

# Orienting to Networked Grief: Situated Perspectives of Communal Mourning on Facebook

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Contemporary American experiences of death and mourning increasingly extend onto social network sites, where friends gather to memorialize the deceased. That “everyone grieves in their own way” may be true, but it forecloses important questions about how people evaluate these expressions, their relationship to others who are grieving, and impacts on their own experiences of grief. Drawing from mixed-methods research conducted over five years, we describe how individuals position themselves within and evaluate expressions of networked grief. We start by identifying five orientations – reinforcing, supporting, transferring, objecting, and isolating – that describe how individuals evaluate actions of grievers, position themselves relative to the network, and act when they encounter grief. We then describe factors and tensions that influence how individuals arrive at these orientations. Based on our findings, we argue that the design of social media can be sensitized to diverse needs by adopting a situated perspective within a dynamic post-mortem network.

CCS Concepts: • **Human-centered computing** → *Social media; Social networks*; **Empirical studies in collaborative and social computing**; • **Social and professional topics** → *User characteristics*.

Additional Key Words and Phrases: death; social media; grief; memorialization; social network sites; Facebook

## ACM Reference Format:

Jed R. Brubaker, Gillian R. Hayes, and Melissa Mazmanian. 2019. Orienting to Networked Grief: Situated Perspectives of Communal Mourning on Facebook. *Proc. ACM Hum.-Comput. Interact.* 3, CSCW, Article 27 (November 2019), 19 pages. <https://doi.org/10.1145/3359129>

## 1 INTRODUCTION

Social media platforms like Facebook are optimized to share our life experiences with large networks. However, during moments of loss and grief, the social media sites we use to connect and share our experiences can also present new challenges. How does one appropriately respond when learning of the death of a distant grade school friend with whom they have long since lost touch? How does one make sense of the influx of messages following the death of a sibling? While Facebook can help us connect in ways that are supportive and celebratory, connections can also expose us and exacerbate our vulnerabilities.

Social networks play an important role in an individual’s experience of grief and mourning. The importance of social groups to funerary and memorializing experiences has been well documented in offline contexts, but both the size of the networks on Facebook, and the new memorializing

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2573-0142/2019/11-ART27 \$15.00

<https://doi.org/10.1145/3359129>

practices in which they engage, raise questions about how individuals relate to and engage with others following a death. In this paper, we demonstrate how people orient to social networks in relationship to their experience of grief.

People are driven to make sense of their own emotional responses and assess the appropriateness of their behavior in relationship to the perceived social structure around the deceased. Death makes visible how one sees themselves in terms of a network of people around the deceased. Death calls forth new actions, new emotions, and shifting orientations to a group of people that you may or may not have seen yourself as connected to prior to the death. Perception of social structure is shifting and subjective, conditioned by abstract categories and their position within the network. Those in the position of ‘family’ may be assumed to be central figures while those who express extreme forms of grief might be placed as more central than initially expected. Each individual associated with the network strives to find appropriate ways to express their own remorse and provide support to others. These goals must be met with an evolving understanding of how the grievers in a network relate to each other and the deceased.

Drawing from an ongoing research on the experiences of death and mourning in the context of social network sites (SNSs), in this paper we describe how people orient themselves and act in relationship to a perceived network of grievers. Based on the analysis of qualitative interviews focusing on participants’ experiences with Facebook following the loss of a friend, we find that people struggle to understand their experience and express grief in terms of the perceived social network around the deceased. Rather than take a top-down approach to the social structure, we use interview data to focus on how individuals orient themselves in relationship to each other based on their situated perceptions of the broader social structure.

We find that a person’s orientation to a grieving community emerges from the interplay between their emotional experience, relationship to the deceased and others who are grieving, and evolving understandings of appropriateness of others’ actions given their place in the network. Specific to our data, we find that individuals *reinforce*, *support*, *transfer*, *object*, and/or *isolate* from the grieving network. These orientations describe how individuals respond to and are impacted by the practices they observe within the larger community and how their assessment of these practices impacts their own understandings of their grief, and subsequently how they should act and feel.

Finally, we describe how our data indicates that people adopt an orientation as they assess and relate to a community of grievers. We present a process model that highlights factors identified in our data as people encounter, situate, and evaluate others’ behavior and position within a network. Our approach is instructive not only because we discuss how orientations are co-constructed in relationship to dynamic social structures and actions, but also because of how it highlights ways that grief can both perform a network and redefine it.

Our paper makes two contributions to both social media scholarship and literature on death and bereavement. First, our study describes how people determine what is appropriate funerary and memorial behavior, particularly in the expanded social contexts that SNSs enable. Second, our findings stress the importance of understanding relationships as more than fixed roles, but rather dynamic relationships that are established relative to an individual’s place within a network.

## 2 RELATED WORK

The expansion of grief and memorializing practices into social network sites necessitates a rich understanding of how individuals orient themselves to both the technological space and the social network with whom they share this space. To situate our contribution, we briefly summarize existing research on postmortem practices on social network sites, the impact of these practices on individual and communal experiences of grief, and related work in the fields of CSCW and HCI.

Building on scholarly arguments about a shift from private to communal forms of grieving, we seek to consider how individuals orient themselves to the communal practices in social media spaces.

## 2.1 Grieving Online

Existing literature of online grief provides a history from obituaries posted to “virtual graveyards” [44, 45] to the memorialization of loved ones on their SNS profiles. Unlike cybermemorials that often appeared on isolated websites, the continued presence of a user’s profile on SNS following their death [4, 8, 22] situates memorializing practices and the dead in the broader context of our daily lives [5, 50].

Much of the work on post-mortem social networking highlights how social network sites enable a broader network to participate in online funerary practices — a phenomenon termed “social expansion” [5]. A number of studies highlight a strong tendency for messages to address the deceased [4, 6, 12, 22, 23] and maintain a continuing bond with the deceased [19, 23] through “post-mortem social networking” practices that blend social media and funerary genres of communication [4]. The deceased’s profile provides a place where survivors can engage in what was once private communication in now broadly public social media spaces [4, 8, 9, 50].

The overall impact of SNS memorials remains unclear, particularly as social media platforms and individual practices continue to evolve. However, researchers generally laud the potential of SNSs to provide spaces where those grieving can gather. Carroll & Landry, for example, argue that online social networks empower those marginalized by traditional memorialization [9]. The availability of social media to engage in memorializing behaviors may empower “disenfranchised grievers” [13] who may not be included in traditional forms of memorialization but can participate online [9].

Of course, experiences will vary, and there are some indicators that experiences in these spaces are nuanced and depend on one’s individual circumstances. For example, one study of post-mortem MySpace comments found that 12.5% of comments include expressions of “emotional distress” [7] that may indicate “acute grief reactions,” a clinical marker of mourning [42]. Likewise, others have questioned whether online services, motivated to encourage user engagement, might extend mourning indefinitely [35].

Like all new forms of communication, public expressions of grief on Facebook come with new risks. For example, strangers — called “grief tourists” [30] or “emotional rubberneckers” [12] — sometimes involve themselves in objectionable ways due to the public visibility of these memorial spaces on Facebook. In the most extreme example, but regrettably not unheard of, Philips documents cases in which anonymous users intentionally posted offensive content into public memorial Facebook groups as a means of “trolling the dead” [41]. These controversial engagements occur not only for publicly deceased people, such as those who are famous or who die as part of a larger tragedy like a mass shooting or natural disaster, but also in relationship to relatively unknown deaths.

## 2.2 Communal Grief

Beyond individual experiences, one of the foremost research questions in death studies asks how the Internet is changing the ways we mourn. Scholarship on grief and bereavement prior to the Internet highlights cultural and societal differences. For example, Anglophone societies typically expect grief to be expressed in private [48]. Walter explains that in every society, “the expression of grief is regulated by conventions and rituals which indicate how, and how much, mourners should speak about the dead and express their feelings” [49, p. 101]. While norms around grief and bereavement are culturally specific, historically, family norms and dynamics have been the primary factors that shaped individual experiences of grief. As death was primarily experienced within the

context of a family, the needs of individuals within family units produced the localized set of rules around which family members oriented to their shared loss.

The Internet has provided new spaces in which people experience loss and express grief, presenting a challenge to historical norms where death and the dying were “sequestered” from daily life [34]. Scholars in death studies have argued that SNSs may be “desequestering” death by facilitating a re-emergence of communal forms of grief last seen in the co-resident living arrangements of the pre-industrial era [50]. Communal forms of grief are made possible on SNSs through two related developments: First, unlike an obituary or traditional memorial, online memorials are interactive. When individuals encounter displays of grief on SNSs, they are able to participate by providing support or expressing their own remorse. Second, even when SNS memorials are made private, they are situated within a social network that can collapse the various facets of the deceased’s life into a shared space [5, 50].

Walter and his colleagues [50] link the reemergence of communal grief to the larger question in cybersociology about whether the Internet fosters social isolation or community [28, 43, 46]. While limited, the research in death studies suggests the Internet facilitates community more than isolation [50], although as noted in previous work [5], individuals may object with how SNSs unexpectedly include them in communal practices. Our understanding of these communal spaces is limited, in part, because the majority of existing literature depends on analyses of visible content (see [5, 9, 23, 40] for exceptions). As such, findings only represent those who participate in post-mortem social networking practices that are visible to researchers, such as posting a message on a deceased friend’s profile page. Yet “listening” is a key form of participation in online spaces we should not overlook [11], and work to date suggests it is common in this context [9, 40]. One survey, for example, found that while 60% of participants had visited the profile of someone who had died, only 10% had contributed a message [9].

Although these questions have traditionally been asked in the context of death studies, the growing body of literature in HCI and CSCW indicates the clear need for and interest in questions of grief and memorialization for CSCW researchers as well. Knowing why people choose not to contribute content is just as important as understanding what motivates those who do, questions that emerge well beyond the context of death but are particularly salient here. As such, in this work we turn to interview methods to understand individual’s situated relationships to those grieving and the social network in which these emotions are shared.

Individuals may assess the benefits and risks of these spaces differently, a concern of nearly any collaborative system. However, their assessment is contingent on their understanding of the audience in this space and what types of information an individual is comfortable sharing and feels is appropriate. Simply put, the community in which communal grief occurs is changing online. The regulation of appropriate behavior that was historically negotiated within the context of a family unit now sits within a larger community in which needs are less apparent. As such, we seek to outline a situated account of how individuals make sense of expressions of grief on SNS, the social network in which these expressions exist, and finally, how they choose to orient themselves to the network that is grieving.

### 2.3 Designing for Grief and Memorialization

In the context of HCI and CSCW, a variety of efforts have been made to specifically address issues of grief and memorialization in design. Theoretical contributions have argued for the adoption of “thanatosensitive” [32] and “life-span oriented” design [33]. Design and user research has been conducted focusing on the construction of memorials [15, 16, 47], online bereavement support systems [31], digital heirlooms [25, 38], personal and family archives [24, 26, 39], and hospice [14].

The majority of this work has only dealt with social media tangentially, with four notable exceptions. Moncur and Kirk's design framework for interactive digital memorials certainly applies to social media spaces [36]. Related to our current argument, they argue that Web 2.0 services have strongly impacted the audience of online expressions of grief and they stress the importance of considering audience in the design of digital memorials. A broad expectation of this work, however, is that interactive memorials will be proactively designed as such, which is largely not the case with social media. The memorialization practices on Facebook, for example, occur in existing spaces that are reappropriated for memorializing practices. Facebook profiles were not historically designed as memorials, but through their affordances were made amenable to memorialization practices. Facebook has moved to support these memorialization practices through the introduction of Legacy Contact and a redesign of Memorialized Profiles [3]. However, these features still focus on supporting memorialization practices in what are otherwise reappropriated spaces.

Scholars have made recommendations for social media based on different use cases. Differences have been proposed based on generational differences in post-mortem social networking behavior and representations of the deceased [29]. Likewise, recent work has looked beyond profiles to make recommendations about the comment threads following celebrity deaths [18]. Finally, Mori and his colleagues performed a systematic comparison of the affordances of three social media platforms and detailed their ramifications post-mortem [37]. They produced a laudably practical set of design considerations such as preserving the profile customizations made by the deceased pre-mortem, and balancing the needs of the bereaved and strangers.

Even when design recommendations do engage with social media platforms, they tend to collapse survivors into simplified types of users (e.g., everyone will want to share stories of the deceased), or advocate for an elusive flexibility in order to let everyone grieve in their own way. Designing a post-mortem profile is possible [3], however, existing solutions may not account for the diversity of ways individuals may engage with these spaces or the ways that expressions of grief increasingly move beyond profiles and extend throughout SNS platforms [5].

In this work, we consider the implications of expressions of grief on SNSs. Rather than consider the specific design of memorials, archives, or support groups, we focus instead on ways that individuals orient themselves to communities and networks when experiences around death and expression of grief become part of their everyday social media practices.

### 3 METHODS

This article is the result of an analysis of data collected via mixed methods inductive research conducted over a period of five years. This paper focuses on the results from an analysis of interviews conducted during that time with individuals who have had a variety of experiences and encounters with death and mourning on Facebook. Our overarching project has focused on understanding the experiences people have with post-mortem profiles. However, during the course of our research, we noticed participants had conflicting opinions about what types of behavior is appropriate on post-mortem profiles, and by whom. How do we make sense of the stranger who actively posts on the deceased's profile while a cousin is concerned that posting would be an inappropriate imposition on the family? It may be true that "everyone grieves in their own way", but online they rarely grieve alone. As a result, we sought to understand how individuals orient themselves, their feelings, and their actions to others while engaging in online grieving and memorializing spaces within Facebook.

The interviews analyzed here are drawn from several data collection efforts, including a broad exploratory study of encounters with death and grief on social media [5], a study of post-mortem data-management [2], and longer term engagements with networks of friends and family who have lost a loved one. We recruited participants in our exploratory study through our personal networks

and snowball sampling, while participants in our study of post-mortem data management were recruited through invitations posted to social media. Our final data collection effort focused on recruiting groups of people with intentionally varied connections to the deceased. We recruited individuals who were managing post-mortem profiles, with whom we then conducted a series of interviews over a one year period. In addition, to understand how differing relationships impacted how people related to the post-mortem profile and others, we used snowball sampling to recruit people with both close and distant relationships to the deceased. All interviews shared an in-depth and open-ended portion in which participants detailed their relationship with the deceased, their experiences surrounding their death (both online and off), and the role that the broader social network played on Facebook.

Collectively, our interview data consists of 67 people (32 men, 35 women), aged 20-59, from across the United States, totaling over 110 hours of interview data. Twenty-two of these participants were interviewed as part of twelve “networks” with a shared loss. Across these networks we interviewed 2-6 participants. In addition to interview data, our analysis is supported by SNS content and artifacts (e.g., profiles, messages, photos, etc.) collected both via our participants and throughout the course of this project.

We adopted an inductive orientation to data analysis using grounded methods [10, 21] as the authors collaboratively iterated through cycles of coding, memoing, discussions, and theory development. We started with an empirical analysis of the interview data to identify the types of communal engagements that networks on Facebook enable (e.g., “providing support”, “augmenting togetherness”, etc.). Using these categories of social engagement, we then analyzed how individuals evaluated their own and others behavior relative to these communal functions in order to arrive at the five orientations individuals adopt (e.g., “supporting”, “isolating”) that we report below.

Finally, we engaged in a secondary analysis of the orientations to better understand how individuals make sense of their position within a shifting community of grievers in online spaces. We worked backwards from orientations to identify factors in our data connected to people’s evaluations of behavior. We paid close attention to instances where people were uncertain about what was most appropriate and where people changed how they evaluated the behavior of others. The process we present (see Figure 1) was inductively developed and then, taking inspiration from the constant comparative method [20], refined the model through comparison with specific accounts in our data.

#### 4 ORIENTATIONS TO EXPRESSIONS OF GRIEF

In our findings, we introduce orientations as a way of describing how one relates to a grieving network on Facebook, and in turn encapsulates one’s understandings of and actions relative to the network. We identified five orientations people adopt towards the network: *reinforcing*, *supporting*, *transferring*, *objecting*, and *isolating*. The orientations are not mutually exclusive, and the distinctions we make between them emerge from a desire for analytical clarity. Notably, these orientations are also not prescriptive. They do not tell us precisely what people might do given a particular context. Instead, they represent the kinds of warring “messiness” all humans see and feel within themselves as they navigate the challenging world of online grieving. Indeed, many of these orientations represent the push and pull of sociality around death that one might see in a pre-Internet world. In today’s technologically integrated environments, however, we see these orientations nudging people’s behavior within the context of the greater reach and immediacy of online social network platforms. Drawing from empirical data, we describe each orientation below. Following our description of the orientations, we present a model outlining the process by which people orient to and in essence ‘create’ an emerging network.

#### 4.1 Reinforcing

Participants often described turning to others in online spaces as a way of reinforcing their own relationship with the deceased. Facebook provides people with a way to share their memories of the deceased with others. Consistent with literature about the way that a community can support the “continuing bonds” people maintain with a deceased loved one [27], individuals who take a reinforcing stance to other grievers actively engage with others who are expressing grief in order to affirm their own relationship with the deceased. Often this leads to a sense of connection with the emerging network of grievers.

Our data includes numerous scenarios in which participants recognized the potential of online spaces to deepen their own relationship with the deceased through interactions with others. This often occurs when individuals encounter messages from others on the deceased’s profile. Nina, for example, was unable to attend her cousin’s funeral across the country. However, she was thrilled to find messages posted to her cousin’s Facebook profile by friends in attendance on the day of the funeral: *“And those messages were so touching,”* she summarized, *“and they never failed [laughs] to make me cry, actually.”*

Participants described interactions with others and their content as a way of engaging with their own relationship with the deceased. Some participants, like Laura, even created Facebook groups specifically to allow people to gather online:

I first made it [the Facebook Group] and... I just sent it to everyone of my friends who knew Jack and said, “This may not be for everyone but it’s a place where we can get together and discuss him and tribute him and leave sunny stories and pictures and a place you can go when you miss him; to not feel alone.”

While this orientation results in an increase in communal interaction, it is very much motivated by a personal and emotional desire to connect with others who care about the deceased. The inability to share with others who can relate to one’s loss was a challenge we observed in our data, and may be particularly important when individuals are isolated from others who are also grieving. Laura explicitly links her own emotional challenges to the creation of the social space on Facebook:

[Jack’s] death really was very hard on me... I mean for years I was crying all the time about it and couldn’t hear songs that remind[ed] me of him. [I] just could not cope or get over it... I would see kind of his spirit or his imagery in a lot of things in my day to day life and felt like I had no one to share that with... And it made me feel very alone. I knew there were so many people, I’m sure, who felt like me – who also felt alone out there and unable to share with... the people in their day to day life what they were feeling...

SNSs also enable new ways to reinforce connections with a group of people who care about the deceased. This was certainly the case for both Nina and Laura. These new avenues for memorialization can impact how both grief and community are experienced.

Nina’s regrets about her absence at the funeral stemmed from more than her individual sense of loss. Coming from a close-knit family, she also felt an obligation to attend that stemmed from her structural position to the deceased (she is ‘family’). However, the online space provided Nina an outlet for her own desire to connect as well as better insight into how others were supporting her extended family. Talking about the broad social network posting content on her cousin’s Wall, Nina explained that:

It sort of crystallized what kind of sort of circle of friends that Yumika had. Also it made me feel a little better about me not going, me not really attending her funeral...

The posts made me realize that Yumika's family is supported by a bunch of people. So... [I was] a little relieved about that.

In Nina's case, family pressures assumed a set of social norms that dictated how Nina felt she should act. However, by engaging in shared grief outside of the context of the funeral, Facebook allowed Nina to reinforce her position to a deceased family member while gaining insight into the other social groups who were grieving Yumika.

A desire to grieve, connect, share, and remember the dead motivates taking a reinforcing orientation. Reinforcing becomes part of the grief experience. This orientation tends to result in an egalitarian view of how Facebook could be used to engage with a community of grievers: everyone can benefit from such a community and those who are uninterested can leave. Accordingly, although many of these participants were aware that not everyone might wish to participate in these spaces, few sensed that others might be exposed to this content unexpectedly, or even find the communal practices offensive.

## 4.2 Supporting

The size of social networks on Facebook means that it is not unusual for people to learn about the deaths of casual acquaintances and witness the intimate expressions of the loved ones they leave behind. In many cases, these may be deaths that the Facebook account holder does not personally grieve. However, these new avenues of exposure to others' grief suggest shifting norms of obligation and support.

A supporting orientation describes those who, despite not knowing the deceased or experiencing deep grief, want to engage with the surrounding network to provide support to friends with whom they are more closely connected. Supporting thus involves engaging with grieving spaces to provide care or understanding to those who are more directly affected.

In our data, we most commonly observed a supporting orientation with people who shared experiences surrounding the death of a friend's friend. The ways individuals choose to engage is shaped by the desire to support their friends, and subsequently by their friends' experiences and evaluations of others' behavior.

Facebook can be a way to learn about the deceased to gain insight into a friend's loss and possibly provide direct support. Marcus, for example, described first receiving notifications in his Newsfeed about the messages posted to an acquaintance's Wall, but gradually found himself:

...interested in finding out more about this person, not so much because he had died but because of all of these other people I knew who were so affected, and just sort of trying to understand what was affecting them and what they were going through.

A supporting orientation is held by those individuals who are conscious of the current emotional state of their friends. During interviews, those taking a supporting orientation described a desire to attend to the needs of their friends. This in turn creates a need for them to balance the desire "not to impose" while fulfilling a perceived obligation to provide care. Thus, choosing how to support is tied to an individual's position in the network and is informed by the norms they associate with that position.

Likewise, a supportive orientation may only extend to a portion of the network. Molly, for example, reflected on the conversations she had with her sister after the death of a mutual (but distant) friend, to whom Molly's sister was more closely connected. Support in this case did not involve supporting her sister's grief, but rather empathizing with her sister's objections over how others were grieving online:



... seeing stuff [expressions of grief] come up... it was really emotional and Samantha [sister]... doesn't necessarily, like, want to be involved in that and so she's like "Oh", like "this is like too much," like "this is too much. I got to keep moving on with my life."

Molly's involvement on Facebook only extended to the point of understanding the type of messages that were being posted so that she could provide support to her sister. Her supportive orientation did not extend to the needs of those who were actively posting content on the deceased acquaintance's Wall.

People may be connected to a grieving network but not feel a personal sense of loss. In these cases, people may adopt a supporting orientation towards their friends. How they choose to engage, then, is motivated by these relationships rather than the deceased or their own sense of loss.

### 4.3 Transferring

A transferring orientation describes those who are motivated to provide care to others that they may not know well, but with whom they share a mutual connection to the deceased. Unlike a supporting orientation in which participants are focused on the impact of the loss on close friends and family, a transferring orientation involves focusing on new or emerging relationships that have been made visible by a mutual connection to the deceased.

Transferring refers to the ways that people may feel obligated to provide support to others based on their relationships with the deceased. In lieu of reinforcing their connection bond with the deceased, some participants focused on the needs of others—effectively transferring interpersonal obligations from the deceased to those around them.

In our data, transferring orientations frequently occurred when participants described a desire to provide care to their deceased friends' parents or family. These desires were often related to common offline practices, such as paying respects or sending letters of condolence. Kevin, for example, when describing the death of a college acquaintance, explained that he did not feel any need to write a message to his friend on Facebook, but did want to acknowledge his death to those who were most impacted: *"I think it's just the same way [as] if you want to like send a card to the family."*

However, a transferring orientation may be impeded by others who are grieving differently. Kevin talked about offline ways of paying respect to the family, notably by attending the funeral. However, because the messages he saw on Facebook were intimate and directed towards the deceased, he was unclear about how he might pay his respects to the family online:

'Cuz I feel like the norm... is that people are writing to the person [deceased]. Like if you have all these people that are talking to him, and then there's this person saying, "Our prayers are with the family" or something like that. I just feel like it would jump out... I don't really have anything to say to Mike, Mike's dead, but I kind of want to be like Mike, I hope your family is doing okay.

In some cases, participants turned to private Facebook messages to communicate their condolences independent of the visible activity on the Facebook profile. However, when family members were active on the deceased's Facebook profile, participants described new ways of providing care. Sahar described the death of her friend Charlie, and the content others — especially Charlie's mother — post to his profile:

It's become a way to keep him alive, I think, for her... but the way that she uses it... I don't think she's keeping him alive for anyone other than herself, but that might explain why she has been invested in the page.

Not close with Charlie's mother, Sahar admits that her assessment is speculative, but she sees this mother's posts as evidence of the need for support. When asked about the content Sahar posts she was quick to explain: *"I don't post things to his page. I 'like' things..."*:

So for me when I "like" things it's more about showing support to the people who are posting that stuff and less about remembering Charlie... it's about being like "I hear your pain and I recognize it and I validate it."

These kinds of engagements might equate to a pre-Internet world of subtle head nods, arm pats, and meaningful looks. However, Sahar would have been unlikely to have the opportunity (nor the obligation) for such gestures given the distance from Charlie's mother. Sahar does not know all of the people who post content to Charlie's page, and while she met Charlie's mother at a memorial service and they have since become Facebook "friends", they certainly are not close. However, as posts from Charlie's Wall show up in Sahar's Newsfeed, clicking "like" is a quiet but visible way of communicating her support and providing care to those Charlie has left behind. In this way, we see both the additional opportunities to provide this kind of care, but we also see the additional burden of the emotional labor imbued in these obligations.

In contrast to a supporting orientation, those who adopt a transferring orientation connect with others through their relationship with the deceased. While the degree of involvement varied in our data, individuals described motivations based on their connection to the deceased and the need to care for those their friend has left behind.

#### 4.4 Objecting

Given the substantial additional labor of the supporting and transferring orientations, not to mention the mental and emotional burden of just experiencing someone else's grief, it is no wonder that in some contexts, people choose to reject these practices. Specifically, when exposed to the various mourning practices on Facebook, people sometimes object to how others express grief. Some participants objected to how bereaved individuals leverage the SNS as an outlet for their grief. Others felt that people should grieve how they want to, but objected to how expressions of grief moved throughout Facebook, blaming the platform rather than the mourner. Across these specific practices, a person taking an objecting orientation is distancing him/herself from those who are grieving in order to counteract obligations they feel to others when exposed to their pain.

Expressions of grief can be intimate and raw, regardless of the outlet. On Facebook, such expressions can be jarring and unexpected to those not expecting to be confronted with the depth of others' loss. Unlike social arenas where grief is expected (e.g., a funeral, support group, etc.) witnessing despair and loss sprinkled in with other, more mundane, posts can be unnerving and disturbing [5].

This was the case for Catherine, who related a struggle with a professional acquaintance who was grieving publicly on Facebook. As a social media professional, Catherine described this woman as *"one of literally thousands of people"* who were fans of her work. Catherine described her horror at discovering the death of this woman's child via the Newsfeed when this acquaintance *"changed her profile picture so that it was a picture of the baby that she had just delivered who had been stillborn."*

While encountering a picture of a dead newborn can be jarring to people checking Facebook for the daily news or social engagement, changing profile pictures to deceased loved ones is an increasingly common practice. Likewise, changing one's profile picture is a common way to show solidarity or support, often with a social or political issue, further muddying the meaning of such a change for a friend who does not know why the picture changed. This can present some issues to those uncomfortable with the content of the profile picture. As Catherine explained:

...she would post continuously. Every single time she updated her status I saw this picture of this dead baby [in my Newsfeed]... And you read things like that and you are like, “ugh”... ‘Cause you know that person is, like, in the worst place...

Facebook algorithmically spreads content throughout the network in ways that may seem indiscriminate. These features of the system exacerbate the apparent randomness of undesired exposure to grief. After repeated and unexpected encounters with this woman’s updates in Catherine’s Newsfeed, she described this woman’s posts as “*confrontational*.”

Catherine’s experience provides an example of objecting to what she felt was inappropriate behavior. Objection can also emerge from more personal sources. Witnessing others’ grief can cause a person to re-assess their place in a social network and relationship to the deceased. This was the case for Katrina, who spoke with us about the hospitalization and death of a high school classmate named Zoe. Katrina was not Facebook friends with Zoe. However, after her death, Zoe’s sister signed into Zoe’s Facebook account and friended everyone in Zoe’s graduating class. Katrina accepted the friend request out of habit, only to be thrust into a funerary scenario. Katrina shared her discomfort with content that appeared, first, on the Zoe’s Wall, and then in her Newsfeed:

[There were] tons and tons and tons of posts from her very close friends... And I haven’t seen her since high school... I hadn’t had any interaction with her... and was just a little freaked out, I guess.

Objecting suggests one way in which individuals are impacted by the content they witness on Facebook. As opposed to other orientations to an emerging network of grievers, Katrina’s comments suggest a desire to avoid interactions with those affected by this death:

I don’t have any reason to be her friend other than like a voyeuristic reason of wanting to see what other people are posting, and I don’t feel like I need or want that necessarily... I felt like it was very intrusive to see these [messages]. I felt like I was intruding, if that makes any sense.

Participants who expressed objection toward a network around the deceased never described raising their objections to the bereaved directly. They were often unsure how to act and deal with the discomfort provoked by exposure to others in distress. As Catherine explains:

I didn’t want to hide her [profile content from the Newsfeed] because it seemed kind of rude... Maybe I would have felt different if I had actually known her, but... there’s only so many times a day that you wanted to be confronted with somebody else’s incredibly awful horrible morbid thing... but we didn’t have the kind of relationship where I felt like I could confront her...

Participants in these scenarios often spent a lot of time during their interview trying to justify their feelings and subsequent actions. Participants did not suggest that grieving communities should not exist, simply that they themselves should not be part of them.

Those who object to expressions of grief may do so as a result of Anglophone cultural norms that sequester death [48]. However, it is notable that objections either focused on the person expressing grief or the platform disseminating their grief. In other words, participants had ideas about who or what was responsible for violating that sequestration.

#### 4.5 Isolating

For a variety of reasons, people may not want to engage with the network of grievers while mourning a loss, a state that can exist for a moment, for the entirety of the loss, or as a default position no matter who they are mourning. Witnessing others’ grief can be taxing [17]. Likewise, the obligatory niceties required when on the receiving end of people’s condolences can be challenging.

Given the size of the networks on Facebook, and the tendency for death to reactivate dormant relationships, the amount of engagement on Facebook can be significant — particularly as social norms may (as we saw earlier) encourage others to reach out to those closer to the deceased. Isolation is a way to directly combat a sense of over-exposure one might have following a loss.

People who adopt an isolating orientation privilege their own emotional needs and relationship with the deceased above relationships with the broader network. Unlike objectors, those who isolate themselves from the network of grievers are close to the deceased and the recipients (or potential recipients) of support and care.

Despite the growing prevalence of communal grieving online, some still prefer to grieve in private. However, the size and diversity of one's social network may result in messages from a variety of people that threaten this privacy. Henry, for example, related his reasons for wanting to keep interactions about the death of his father off of Facebook. This required him to closely monitor his own Wall for sympathetic comments:

When my father passed away, I didn't want people to know... I had just moved to a new city and I was already having a tough time with other things in life and I just didn't... I wanted my loved ones and really close friends to know that this had happened, but I didn't feel like I needed to write an email or post it on Facebook... *especially* on Facebook... If somebody had made a comment about it, if somebody had found out like a relative and posted something on [my] Wall, [I] quickly deleted it...I don't want somebody asking me about if I miss my dad on Facebook... I use it as a very casual tool; it's not personal.

For someone interested in mourning privately, Facebook can complicate the desire to control where, when, and with whom they share their grief. Messages of support on Facebook are often indiscriminately public and can invite unwanted attention, even when posted by an inner circle — in Henry's case, his aunt. Deleting messages allowed Henry to have some control about when and how he grieved.

While in some cases, an isolating orientation can be a means to maintain privacy, for others, it allows them to prevent the network from amplifying their own deep sense of loss. When talking with Cassie, she explained that many experiences on Facebook seemed like updated versions of her experiences with LiveJournal surrounding the death of her younger sister. A teenager at the time, Cassie described being traumatized by the loss and her inability to engage with her grief in yet another place. *"You know, I honestly didn't read them,"* she confessed while sharing some of the online messages left for her sister. *"I was just really upset for a long time... I guess I still am, but not to the same degree... So I just couldn't read them."*

For some, isolating might involve a careful moderation of information that flows through Facebook. For others, isolation involves removing oneself from the social space entirely. To avoid reading the messages left for her sister, Cassie avoided the page all together.

Individuals adopt an isolating orientation when their own needs either preclude them from providing support to others, or the network problematically amplifies their loss. However, in many cases isolation may not be possible even when one desires it. Over the span of this project we have noted a growing expectation that close friends or family members participate in and manage spaces like the Facebook profile. It is important to note that those who adopt an isolating orientation are most frequently close family members who might be obligated to fill this role.

## 5 DISCUSSION

Following a death, individuals determine how to act on Facebook based on their relationship to the deceased, the network of other grievers, and their own grief. The five orientations we presented

above describe the kinds of tensions and responses people experience as they evaluate others' actions, their relationship to other survivors and to the deceased, and ultimately determine their own course (or courses) of action. We name these "orientations" because people may frequently pivot between them. They orient themselves to a variety of contexts both internal to their own psyches and externally defined by social relationships, technological features, information shared, and communication and societal norms. What is deemed appropriate one day may be horrifying the next; what is acceptable for one relationship may be abhorrent to another.

Analyzing *how* people come to each of these orientations, and how they adapt and evolve over time, reveals an underlying process by which people situate themselves within an emerging and shifting network of people brought together around death in online spaces. Specifically, our data indicate that people attend to their own emotional experience, norms of grief and Facebook, and the structure of the network when making an assessment about appropriateness of others' behavior. Such assessments then influence how individuals position themselves in terms of a shifting network of people and the concomitant emotions and actions they feel are appropriate to express to the group.

In this section, we present a model that describes a conceptual process by which individuals come to an orientation. Social networks "happen" (emerge, shift, etc.) during intense times and in new social spaces, and particular encounters with these dynamic networks shape the responses people have to others in the network and to their actions. Our findings point to a reciprocal relationship between how individuals make sense of others' actions and their own experience of grief — both of which are impacted by a situated perspective of the network structure. Our model also reveals how individuals make choices about how to act. These choices in turn impact the content they see (e.g., new encounters) and how the network, at least from their perspective, "happens."

Our model (see Figure 1) is presented from the perspective of an individual encountering expressions of grief and orienting towards the grieving network. Orientations are a dynamic and continuous process that emerges through repeated cycles through this model. For clarity, we presented our model as a cyclical process. However, in practice, individuals may move back and forth throughout these steps, and even anticipate future steps and their outcomes when making sense of their relationship to others and the broader network.

### 5.1 Encounter

An individual encountering another's expression of grief precipitates the dynamic process of orienting to networked grief. Encounters happen throughout Facebook. Individuals may intentionally seek out encounters (e.g., people deliberately visiting the profile), but an unexpected encounter grieving content in decontextualized spaces (e.g., Facebook Newsfeed) is common as well.

### 5.2 Situate

Once an expression of grief is encountered, individuals cannot help but make sense of it in terms of their understandings of self and of other in relation to a perceived sense of the network. In other words, they orient themselves and the other person in relationship to their understandings of the network structure at that time, in that place, and with the knowledge they have at hand. An individual locates the other in the network structure based on the individual's relationship to this person and their own relationship to the network. Is the other someone who is "like" the individual? Is he or she put in a privileged position, such as 'family' or 'childhood friend'? Each of these structural categories, placed on both the self and other, affect how the individual will evaluate the expression of grief in terms of emotional content, and appropriateness.

Thus, this process is informed by social norms the individual holds for grief (e.g., should expressions be private or communal?), social structure (e.g., next of kin are closer to the deceased than

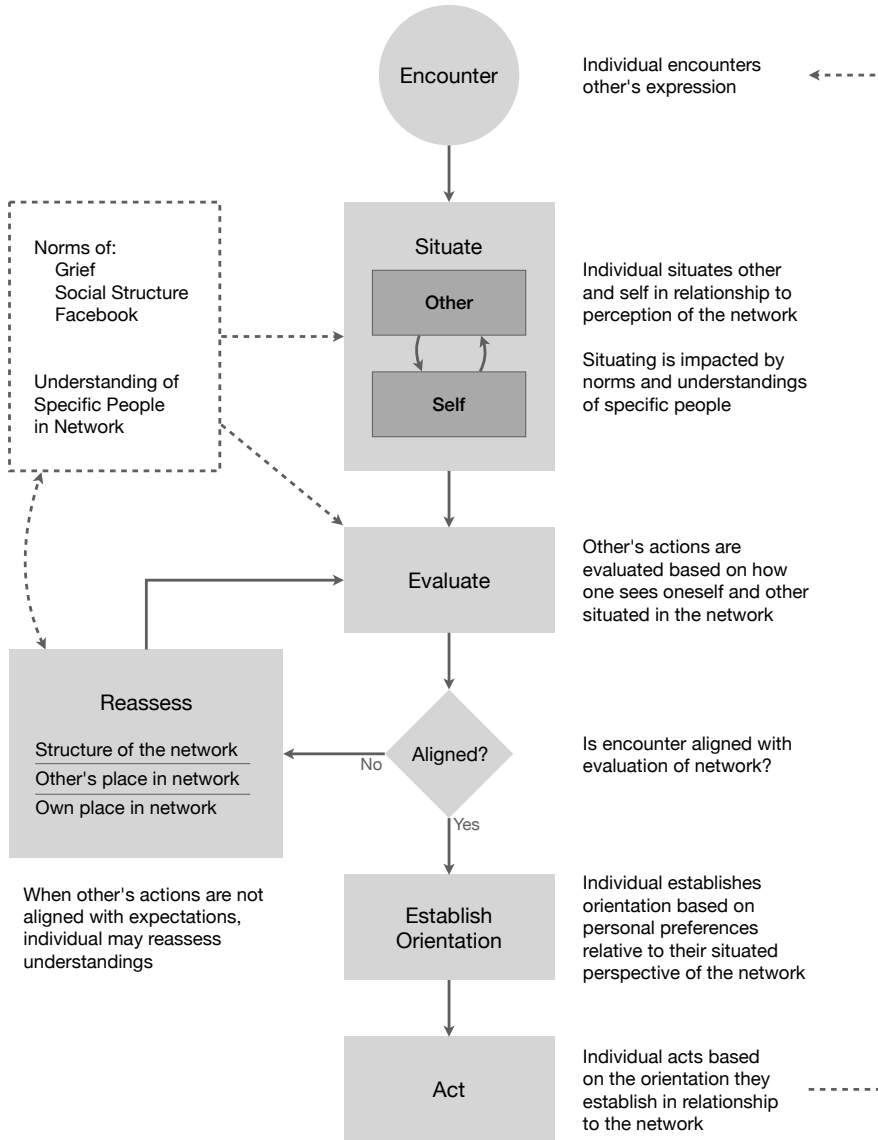


Fig. 1. Model describing a process of situating and orienting oneself to expressions of networked grief.

acquaintances), and appropriate uses of Facebook. Likewise, knowledge about specific individuals in the network impacts how the individual situates him/her self in terms of both the network and the other (i.e., “Aunt Martha is always over the top so I’m not going to compare myself to her.”) In the absence of personal information about the griever, generalized norms around grief and

appropriate use of Facebook take their place to create a generalized sense of ‘how one should act in this space.’

### 5.3 Evaluate

An individual’s perception of a network emerges from a specific point of view, which is always partial and changes with additional information. The individual evaluates the expression of grief based on this understanding of the network, and the situated location they and the other hold in it. Again, this process of assessment is influenced by the norms an individual has learned for appropriate behavior both on Facebook and grief more broadly.

The content to which an individual is exposed may be highly aligned with an existing understanding of the other, who they are, and their perceived location in the network, and therefore unremarkable. However, when content does not align with expectations this challenges the individual’s view of the author and the network relationships. This misalignment leads to a reevaluation of their understandings of self, other, and the network.

If the other’s behavior is aligned with the individual’s understanding of who that person is in terms of the network structure and how one in that position should express grief, the individual begins to establish an orientation toward the network. However, when things are not aligned, the individual must reassess their assumptions.

### 5.4 Reassess

Misalignment leads to reassessment of how the individual and others are situated in the network. For example, expressions of deep remorse can indicate a close relationship to the deceased (e.g., “Dan is really upset... Maybe he was closer to the deceased than I thought”), thereby influencing the individual’s understanding of how people are situated in the network. Similarly, individuals may reassess assumptions about the overall structure of the network. Encountering statements from the deceased’s distant acquaintances may prompt one to adopt a much broader view of the network.

The process of assessment is influenced by the norms an individual has learned for appropriate behavior on Facebook and grief more broadly. However, reassessment can also motivate an individual to reassess their understanding of these norms. For example, while one may believe that Facebook is too casual of a platform for weightier topics, encountering a sensitive and thoughtful expression may cause an individual to reevaluate this assumption.

Reassessment and evaluation is a cyclical process in which the understanding of the network and individual’s places within it iteratively evolve. Once an individual’s interpretation of the encounter is brought into their understanding of the network, they can establish an orientation in relationship to the network.

### 5.5 Establish Orientation

Individuals establish an orientation in relationship to the network once they understand what is ‘happening’ in this online space. One’s specific orientation to this emerging network of griever emerges as a result of situating people into one’s understanding of the network and then evaluating their behavior based on their position within the network. Once individuals have a sense of how others are using Facebook to express grief, communicate with each other, and their relative relationship to each other and the deceased, they are able to make decisions about they feel about this network and orient accordingly.

### 5.6 Act

Once an orientation to the network is established, people will act in accordance to their sense (which is, of course, always provisional) of who is doing what in this space and what that implies for

how they can, should, or want to be involved. In sum, individuals make decisions about how to act based on their own emotional needs, informed by their assessment of what behavior is appropriate given their network position. Actions, in turn, shape the type and frequency of future encounters with others' content. As such, some make choices to specifically shape their relationship to the network over time.

## 6 CONCLUSION & FUTURE WORK

Death and its associated grief on SNSs provide an extreme case in which individuals encounter and make sense of emotional content in networked spaces. SNSs are optimized for connecting with others and sharing experiences and though they appear dynamic are actually quite brittle in how they encode these contexts and relationships. Gathering with others who are also grieving in online spaces can be a key way to receive support while also reinforcing one's connection with the deceased [23]. However, even as SNSs facilitate communal experiences of mourning [50], people are variable in how much they can or choose to participate in or even be exposed to the grief of others in these spaces. Some may benefit from communal expressions of grief, but for others the individualized nature of grief [51] may result in a desire to limit their interactions with the broadly public spaces afforded by SNSs.

Rather than defaulting to the simple truism that "everyone grieves differently," the analysis we present describes how people judge and navigate the actions of others as they develop their own orientation to instances of networked grief. In so doing, our model gives insight into how networks "happen." Even as individuals make sense of their relationships to others, their actions serve to initiate, shift, calcify, and erode their relationships to these networks [1]. Ultimately, individuals do not simply sign in to Facebook to express their grief. The networks that happen around individuals as they express their emotions act to *construct* their grief.

Orientations describe how individuals negotiate their own needs in relationship to a broader network. Public spaces for grief are not simply supportive environments where those who are grieving can gather. Nor are they just sites that open people up to new risks. They are dynamic spaces that are best understood from individuals' perspectives and their place within a network.

The diversity of orientations we shared may help to complicate simple or idealized assumptions about the experience and expression of grief in networked settings. People change how they orient to grief and to the expressions of it over time and as context changes. While we have identified five key orienting forms in our data, additional orientations could likely emerge given different contexts – both technological and not. Large social network sites like Facebook would benefit from directing their efforts on the steps we outlined in our model that highlight points of inflection that give rise to orientations. Large-scale data science, focused on identifying markers for the milestones we have outlined through which people orient, could help identify orientations that exist within a specific platform, as well as possible tensions between different orientations. Likewise, while designers should explore ways to accommodate specific orientations in their systems, they should also consider how people might pivot rapidly among these. While challenging, designers can shape the orientations that emerge by addressing the factors we have identified here. As first steps, we suggest that designers focus on what expressions of grief an individual encounters (*Encounter*, in our model) and what contextual information is available as an individual evaluates these expressions (*Situate*).

This work demonstrates how people come to produce various orientations to grieving networks on Facebook. An individual's orientation can change in relationship to an evolving network of grievers, and is contingent on their understanding of the nature and composition of the network, how it is changing, behavioral norms, and expressions of grief. However, by exploring how people



adopt an orientation to an evolving network, our analysis sheds light on broader questions of sociality on SNSs.

The work presented in this paper is thus relevant to innumerable instances in which a person is struck by a post on an SNS — whether it be distressing, funny, or bombastic. Future work may benefit from examining how the factors we describe in our model function in other social spaces, in reaction to other categories of posts, and in service of other emotions. Such research would enrich our understanding of the various orientations that are produced through a process of situating oneself to evolving networks.

## 7 ACKNOWLEDGEMENTS

We wish to thank the many participants whose experiences and willingness to share their time made this work possible. We are also grateful to Sen Hirano, Courtney Loder, Lynn Dombrowski, Vanessa Callison-Burch, Duncan Sheik, Steven Frost, members of the STAR Group at UC Irvine, and members of the Identity Lab at CU Boulder. This research was made possible by support from the Intel Science and Technology Center for Social Computing, the National Science Foundation EAGER #1042678, and the ARCS Foundation.

## REFERENCES

- [1] Peter L. Berger and Thomas Luckmann. 1966. *The social construction of reality: A Treatise in the Sociology of Knowledge*. Doubleday. 224 pages.
- [2] Jed R. Brubaker, Mike Ananny, and Kate Crawford. 2016. Departing glances: A sociotechnical account of ‘leaving’ Grindr. *New Media & Society* 18, 3 (2016), 373–390. <https://doi.org/10.1177/1461444814542311>
- [3] Jed R. Brubaker and Vanessa Callison-Burch. 2016. Legacy Contact: Designing and Implementing Post-mortem Stewardship at Facebook. In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems - CHI '16*. ACM Press, New York, New York, USA, 2908–2919. <https://doi.org/10.1145/2858036.2858254>
- [4] Jed R. Brubaker and Gillian R. Hayes. 2011. "We will never forget you [online]": an empirical investigation of post-mortem MySpace comments. In *Proceedings of the ACM 2011 conference on Computer supported cooperative work*. ACM Press, New York, New York, USA, 123–132. <https://doi.org/10.1145/1958824.1958843>
- [5] Jed R. Brubaker, Gillian R. Hayes, and Paul Dourish. 2013. Beyond the Grave: Facebook as a Site for the Expansion of Death and Mourning. *The Information Society* 29, 3 (2013), 152–163. <https://doi.org/10.1080/01972243.2013.777300>
- [6] Jed R. Brubaker, Funda Kivran-Swaine, Lee Taber, and Gillian R. Hayes. 2012. Grief-Stricken in a Crowd: The Language of Bereavement and Distress in Social Media. In *ICWSM 2012 - Proceedings of the 6th International AAAI Conference on Weblogs and Social Media*. The AAAI Press, Dublin, Ireland, 42–49. <http://www.aaai.org/ocs/index.php/ICWSM/ICWSM12/paper/viewFile/4622/4965>
- [7] Jed R. Brubaker, Funda Kivran-Swaine, Lee Taber, and Gillian R. Hayes. 2012. Grief-Stricken in a Crowd: The Language of Bereavement and Distress in Social Media. In *ICWSM 2012 - Proceedings of the 6th International AAAI Conference on Weblogs and Social Media*, John G. Breslin, Nicole B. Ellison, James G. Shanahan, and Zeynep Tufekci (Eds.). The AAAI Press, Dublin, Ireland, 42–49. <http://www.aaai.org/ocs/index.php/ICWSM/ICWSM12/paper/viewFile/4622/4965>
- [8] Jed R. Brubaker and Janet Vertesi. 2010. Death and the Social Network. In *HCI at the End of Life Workshop at CHI2010*. Savannah, GA. <https://pdfs.semanticscholar.org/aaf3/b480dc877adde04ab57421aef59aaee8b4f3.pdf>
- [9] Brian Carroll and Katie Landry. 2010. Logging On and Letting Out: Using Online Social Networks to Grieve and to Mourn. *Bulletin of Science, Technology & Society* 30, 5 (2010), 341–349. <https://doi.org/10.1177/0270467610380006>
- [10] Kathy Charmaz. 2006. *Constructing grounded theory: a practical guide through qualitative analysis*. Sage Publications, Thousand Oaks, CA. <https://doi.org/10.1016/j.lisr.2007.11.003>
- [11] Kate Crawford. 2009. Following you: Disciplines of listening in social media. *Continuum* 23, 4 (8 2009), 525–535. <https://doi.org/10.1080/10304310903003270>
- [12] Jocelyn M. DeGroot. 2008. Facebook Memorial Walls and CMC’s Effect on the Grieving Process. (2008).
- [13] Kenneth J. Doka. 1989. *Disenfranchised grief: recognizing hidden sorrow*. Lexington Books. 347 pages.
- [14] Robert Douglas Ferguson, Michael Massimi, Emily Anne Crist, and Karyn Anne Moffatt. 2014. Craving, creating, and constructing comfort. In *Proceedings of the 17th ACM conference on Computer supported cooperative work & social computing - CSCW '14*. ACM Press, New York, New York, USA, 1479–1490. <https://doi.org/10.1145/2531602.2531631>
- [15] Pin Sym Foong. 2008. Designing technology for sensitive contexts: supporting end-of-life decision making. In *Proceedings of the 20th Australasian Conference on Computer-Human Interaction: Designing for Habitus and Habitat*, Vol. 287. ACM, San Diego, CA, USA, 172–179. <https://doi.org/10.1145/1517744.1517801>

- [16] Pin Sym Foong and Denisa Kera. 2008. Applying reflective design to digital memorials. In *SIMTech'08*. <http://mundanetechnologies.com/goings-on/workshop/cambridge/papers/FoongKera.pdf>
- [17] Laura M. Funk, Sheryl Peters, and Kerstin Stieber Roger. 2017. The Emotional Labor of Personal Grief in Palliative Care: Balancing Caring and Professional Identities. *Qualitative Health Research* 27, 14 (12 2017), 2211–2221. <https://doi.org/10.1177/1049732317729139>
- [18] Katie Z. Gach, Casey Fiesler, and Jed R. Brubaker. 2017. "Control your emotions, Potter": An Analysis of Grief Policing on Facebook in Response to Celebrity Death. *Proceedings of the ACM on Human-Computer Interaction* 1, CSCW (12 2017), 1–18. <https://doi.org/10.1145/3134682>
- [19] Emily Getty, Jessica Cobb, Meryl Gabeler, Christine Nelson, Ellis Weng, and Jeffrey T. Hancock. 2011. I Said Your Name in an Empty Room: Grieving and Continuing Bonds on Facebook. In *Proceedings of the 2011 annual conference on Human factors in computing systems CHI 11*. ACM, San Diego, CA, USA, 997–1000. <https://doi.org/10.1145/1978942.1979091>
- [20] Barney G. Glaser and Anselm L. Strauss. 1965. *Awareness of Dying*. Routledge, New York. <https://doi.org/10.4324/9781351327923>
- [21] Barney G. Glaser and Anselm L. Strauss. 1967. *The discovery of grounded theory: Strategies for qualitative research*. Aldine, Chicago, Illinois.
- [22] Karen Elizabeth Graves. 2009. *Social Networking Sites and Grief: An Exploratory Investigation of Potential Benefits*. Ph.D. Dissertation. Indiana University of Pennsylvania.
- [23] Elaine Kasket. 2012. Continuing bonds in the age of social networking: Facebook as a modern-day medium. *Bereavement Care* 31, 2 (7 2012), 62–69. <https://doi.org/10.1080/02682621.2012.710493>
- [24] Joseph 'Jofish' Kaye, Janet Vertesi, Shari Avery, Allan Dafoe, Shay David, Lisa Onaga, Ivan Rosero, and Trevor Pinch. 2006. To have and to hold. In *Proceedings of the SIGCHI conference on Human Factors in computing systems - CHI '06*. ACM Press, New York, New York, USA, 275. <https://doi.org/10.1145/1124772.1124814>
- [25] David Kirk and Richard Banks. 2008. On the design of technology heirlooms. In *Proceedings of SIMTech 2008*. <http://www.cs.nott.ac.uk/~rcb/MScProjects/dis/Kirk&BanksTechnologyHeirlooms.pdf>
- [26] David S. Kirk and Abigail Sellen. 2010. On human remains: Values and practice in the home archiving of cherished objects. *ACM Transactions on Computer-Human Interaction* 17, 3 (7 2010), 1–43. <https://doi.org/10.1145/1806923.1806924>
- [27] Dennis Klass, Phyllis R. Silverman, and Steven L. Nickman. 1996. *Continuing bonds: new understandings of grief*. Taylor & Francis, Philadelphia. 361 pages.
- [28] Robert Kraut, Sara Kiesler, Bonka Boneva, Jonathon Cummings, Vicki Helgeson, and Anne Crawford. 2002. Internet Paradox Revisited. *Journal of Social Issues* 58, 1 (2002), 49–74. <https://doi.org/10.1111/1540-4560.00248>
- [29] Cristiano Maciel and Vinicius Carvalho Pereira. 2012. The internet generation and its representations of death: considerations for posthumous interaction projects. In *Proceedings of the 11th Brazilian Symposium on Human Factors in Computing Systems (IHC '12)*. Brazilian Computer Society, Porto Alegre, Brazil, Brazil, 85–94.
- [30] Alice E. Marwick and Nicole B. Ellison. 2012. "There Isn't Wifi in Heaven!" Negotiating Visibility on Facebook Memorial Pages. *Journal of Broadcasting & Electronic Media* 56, 3 (7 2012), 378–400. <https://doi.org/10.1080/08838151.2012.705197>
- [31] Michael Massimi. 2013. Exploring remembrance and social support behavior in an online bereavement support group. In *Proceedings of the 2013 conference on Computer supported cooperative work - CSCW '13*. ACM Press, New York, New York, USA, 1169. <https://doi.org/10.1145/2441776.2441908>
- [32] Michael Massimi and Andrea Charise. 2009. Dying, death, and mortality: Towards thanatosensitivity in HCI. In *Proceedings of the 27th international conference extended abstracts on Human factors in computing systems - CHI EA '09*. ACM Press, New York, New York, USA, 2459. <https://doi.org/10.1145/1520340.1520349>
- [33] Michael Massimi, William Odom, Richard Banks, and David Kirk. 2011. Matters of life and death. In *Proceedings of the 2011 annual conference on Human factors in computing systems - CHI '11*. ACM Press, New York, New York, USA, 987. <https://doi.org/10.1145/1978942.1979090>
- [34] Philip A. Mellor and Chris Shilling. 1993. Modernity, Self-Identity and the Sequestration of Death. *Sociology* 27, 3 (1993), 411–431. <https://doi.org/10.1177/0038038593027003005>
- [35] Lisa M Mitchell, Peter H Stephenson, Susan Cadell, and Mary Ellen Macdonald. 2012. Death and grief on-line: Virtual memorialization and changing concepts of childhood death and parental bereavement on the Internet. *Health Sociology Review* 21, 4 (12 2012), 413–431. <https://doi.org/10.5172/hesr.2012.21.4.413>
- [36] Wendy Moncur and David Kirk. 2014. An emergent framework for digital memorials. In *Proceedings of the 2014 conference on Designing interactive systems - DIS '14*. ACM Press, New York, New York, USA, 965–974. <https://doi.org/10.1145/2598510.2598516>
- [37] Joji Mori, Martin Gibbs, Michael Arnold, Bjorn Nansen, and Tamara Kohn. 2012. Design considerations for after death. In *Proceedings of the 24th Australian Computer-Human Interaction Conference on - OzCHI '12*. ACM Press, New York, New York, USA, 395–404. <https://doi.org/10.1145/2414536.2414599>

- [38] William Odom, Richard Banks, David Kirk, Richard Harper, SiĀcĀn Lindley, and Abigail Sellen. 2012. Technology heirlooms?. In *Proceedings of the 2012 ACM annual conference on Human Factors in Computing Systems - CHI '12*. ACM Press, New York, New York, USA, 337. <https://doi.org/10.1145/2207676.2207723>
- [39] William Odom, Richard Harper, Abigail Sellen, David Kirk, and Richard Banks. 2010. Passing on & putting to rest. In *Proceedings of the 28th international conference on Human factors in computing systems - CHI '10*. ACM Press, New York, New York, USA, 1831. <https://doi.org/10.1145/1753326.1753601>
- [40] Natalie Pennington. 2013. You don't de-friend the dead: an analysis of grief communication by college students through Facebook profiles. *Death studies* 37, 7 (2013), 617–35. <https://doi.org/10.1080/07481187.2012.673536>
- [41] Whitney Phillips. 2011. LOLing at tragedy: Facebook trolls, memorial pages and resistance to grief online. *First Monday* 16, 12 (2011).
- [42] Therese A. Rando. 1993. *Treatment of complicated mourning*. Research Press, Champaign, IL.
- [43] Howard Rheingold. 1993. *The Virtual Community: Finding Connection in a Computerized World*. Addison-Wesley Longman Publishing Co., Inc., Boston, MA.
- [44] Roberts and Pamela Lourdes A. Vidal. 2000. Perpetual Care in Cyberspace: A Portrait of Memorials on the Web. *OMEGA: The Journal of Death and Dying* 40, 4 (2000), 521–545. <https://doi.org/10.2190/3BPT-UYJR-192R-U969>
- [45] Pamela Roberts. 2004. The living and the dead: Community in the virtual cemetery. *OMEGA: The Journal of Death and Dying* 49, 1 (2004), 57–76.
- [46] Sherry Turkle. 1995. *Life on the Screen: Identity in the Age of the Internet*. Touchstone Books, New York, NY.
- [47] Elise van den Hoven, Wina Smeenk, Hans Bilsen, Rob Zimmermann, Simone de Waart, and Koen van Turnhout. 2008. Communicating Commemoration. In *Proceedings of SIMTech 2008*. Cambridge, UK. <http://www.elisevandenhoven.com/publications/hoven-simtech08.pdf>
- [48] Tony Walter. 1999. *On Bereavement: The Culture of Grief*. Taylor & Francis Group. 232 pages.
- [49] Tony Walter. 2000. Grief narratives: The role of medicine in the policing of grief. *Anthropology & Medicine* 7, 1 (2000), 97–114. <https://doi.org/10.1080/136484700109377>
- [50] Tony Walter, Rachid Hourizi, Wendy Moncur, and Stacey Pitsillides. 2011. Does the Internet Change How We Die and Mourn? Overview and Analysis. *OMEGA: The Journal of Death and Dying* 64, 4 (2011), 275–302. <https://doi.org/10.2190/OM.64.4.a>
- [51] Clare Wright and Adrian Coyle. 1996. Experiences of AIDS-related bereavement among gay men: implications for care. *Mortality* 1, 3 (1996), 267–282. <https://doi.org/10.1080/713685840>

Received April 2019; revised June 2019; accepted August 2019