Hurricane Sandy in October 2012. Users frequently used the hashtags #NewJerseyStrong and #NJStrong (Zimmer), and the webpage called NewJerseyStrong.com materialized to circulate news about man-made and natural disaster preparedness, and, starting in the summer of 2013, to promote New Jersey for vacations and residence.

The use of #PlaceNameStrong may have come from two different slogans: from Livestrong, yellow bracelets marketed since 2003 by the Livestrong Foundation, a nonprofit organization whose focus is on supporting people affected by cancer, and from the U.S. Army recruitment slogan of Army Strong, which was created in 2006 and has been used since then in variety of print and video advertisements (Zimmer). Tweets use #PlaceNameStrong in response to natural disasters and human created tragedies, such as #BostonStrong after the Boston Marathon bombings in April 2013 (Dubois; Zimmer). Users tweeted with #BostonStrong over 500,000 times on Twitter in the week after the Boston Marathon Bombing (Dublois). Other uses of #PlaceNameStrong include #OrlandoStrong after the Pulse Nightclub shooting in June 2016 and #PuertoRicoStrong after Hurricane Maria in September 2017.

Methodology

The author collected tweets using Twitter's Premium Search API (Application Programming Interface) and stored them in a MongoDB document database, using a custom Python program based on the publicly available Twitter API (Geduldig). This study used only public tweets and did not retain personally identifiable information as part of the analysis. The author performed searches for the hashtags #PutYourSticksOut and #HumboldtStrong to retrieve tweet data, including the name and description for the sender and information on their location. Since Twitter is an anonymous platform with no verification of identity except for a small number of public figures, the identifying and location information used to categorize tweets

is all self-reported, and the categories studied represent the way users present on Twitter, not necessarily their actual identity. While Twitter accounts that misrepresent the user's identity exist, no evidence exists that they are widespread enough to skew these results.

The study examines #PutYourSticksOut tweets for the period a week after the date of the bus crash, from April 7-13, 2018, resulting in a total of 46,317 tweets from 32,826 distinct users. The author examined user account descriptions with a semi-manual process to divide them into accounts of individuals and accounts of groups or organizations (e.g., teams, schools, media outlets, governmental organizations, nonprofits, online news aggregators, etc.), and then the author processed the individual accounts to identify gender and whether the user identified as a parent or a hockey player.

To identify organizational users, the author examined a sampling of tweets to find words common in organization account descriptions. Then the author compiled a list of accounts containing those words and examined the results manually to remove any individual accounts the search included. The author included accounts for individuals associated with organizations (e.g., reporters, teachers, etc.) in the individual account category as long as the account represented one individual, even if the account was identified as their "official" account.

The author identified gender first by filtering on gender-identifying words in the account description: Female by mother, mom, momma, mama, wife, sister, daughter, aunt, female, girl, chick; Male by father, dad, papa, husband, brother, son, male, uncle, boy, dude. The author further manually filtered results to remove common cases where the matched word did not refer to the user (such as "mother of a son and a daughter" matching "son".) For accounts that could not be identified from their longer description, the author extracted the first name (if any) from the user name and compared against name/gender identifications in the Data.World "Gender by Name" dataset (Howard), compiled from the U.S. Social Security Administration's 1930-2015 database of baby names.

The author also determined parent identity first by filtering on parent-associated words in the account description: mother, mom, momma, mama, father, dad, papa, parent. The author further manually filtered results to remove instances where the user referred to someone else or did not identify as being a parent. Quite a few identified as "dog mom." The author identified hockey players by filtering for descriptions matching "hockey player," "goalie," or "hockey coach," and then removing results not referring to the user, such as "my favorite hockey players

are…"

In addition, the author performed queries to count the percentage of original tweets compared to retweets (reposting) of another user's tweet, and to count the percentage of original tweets that included a photo. Image analysis to confirm that the photos were of hockey sticks is beyond the scope of this project, but the author examined a sample of thirty randomly selected tweets and found all users had shared photos of hockey-sticks. These choices represent levels of effort: retweeting allows a user to participate and spread the word with relatively little effort; an original tweet requires more investment; actually putting hockey sticks out, taking a photo, and posting it represents full participation in the ritual.

For comparison purposes, the author gathered a somewhat random baseline set of tweets from the same time period within the limits of the software. The Twitter API does not have the capability to collect a true random set of tweets for a particular timeframe, only the results of a search, so the baseline set of tweets consisted of the combined results of searches for the common words "he," "she," "are," and "our." The author performed these searches for the second half of each day from the target period, April 7-13, 2018, with a maximum of 500 results for each word for each day. This search retrieved 13,219 tweets that the author categorized using the same procedures as for the main data.

The Twitter API results include location information if the user has set a public location in their user account profile. This location must be manually entered; it is not real-time location information from their phone or other device. The user can set any location; it does not have to be a real location. Twitter performs geocoding to attempt to match the chosen location text to a known location, and if successful, populates fields for country, region (state/province), locality, etc. Twitter does not document the specific data source and process used for geocoding.

Results of Analysis of Tweets

The #PutYourSticksOut hashtag search produced 46,317 tweets from 32,826 distinct users. Of these, 44,819 tweets appeared on 31,718 accounts of individuals. Only 1,108 accounts were organizations. The baseline set searches produced 13,219 tweets from 12,840 users and 12,972 tweets from 12,606 accounts of individuals. To explore what the data can tell us about the characteristics of those who participated in #PutYourSticksOut, we compared the percentage of individual users between the baseline set and the #PutYourSticksOut tweets (see Table 1).

Category	General Twitter Usage	#PutYourSticksOut
Gender		
Female	27.9%	37.3%
Male	25.4%	41.9%
Undetermined	46.7%	20.8%
Parents	1.7%	14.0%
Players	0.03%	1.0%

Table 1. Categories of Users of #PutYourSticksOut Hashtag

The clearest difference in the #PutYourSticksOut tweeters is the percentage who identify as parents, 14% vs. 1.7% in the baseline set. This suggests that being a parent was a factor in motivating users to participate in this newly created online ritual. Compared to the baseline set, the #PutYourSticksOut tweeters also included many people who were themselves hockey players, but the overall numbers are small enough that it is unlikely this alone is a significant motivating factor.

For the level of participation in #PutYourSticksOut, 29% of tweets were original, and 71% were retweets. Of the tweets, 22% (9,866) were original tweets with photos. As a point of reference for typical Twitter behavior outside of an organized activity like this, only 3.3% of tweets in the baseline set were original tweets with photos. The author observed no trolling (negative tweets) and only ten "spam" tweets.

Users from 104 different countries tweeted the #PutYourSticksOut hashtag. This number includes personal as well as organizational accounts. While Canada had the largest number with 17,606 tweets, the U.S. was second with 6,730 tweets. After North America, the number of tweets decreased. Other countries which produced large numbers of tweets with the hashtag in descending order of volume of tweets were the United Kingdom (493), France (58), Germany (50), Australia (36), Djibouti (34), Mexico (30), Papua New Guinea (28), and the Central African Republic and Finland (23 each). People in countries in Africa, Asia, Central and South America also tweeted with the hashtag. However, the country of location could not be identified in 19,478 of the tweets, which is slightly under half of the total number of tweets (see Table 2).

Country Location	Tweet Count
Unidentified	19,478
Canada	17,606
United States	6,730
United Kingdom	493
France	58
Germany	50
Djibouti	34
Mexico	30
Papua New Guinea	28
Central African Republic, Finland	23 (each)
Curacao	20
Ireland, Italy, Saint Vincent and the Grenadines	16 (each)
Brazil, North Korea, Switzerland	15 (each)
Spain	14
Belgium, South Africa	13 (each)
Corte d'Ivoire, Nigeria, Norway, Philippines, Sweden	12 (each)
Bolivia, Georgia, Japan	10 (each)
Bangladesh, Cape Verde, Indonesia, Sri Lanka, United Arab Emirates	9
India, Mauritius, Morocco, Netherlands, Serbia, Solomon Islands	8
Andorra, Kenya, Montenegro, New Zealand	7 (each)
Armenia, Hungary, Jamaica, Russia, Singapore	6
Burkina Faso, China, Czech Republic, Egypt, Macedonia, Pakistan, Ukraine	5 (each)
Colombia, Iceland, Jordan, Qatar, Samoa, Uruguay, Zimbabwe	4 (each)
Congo, Hong Kong, Latvia, Luxembourg, San Marino, Thailand	3 (each)
Belarus, Bosnia and Herzegovina, Chile, Dominican Republic, Lebanon, Malawi, Malaysia, Mongolia, Peru, Sant Martin, Venezuela	2 (each)
Argentina, Belize, Cayman Islands, Costa Rica, Croatia, Denmark, Gabon, Ghana, Greece, South Korea, Lao, Lithuania, Madagascar, Malta, Nicaragua, Oman, Poland, Portugal, Rwanda, Saudi Arabia, Somalia, Timor-Leste, Turkey, Yemen	1 (each)

Table 2. Countries of Origin for #PutYourSticksOut Tweets

Newly Created Hashtags and Images as Performance of Grief

The recent online hashtag using the formula #PlaceNameStrong was used soon after the accident; however, two days after the accident, many people who had a connection to hockey but not specifically to that team, created their own new expression of grief, #PutYourSticksOut. Although he did not create this expression of grief, Canadian regional sports broadcaster Brian Munz urged his followers to leave their hockey sticks out on porches, at front and back doors, gaining inspiration from a high school friend who did the same. Munz said in a tweet (Figure 1): "Got this text from a friend who I went to high school with in [sic] Humboldt." The tweet also showed a photograph of a hockey stick leaning on the porch and the message reads: "Leaving it out on the porch tonight. The boys might need it...wherever they are" (Mezzofiore) (Figure 2).

Figure 1. Brian Munz's First Tweet on April 8, 2018 with Photo of Hockey Stick.

Figure 2. Photo and Text Message Included in Brian Munz's Tweet.

Within two days, thousands of people from 104 countries tweeted the user created hashtag #PutYourSticksOut (see Figure 3) These photos and the hashtag were not commercial and not connected to any fundraiser or monetary compensation. Many of the messages discussed how the tweeters felt the deaths deeply. These public expressions emerged from the fictive kinship of hockey fans. People used the hashtag to demonstrate they felt part of a larger "hockey family" on social media, no matter what team they root for.

Figure 3. Location of Tweets Used #PutYourSticksOut Week After The accident.[1]

Why Was the Reaction on Twitter so Vast?

Why was there such a big reaction? Several factors may have made this reaction widely felt. Hockey playoffs which started that week in all the junior, minor, and major leagues resulted in an overall heightened awareness of hockey in general. The major league hockey playoffs, which lead to the Stanley Cup series, are a mega sports event. Viewership of the Stanley Cup games on television, not counting streaming services, can reach 4.8 million people, depending on the teams playing (Paulsen "Stanley"). While the number of people who watch professional hockey playoffs is smaller than the number of people who watch the Olympics (several hundred million) or the U.S. football Super Bowl (approximately 111 million

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[1] Source: Map generated from Twitter geocoded user location data using Google Maps "My Maps" feature.

viewers) (Paulsen "Superbowl"), a large number of people consider themselves part of the hockey fandom across multiple countries and are aware of hockey related news.

Something which may have caused the Humboldt accident to resonate is that most of those killed in the accident were teenagers or young adults. Deaths with a high symbolic value to a community often receive attention in the media. The unexpected deaths of people who are not yet adults can symbolize the future of society, making such deaths more likely to be ritualized (Pantti and Sumiala 24). As Candi Cann argues in "Virtual Afterlife," the death of children or young adults is more likely to be expressed through car decals or t-shirts (89, 95), something which can be seen by anyone exposed to the person visibly displaying those objects on their person or on their car or truck. While the hockey sticks put outside would not be easily visible beyond a person's neighborhood, now with social media, it is possible to perform grief to a large number of people.

A sensational manner of death or death in a disaster can cause someone to become known after death (Radford and Block 141). That members of the Broncos team died in a random and tragic traffic accident may have contributed to the wide reaction to the deaths because people cannot control tragic accidents. Additionally, many of those who tweeted about the Humboldt accident felt a sense of sameness with those who died. People who are parents of hockey players could possibly imagine themselves in the same situation with a child who plays on an organized team. Of those who posted #PutYourSticksOut, 4,301 users identified as parents in their user description, and they created a total of 6,429 tweets. Another way that people may have identified with the Humboldt team is as a hockey player. There were 511 tweets from 345 people who self-identified as hockey players.

Why did so many people perform this newly created mourning ritual? A reason to share grief online for someone in a parasocial network may be a sense of identification (Klastrup 6). One possible significant component is that the public expression of grief could express a desire to create or maintain their membership in the "hockey family." Being online lets people actively interact with others who have the same interests even if they are not in the same location (Radford and Block 142). Identifying as a fan of a specific sport or team helps mark a person's place within society. No matter the reported or unreported connection to hockey, many of those who tweeted about the Humboldt accident felt a sense of sameness with those who died.

Constraints on Expressions of Grief in Culture Today

As Cann observes in *Virtual Afterlife*, in the U.S. grief is not only unwanted in the workplace, it is unwanted in society (10). Most employers only offer three days of bereavement leave for a family member, and that is usually only for benefitted employees. Cann hypothesizes that public memorializations have increased because death is disappearing from our lives (xii). We are displaced from death, compared to people in the time before the late industrial revolution and the creation of the modern funeral industry during the U.S. Civil War (Cann 2). This is very different than in the nineteenth century, when it was acceptable to perform rituals related to grief for months or years, through clothing, decoration, and other objects (Carroll and Landry 342). Prior to social media, formal obituaries in newspapers constituted the preferred way of memorializing, making the obituary section one of the most lucrative sections of the newspaper and one of the most widely read (Carroll and Landry 341). Formal obituary notices notified a wide number of people in a person's social network and at the same time enabled a form of remembering the deceased (Carroll and Landry 342). In North America, the cultural expectation is that people should resume a "normal" way of life after a short period of mourning (Carroll and Landry 342).

Grief is so compartmentalized that it is no longer considered part of everyday life (Cann 10), and there is little opportunity provided in society for shared mourning (Cann 12). This in turn creates a need to express and perform grief in ways recognized by members of communities. Social media may provide a safe space to perform grief, especially grief which might be discouraged in other contexts (Klastrup 4). Another reason for so many online messages expressing grief in general is that it may be easier for some to practice grief online than offline in daily life (Christensen and Gotved 4). These issues may then contribute to the unique, grassroots public expressions of grief, such as #PutYourSticksOut and the connected images.

An increase in popularity of "grassroots" memorials and ways in which people remembered those who died began in the late twentieth century in the United States. These memorials and discourses help create meaning from death and also seek recognition for those grieving (Cann xi). While personal examples of memorials can include t-shirts or vehicle decals (Cann 89, 95), widely used social grassroots memorials such as roadside crosses (14, 22-3, 117) at the site of car accidents and ghost bikes at places where bicyclists have died also memorialize deaths (31-36).

Another example is The Names Project, also known as the AIDS quilt, in which people or organizations created quilt squares, which were added to other larger units to be displayed in public locations (The Names Project Foundation). In addition to memorializing a person, these performances of grief strive to make meaning out of death by promoting awareness, acceptance, and activism in the case of The Names Project, or bringing attention to dangerous locations to try to prevent deaths in similar circumstances in the case of roadside crosses and ghost bikes.

Social media provides another unique way to perform grief. These online activities can take the place of or supplement behaviors performed at cemeteries, funeral homes, and in religious services (Carroll and Landry 341). One proposed reason for online mourning rituals is that social media helps meet the psychological needs of those who are mourning (Carroll and Landry 341). Social media allows people to participate in mourning over a longer period of time (Sanderson and Cheong 329).

Discussion

New grief traditions form and become part of the public sphere (Cann 12). Online, these new grief traditions include social network memorials. The mass popular reaction on Twitter to the hockey team accident from people not directly affected by it is the type of reaction commonly seen online for famous people, like the musician Prince in April 2016, or for larger scale tragedies such as after the mass shooting in Las Vegas in October 2017. The performance of grief on social media such as Twitter shows a need for memorialization that goes beyond traditional mourning. Many want to mourn in the public sphere and be recognized as a member of the group allowed to mourn (Cann 126). Cann hypothesizes (128) that people participate in online mourning specifically because ways to mourn individually are not easily available due to lack of time off or are exclusive and leave some people out. Mourning on social media is both a private and public conversation (Cann 129). While we cannot ignore the fact that Twitter and other social media are commercial enterprises whose focus is data and advertising (Fuchs 80), even so they allow people to come together to form their own communities or calls to specific action, such as for Black Lives Matter. While it is capitalist media, social media enables expressions of agency and belonging in the online and larger hockey community, even if individuals are not fully aware that this may be a factor. This is in opposition to Habermas's idea that capitalist media messages are only created from the top

(Habermas 55), such as by the owners of the media platform and of the hockey leagues. Instead, this mass mourning showed unique and meaningful messages can be created from below by users of the media platform. Participating in online mourning may be a way for people to express their agency in a culture which is quick to dismiss the grieving process.

While formal mourning rituals can be performed by religious or governmental institutions, individuals can perform spontaneous mourning rituals, which Mervi Pantti and Johanna Sumiala call "civic rituals" (127). The posting of images created by individuals of hockey sticks left outside of doors or buildings with the #PutYourSticksOut hashtag is an example of a civic ritual. Media can share these messages, which allows more people to participate as well as feel a sense of community and compassion (Pantti and Sumiala 127). By showing these individually driven civic rituals, social media allows others a way to perform grief (Pantti and Sumiala 129). At the same time, the media displays of mourning rituals bring people together with a sense of belonging (Pantti and Sumiala 133). Avenues to explore in the future research on the performance of grief on social media include the unpaid social labor of Twitter users; how people use grief for advocacy; and analysis of images used in mourning rituals on social media.

The user created content of #PutYourSticksOut shows it is possible to break through commercial platforms to create meaning and take part in a ritual of mourning in a non-commercial way. This is important in cultures where people have a very limited amount of time to perform grief as individuals. But when the accepted opportunities to perform mourning rituals for those in one's immediate personal network (family, close friends) is culturally limited, it is acceptable to perform grief for parasocial connections on social media. By their reactions on Twitter, users created meaning for themselves and their online community.

During the April 2019 hockey playoffs at the junior, minor, and major leagues, teams actively commemorated the one-year anniversary of the Humboldt hockey team accident by creating and showing #PutYourSticksOut videos, photos, and social media posts. Hundreds of individuals also used the #HumboldtStrong hashtag as well as #PutYourSticksOut during the anniversary of the accident, although not in as large numbers as they did in 2018. The remembrances of the Humboldt accident one year later on social media are examples of "public memory," a shared memory that relates to the audiences of the message's common interests (Butterworth 205). Public memory is likely to be invoked in times of shared crisis (Butterworth 205), such as the sudden unexpected deaths of teens and

young adults in the accident. Public memory can be used to advance ideas of good public behaviors (Butterworth 205-206). Organizations related to hockey (teams, leagues), which could be seen as promoting hockey as much as remembering people killed in an accident, published the majority of the messages one year later. People in Canada, particularly Saskatchewan province, posted the majority of the personal messages one year later that used the #PutYourSticksOut and #HumboldtStrong hashtags. Based on tweets and official webpages at both the one and two year anniversaries of the accident, the event had not been monetized by the Humboldt Broncos or the junior league. While NHL teams performed public displays of #PutYourSticksOut at the one-year anniversary of the accident with photos and social media messages (see Figure 4), they did not observe the second anniversary of the event.

Examining mourning and grieving performances online in social media is a developing area of research. Social media may provide a safe space to perform grief, especially grief which might be discouraged in other contexts (Klastrup 4). Because of social media, the relationship between rituals and media has changed. It is possible to participate in virtual mourning and the creation of new rituals (Pantti and Sumiala 120) across economic, geographic, and social distances (Hjorth and Kim 554). Social media allows people to organize and create messages in new ways in addition to participating in parasocial networks that have meaning for the individual. Tweeting #PutYourSticksOut became a way to symbolically show membership in a community, in this case, hockey fandom. While social media may have negative aspects, the creation of #PutYourSticksOut offers a counter-narrative that demonstrates positive aspects of social media.

Figure 4. #PutYourSticksOut Image, Social Media Post During Washington Capitals (NHL) April 6, 2019 Game

Acknowledgements

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