



OPEN ACCESS

EDITED BY

Lorella Viola,
University of Luxembourg, Luxembourg

REVIEWED BY

Fausto Colombo,
Catholic University of the Sacred Heart, Italy
Vanessa Bravo,
Elon University, United States
Lothar Smith,
Radboud University, Netherlands

*CORRESPONDENCE

Natalia Sánchez-Querubín
✉ N.SanchezQuerubin@uva.nl

RECEIVED 04 December 2022

ACCEPTED 06 June 2023

PUBLISHED 28 June 2023

CITATION

Sánchez-Querubín N (2023) Transnational death and technological haunting. *Front. Hum. Dyn.* 5:1115824. doi: 10.3389/fhumd.2023.1115824

COPYRIGHT

© 2023 Sánchez-Querubín. This is an open-access article distributed under the terms of the [Creative Commons Attribution License \(CC BY\)](https://creativecommons.org/licenses/by/4.0/). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.

Transnational death and technological haunting

Natalia Sánchez-Querubín*

University of Amsterdam, Media Studies, Amsterdam, Netherlands

The paper proposes “technological haunting” as a concept in migration and transnational death studies. Existing theory and empirical work in media studies explore connections between new media and grieving practices and how affordances of co-presence and portability shape how people maintain bonds with the deceased. The unique considerations that “technological haunting” brings to the study of transnational families and death still need to be addressed by both media scholars and researchers within digital migration studies.

KEYWORDS

transnational families, transnational death, online media, mourning (bereavement), online funerals

Introduction

Transnational families maintain bonds and practice care while living separated by significant distances during prolonged periods (Baldassar, 2014). The “mediated co-presence” (Madianou and Miller, 2012) and portability afforded by new media are essential for how transnational families maintain relationships, considering that face-to-face interactions are limited (Leurs, 2014; Francisco, 2015; Alinejad, 2019; Wilding et al., 2020; Abel et al., 2021; Hillyer, 2021; Tariq et al., 2022). Digital media are also important for practicing intergenerational care and death, which are sub-areas in transnational family research (Blouin et al., 2022). They explore, for example, caregiving between aging parents in the home country and children who live abroad and the need for more compassionate policies and perspectives that can account for aging migrants (Ciobanu and Hunter, 2017), such as the role of distant support networks and media literacy (Wilding and Baldassar, 2018).

Online rituals and communication during times of crisis are also especially significant when members of transnational families have limited resources or work leave (Giralt, 2019), unstable migration statuses (Bravo, 2017), and are subjected to border regimes, including border closure during the Covid-19 pandemic, all of which shape how individuals may care for their loved ones and be present at the end of their lives (Alexis-Martin, 2020; Hinkson et al., 2022). Research also finds that media affordances like video streaming do not alleviate the need for physical presence but can help people cope with the distance during a crisis (Baldassar, 2014; Bravo, 2017; Le Gall and Rachédi, 2019; Brandhorst et al., 2020). While this body of literature is rich and extensive, there is still a need for more research on grief experiences as “less is known about processes of transnational grieving and their impacts on migrants and their family relationships after the bereavement has occurred” (Giralt, 2019; p. 578). This paper invites considering how the concepts of “digital remains” (Lingel, 2013; Wright, 2014; Morse and Birnhack, 2022) and “haunting” can contribute to this aim by potentially informing studies of grief in transnational families.

Research on grieving, amongst other aspects, investigates how people continue bonds with the deceased (Gibson, 2015; Walter, 2015; Arnold et al., 2017; Wagner, 2018; De Vries, 2019; van der Beek et al., 2019; Eriksson Krutrök, 2021). The theory of continuing bonds

emphasizes that the bereaved sustain a relationship with deceased loved ones by talking to them, writing letters, praying, sharing memories, conserving objects (Root and Exline, 2014), visiting online cemeteries (De Vries and Rutherford, 2004), and interacting with digital remains, which are a deceased person's personal data in social media accounts, text messages in phones, digital photos in cloud services, and voice messages in WhatsApp (Cumiskey and Hjorth, 2017). Media studies scholarship investigates people's use of online media for continuing bonds with the dead while also considering how the media affordances and infrastructures of apps and commercial platforms shape these practices (Gibbs et al., 2014, 2015; Lagerkvist and Andersson, 2017; Thimm and Nehls, 2017; Leaver and Highfield, 2018). Indeed, digital remains are framed by debates about their place in contemporary understandings of grief, potential misuse by media companies, and memorialization in participatory media spaces, often suggesting "that this tension between this anticipated decoupling between the body and data is indeed a source of anxiety in our lives" (Graham et al., 2013; p. 134). The concept and metaphor of *haunting* emerges in cultural and media studies for capturing the sense of nostalgia and connection, as well as ambivalence and anxiety associated with digital remains. As media researchers and philosophers, Lagerkvist and Andersson (2017) argue, "studying death online both enables and requires a re-conceptualization of our culture of connectivity as an existential and ambivalent terrain" (2017; p.551). After all, the media we use to maintain mediated co-presence and "lifelines" (Lagerkvist and Andersson, 2017) with people we love, become also archives of traces left behind after death, and in this way also, a "media of absence" in need of managing (Lagerkvist, 2019a; p. 190).

The subject of digital remains and thus questions about their status, ritualization, and management are absent in studies about how transnational families experience grief. It is true that families and friends living in proximity also deal with digital remains; however, bringing the subject to transnational death may illuminate grief behaviors and anxieties – *forms of haunting*—informed by migrant experiences. After all, migration studies teach us that distance and mobility are aspects of kin work and that "transnational bereavement and grieving relate to the ever-changing emotional geographies of migration and transnational families" (Giralt, 2019; p. 578). Living apart together in a networked and data-intensive world also means dying in it.

To summarize, this paper focuses on a potential area of inquiry: how may "digital remains" and "haunting" concepts inform research in transnational families and grief? The paper is a conceptual piece, meaning it does not include original research based on data. Instead, it approaches the question by discussing literature and presenting ideas for future research. The structure is the following: first, I review transnational care and death literature. Afterward, I introduce digital remains and haunting as concepts developed in media studies. The last section brings both areas together to suggest future research directions about the grief experiences of transnational families.

Transnational care and media

Transnational families are "families that live some or most of the time separated from each other yet hold together and create

something that can be seen as a feeling of collective welfare and unity, namely familyhood, even across national borders" (Bryceson and Vuorela, 2020; p. 18). Research into transnational family approaches care as a complex phenomenon that connects affect with material and media practices (Tronto, 1993) and with the intention of "at least removing the assumption that distance is implicitly a barrier to care exchange" (Baldassar, 2016; p. 161). Transnational family studies, in fact, tend to contest "very powerful normative notions of care and intimacy as inherently proximate forms of relatedness and of our taken for granted assumptions about emotional closeness and 'being there' requiring physical co-presence" (Baldassar, 2016; p. 146).

Whereas in the past, "transnational family members would stay in touch only by long-awaited letters that traveled by sea, today, people can be virtually constantly present in each other's lives" (Baldassar et al., 2016; p. 477). For example, people use videoconferencing (e.g., Skype and Zoom) to have dinner together and celebrate birthdays, enabling "the ability of family members to be co-present (emotionally 'there' for each other) across distance" (Baldassar, 2016; p. 145). People also leave video calls open for several hours so that relatives may have a window into their everyday lives (Neustaedter et al., 2015) and mothers play "hide-and-seek with their children (with the help of an adult who moves the laptop around the house to find the children in their hiding places)" (Madianou and Miller, 2012; p. 71). Likewise, exchanging text, photos, videos, and memes in family group chats is "used by long-distance families to affirm their relationships" (Abel et al., 2021; p. 643). These chats create "ambient" and "connected" presence and phatic communication, namely, it is "the repetition, rather than the content of these short messages that maintain the relationship tie and form a sense of connectedness" (Vetere et al., 2009; p. 179). The "portability of care" (Huang et al., 2012; p. 131) and these forms of anytime/anywhere connection "have become woven into the rhythms of family life" (Clark, 2012; p. 202).

Aging and end of life care in transnational families

Managing aging kin, illness, and the end of life represent challenges for people separated geographically. For example, Saramo (2019) frames death as a moment of family rupture, when "we joined countless other families, today and in centuries past, in the processes and emotions of transnational death. Such intimate negotiations, hinged on individual deaths, collectively shape, and reshape identities, traditions, symbols, and cultural borders" (p. 8). Transnational family studies also investigate "death work" performed at a distance: "transnational families 'do' kinship on an everyday basis through acts of support and negotiations that defy distance. Can they also 'do' death?" (Matyska, 2019; p. 49).

Parents staying in their home countries while adult children relocate to pursue education and long-term employment and residency abroad is now a common scenario. The serious illness of a parent can then set into motion a distant "crisis" of care. It calls for attending medical appointments, coordinating exams and treatments remotely, arranging for prolonged stays, accompanying the person using various media, hiring caregivers, and even having parents emigrate to live with their children. The responsibility

might be assumed alone or distributed between siblings, relatives, and the local community. Illness and aging reveal aspects of transnational caregiving that “remain hidden during those periods when ‘routine’ forms of distant care are adequate” (Baldassar, 2014; p. 391). After all, “it is during these ‘crisis events’ of the family life-course when physical co-presence is most acutely required to deliver hands-on personal care and intimate emotional support to the sick family member. It is also a time when close kin, including those who are living faraway, feel they need ‘to be there’ for their own sense of well-being” (Baldassar, 2014; p. 394).

Many factors will determine how people can be there for each other during times of crisis. Family members with low digital literacy will likely struggle to use apps and videoconferencing platforms to connect with relatives (Baldassar, 2014). Those with dual citizenship, stable migration status, and generous work leaves will be able to move and engage in caregiving more freely. The accounts from undocumented Latino migrants living in the United States collected by Bravo (2017) describe the opposite, namely, scenarios where people “had no other choice than to have a ‘virtual’ presence at home, rather than a physical one, when a person in the family gets terminally ill or dies at home” (Bravo, 2017; p. 36). It is not uncommon for members of transnational families to express feelings of guilt and anxiety toward their obligations, which are exacerbated by border regimes—“access to mobility is one of the sharpest stratifying dimensions of our age” (Brandhorst et al., 2020; p. 262). For example, one of the participants in Bravo’s study, who maintained constant communication with his father during the period leading to his death, concludes: “I helped in my own way, sending money and making sure our relatives were with him all along the way. I also sent money for his funeral. Still, I never felt so defeated in my whole life, but I had no option” (Bravo, 2017; p. 39). Digital technologies, particularly webcams, “facilitate visual interaction with the dying person anywhere in the world” (Le Gall and Rachédi, 2019; p. 66). However, hearing, touching, and physically interacting with the dying person “allows for a form of intimacy that is not attainable through long-distance communication” (Le Gall and Rachédi, 2019; p. 67).

Transnational death: online funerary rituals

A person’s passing is followed by a period when both professionals (e.g., funeral directors) and kin engage in death work. The term “death work” helps to draw “attention to the role of death in the making of transnational families and to stress that death, similarly to kinship, is work rather than a biologically determined phenomenon, enacted through mutual agency and effort by the dying and the survivors, who as transnational family members simultaneously do transnational kinship by doing death” (Matyska, 2019; p. 49). Transnational death challenges the performance of such work and “raises questions about identity, belonging, and customs, but also about the logistical care of bodies, rituals, and commemoration” (Saramo, 2019; p. 8). As with distant intergenerational care, “people fulfill different necessary roles according to their abilities and where they are located” (Saramo, 2019; p. 14).

Funerals help people grieve and process a loss. Having a funeral can also be part of the deceased person’s vision of a good death. Migrant communities have historically set up mutual aid funds to secure proper burials aligned with their traditions so that they do not become “some foreigner hastily buried” in a shallow, unmarked grave (Saramo, 2019; p. 11). Funerals are also arranged in the host country through specialist religious organizations, while repatriation is a priority for some communities. For example, Nunez and Wheeler (2012) write about the importance of dying and resting on one’s native land for migrants from African countries residing in South Africa. Johannesburg-based organizations and repatriating funeral parlors serve these groups by navigating the social, governmental, “and spiritual channels necessary for determining the course of a deceased migrant body” (Nunez and Wheeler, 2012; p. 212). As repatriation is lengthy, funerary parlors’ refrigeration technologies are a selling point.

Family and friends living abroad may return to their home country for a funeral. In addition to the *in-situ* funeral, online memorial pages, digital guest books, and other online rituals complement the grieving process. A person “may visit and interact with an online memorial site for a loved one over many years, but this does not mean she will not also physically tend to the body of the deceased and its final resting place, and the material belongings and meaningful memorabilia left behind” (van Ryn et al., 2017; p. 114). The statement mentioned above is, however, not applicable to all cases. Studies in transnational death include many instances when mediated co-presence is the only option. The (im)mobility regimes related to immigration status, visas, expensive airfares, and latest the covid pandemic prevent people from gathering. Covid-19, one may argue, made distant grieving into a mainstream issue.

Le Gall and Rachédi (2019) explore how missing a relative’s funeral affects people deeply. Between 2013 to 2015, they interviewed people who participated in funerary rituals through Skype. A Mexican woman recounts: “I was in contact during Mass, the burial, and the prayers. My sister and a cousin helped me with Skype. I would also call, and I heard everything. There were a lot of people. I wouldn’t talk. I would just accompany them via the internet” (Le Gall and Rachédi, 2019; p. 69). Similarly, an Indian woman living abroad could not travel to her father’s funeral. Videoconferencing enabled her to be present: “We were on Skype and whatever was going on—I was there. The whole night, sitting online, praying, and seeing my daddy until the last moment when they took him away. So, I felt that I was there with him all the time” (Nesteruk, 2018; p. 1021). These subjects wanted to be present but could not.

Hundreds of people die crossing borderlands, such as the ones between Mexico and the United States and between the Mediterranean Ocean and Europe (Cuttitta and Last, 2020). The post-mortem management of border deaths concerns “counting, mourning, and engaging dead bodies” by governmental institutions and security agencies (Cuttitta and Last, 2020; p. 12). Regarding the Mediterranean route, “most of the bodies disappear into the sea or are buried in anonymous graves at cemeteries on either side of the European Union (EU) border” (Horsti, 2019; p. 672). For every corpse washed ashore, “there is a family living with ambiguity, not knowing if their loved one is dead or alive” (Kovras and Robins, 2016; p. 41).

Researchers, activists, and humanitarian organizations have critiqued the EU's "inability to respond ethically to migrant death as a social loss worthy of common grief" (Horsti, 2019; p. 672). In turn, M'charek et al., 2020 argue for treating migrant bodies as "matters of care," through proper documentation and memorialization. A more caring treatment of border deaths may include more accessible online databases to help with body identification and offer narrative context to statistics. Organizations also engage in grief activism (M'charek et al., 2020) and grassroots forensics (Schwartz-Marin et al., 2016). An example is the Centre for Political Beauty (CPB), a Berlin-based art collective that staged a symbolic burial for refugees in front of the German Parliament and, with the families' permission, exhumated deceased migrants buried on the shores of Italy and transported them to Berlin to provide a dignified funeral. Photographs and social media can also support grieving. For example, Horsti (2019) writes about how digital photographs of burials in Greece taken by relatives (for example, people already living in Europe or who survived the crossing) help those back in the country of origin to grieve. These "online memorials are accessible across borders and in some ways stand in for the victims' unknown or inaccessible graves" (Horsti, 2019; p. 672). The photographs of the rituals "documented the act of mourning for those who were not present at the time" (Horsti, 2019; p. 672).

The sections above only offer a glimpse into the complex subject of intergenerational care and death within transnational families. While I have used elderly parents and migrant children as examples, the situation extends to illness in other family members and different configurations. Additional issues are the "reduced mobility that often accompanies bodily aging" (Brandhorst et al., 2020; p. 265; Askola, 2016) and the restrictive migration policy that sees older people as an economic burden. Furthermore, retirees establish themselves in countries where their pensions afford them a better lifestyle. It means also "new challenges such as the distance from family and an increasing insecurity about legal status, access to public health and aged care services" (Brandhorst et al., 2020; p. 266). Aging in exile requires society's understanding of what it means to age in one's adoptive country (Nesteruk, 2018; p. 1015). Ultimately, distant mourning can be the product of (in)immobility regimes and thus a concern for mobility justice and grief justice. Mobility justice "recognizes that while mobility is a fundamental right for everyone, it is experienced unequally along the lines of gender, class, ethnicity, race, religion, age, and able-bodiedness" (Brandhorst et al., 2020; p. 262). The capacity for caring and grieving is framed by devices such as work leave and remote work policy. For example, in her study of Australian transnational families, Nesteruk (2018) remarks how "the infrastructure of employment and bereavement leave policy is designed for limited periods of grief recovery, and a fast return to productive activities both at work and at home is expected" (Nesteruk, 2018; p. 1021). Family reunification visas for the elderly are complex, airline fares are costly, and visa procedures are lengthy and harrowing. There is a need for more compassionate and structural undertakings of the needs of transnational families.

Access to technology and digital literacy in the face of death and care become issues of justice. Indeed, there are "inequalities in people's ability to afford travel and access ICTs, which raises the issue of whether these should be considered as new kinds of

'human rights and civic policy issues: the right to have contact with faraway kin and the right to the technologies which facilitate distant care" (Baldassar, 2014; p. 395). Access to co-presence, with good quality image and audio and digital death work, becomes a site of intervention, especially outside commercial funerary enterprises.

Digital remains and technological haunting

In the sections above, I reviewed literature attending mainly to issues of mediated distant care, crisis management, and funerary rituals in transnational family settings. This body of work can be further enriched by focusing on an additional aspect of people's grief practices, namely, digital remains and issues emerging around them (Maciel and Pereira, 2013; Stokes, 2015). Digital remains are defined as "orphaned data whose creator and owner is now dead" (Morse and Birnhack, 2022; p. 1344), "online content on dead users" (Lingel, 2013; p. 191), and "digital traces that will remain even after we die" (Wright, 2014;). They include people's social media accounts, devices like laptops and mobile phones, photos and texts stored in them, and digital footprints in channels like WhatsApp. Questions about digital remains involved their status in terms of value, privacy, and ownership (Maciel and Pereira, 2013; Stokes, 2020; Morse and Birnhack, 2022) and about deciding how to sort, delete, store, share, memorialize the personal data of someone who has passed away (Gach and Brubaker, 2021). For example, Facebook and Instagram have protocols for dealing with the public accounts of people who have died. Family can contact the company, and after submitting proof of death, they can memorialize the account, thus saving it for posterity, or shut it down. Studies describe memorialized accounts in terms of how they function as "biographical objects" (Ebert, 2014; p. 35) suited for the preservation of bonds and as sites for "performative displays of mourning" that allow wider audiences to pay respect to remains and maintain bonds with the dead (Marwick and Ellison, 2012, p.378). In their study of digital remains, Gray and Coulton (2013) remark that "as an immaterial and immanent form, the dead can effectively, but not formally, exist" (p.37), thus we find them in acts of recall and in a "broader range of connections between the senses, agencies, memory and history that is enmeshed through our emotional and aesthetic experiences" (p.37). Social media is also part of the landscape where these emotional and aesthetic experiences occur (Walter et al., 2012; Brubaker et al., 2013; Gotved, 2014; Refslund Christensen and Sandvik, 2015).

The dead are "a continuing co-presence on social media platforms" (Eriksson Krutrök, 2021; p. 1; Leaver, 2019). Terms like "ghost in the machine" (Stokes, 2012; Wortham, 2015; Kasket, 2019; Pasquali et al., 2022) and "digital specters" (Cumiskey and Hjorth, 2017), frequently used in news and academic media, capture the haunting nature of these encounters. Ideas about "haunting" also help examine the ambivalence of public digital remains like social media accounts. Haunting evokes attraction and nostalgia, albeit accompanied by uncertainty and anxiety (Sconce, 2000; Blanco and Peeren, 2013). Moreover, "haunting" speaks of presence and activity that lingers beyond a clear source, which may bring comfort and pain. Digital remains are intertwined

with interactivity, automation, and popularity metrics of the social media platforms that host them, which also means a lack of control over someone's digital afterlife. On the one hand, social media companies ultimately dictate digital legacy management terms and own the data, which continues to be stored and used in servers. Conservation is not entirely up to users. On the other hand, interaction with the memorialized account, namely, new forms of maintaining bonds with the deceased, can be unsettling. People post public content speaking directly at the deceased person rather than about them, mimicking ongoing conversations. For example, a woman describes being uncomfortable when content from her deceased relative shows up on her social media feed; to avoid it, she tweaked the settings but found de-friending the account to be "an act she could not bring herself to do, though she found the page hard to visit" (Pennington, 2013; p. 625). Quantification is also a potentially painful aspect of grief online, when for instance, a person sees that others no longer interact with the memorial account they manage—"how do we understand the expressed hurt some bereaved feel when not receiving enough likes or visitors at the site of their commemoration?" (Lagerkvist, 2019b; p. 15). Unsettling activity also includes someone logging in as the deceased and impersonating them and Facebook recommending users to interact with a deceased person's profile (Zaveri, 2019). Questions about post-death activity will continue growing as the memorialization industries innovate by offering bots, holograms, and avatars trained on a deceased person's online data to recreate their communication styles (Jiménez-Alonso et al., 2022). In these products it "is not simply the presence of the deceased that causes anxiety, but the supposed fullness of that presence, formed by near-totalized recording, networked and beyond the control of the user" (Bollmer, 2013; p. 145).

In addition to public digital remains like social media accounts, people need to deal with digital remains found in private channels and stored in people's devices. Anthropologists like Gibson (2008) have examined how families manage the objects left behind by a loved one. Deciding what to keep, distribute amongst family and friends, sell, or donate is underlined by how grief changes value: "When a loved one dies suddenly their personal belongings and defining possessions come to the foreground of consciousness—they are truly noticed. This noticing is complex and often poignant. Death reconstructs our experience of personal and household objects in particular ways; there is the strangeness of realizing that things have outlived persons" (Gibson, 2008; p. 8). A similar logic can help think about how grief changes people's perception of digital objects, albeit with consideration for their (im)materialities. While it is true that "digital objects of the dead lack the integrity of a physical form and boundary and the kind of relation and intimacy that can be had when this is the case" (Gibson, 2014; p. 234) people store and interact with digital remains and the devices that host them, often in ways that evoke interactivity. For example, Cumiskey and Hjorth (2017) authors of *Haunted Hands*, explore how people's relationship with their mobile phones changes after losing a loved one. One of the subjects in their ethnographic study keeps a mobile phone with text messages from her parents lost in Typhoon Haiyan, constantly checking old messages they had sent. "She holds the phone as if it contains her parents' spirits" (Cumiskey and Hjorth, 2017; p. 1). Another subject carries her old phone, "refusing to get it upgraded because it has a text messaging from her father who has

passed away" (Cumiskey and Hjorth, 2017; p. 1). Another person continued to pay their brother's phone bill for six months after his death—"as if shutting down the phone would close the last avenue to her brother" (Cumiskey and Hjorth, 2017; p. 2). The phone represented a digital extension of him, "a digital ghost left behind to keep her company, as well as a memorial used to reminisce about him and to revisit shared memories" (Cumiskey and Hjorth, 2017; p. 2). Likewise, a father uses his phone as a tool for ritual by texting his son, who passed away. Moreover, there is uncertainty about how to put digital remains to rest in ways that feel meaningful. For example, this anxiety underlines the artistic research project "Requiem for my mothers' data" (Petrozzi, 2023), which started the death of author's mothers and being left with their devices and data to look after. They describe their project as an inquiry "into technocapitalism as a new realm in need of ceremony, rituality and care practices evolving around and in it" (Petrozzi, 2023).

A consideration for transnational migration and family studies

In this paper, I have, on the one hand, reviewed literature from death and transnational family studies and, on the other, about the topic of digital remains and memorialization, as developed in media studies. Now, I conclude by combining insights from these two areas to propose directions for future reflection and inquiry; namely, researchers could incorporate considerations about how death transforms people's relationships with media and data into ethnographic and theoretical work on grief in transnational family settings. While these considerations are relevant also for families living in geographical proximity, it is important to include them in transnational family research and explore if specific dynamics or issues emerge due to distance and their communication practices. I propose that research could, more concretely, integrate the following three points.

Memorialization unbound to location

In principle, memorialized online spaces (e.g., social media profiles turned into memorials) complement and expand rather than replace visits to cemeteries and other meaningful locations and contact with other people affected by the loss. However, do limited opportunities to visit graves and other sites of commemoration faced by transnational families affect their perception and use of online memorial spaces? Existing literature describes the importance of online funerals, but do other practices that unbound mourning from location emerge as significant for migrants?

Sorting through objects, devices, and private digital remains

The expectation is that after a person dies, relatives sort through their belongings, including clothes, furniture, and digital remains like mobile phones, digital photographs stored in cloud services, and emails. Accessing and deciding which digital remains to save

is challenging due to the volume of content (e.g., hundreds of digital photos, emails). Researchers could integrate these concerns into investigations about grief by exploring how members of transnational families sort through personal and household items. Do difficulties in accessing locations and transporting physical objects (for example, taking furniture to another country) shape the sorting process? Do digitization practices such as scanning photos and photographing a person's house emerge as a response? Likewise, there are no clear rituals or scripts for disposing of objects such as a deceased person's mobile phones and laptops meaningfully. How do people manage a deceased person's devices and data? Also, are practicalities such as making sure passwords are accessible to others part of how the family prepares for death?

Ritualistic behavior with and through media

A third area of investigation pertains to ritualistic behavior with and through media. Do transnational families develop shared online rituals that help collectively maintain bonds with the deceased and grief? An example could be organizing online masses to celebrate anniversaries, sharing photos from the cemetery with those who are not in the home country, and video chatting. Also, texting, sharing images, voice messages, and emailing are lifelines between people living apart and activities that generate large quantities of content and data. Literature on grief and media describes people engaging in ritualized behaviors with digital communication channels, such as texting someone who has died. This behavior is framed as a way for continuing bonds with the deceased. A general inquiry pertains to how participants in family groups deal with these digital remains stored in cloud services and phones and with the absence of one member. Pertaining to communication between two people, what type of emotions do

these communication channels, still visible in a person's device yet inactive, generate? Do people engage in ritualistic behavior like texting a dead person? How is the intensity of engagement with these devices—as most interactions between family members occurred through them rather than in person shaping-people's relationship with them post-mortem?

The paper's goal has not been answering these questions but instead creating a context that invites asking them and, hopefully, has made a case for looking into how people's relationship with media changes after the death of a loved one and if the management of digital remains might have a specific quality and issues for migrants.

Author contributions

The author confirms being the sole contributor of this work and has approved it for publication.

Conflict of interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

References

- Abel, S., Machin, T., and Brownlow, C. (2021). Social media, rituals, and long-distance family relationship maintenance: a mixed-methods systematic review. *New Media Soc.* 23, 632–654. doi: 10.1177/1461444820958717
- Alexis-Martin, B. (2020). Sensing the deathscape: digital media and death during COVID-19. *J. Environ. Media*, 1, 11–1. doi: 10.1386/jem_00032_1
- Alinejad, D. (2019). Careful co-presence: the transnational mediation of emotional intimacy. *Soc. Med. Soc.* 5:2, 2056305119854222. doi: 10.1177/2056305119854222
- Arnold, M., Gibbs, M., Kohn, T., Meese, J., and Nansen, B. (2017). *Death and Digital Media*. London: Routledge. doi: 10.4324/9781315688749
- Askola, H. (2016). Who will care for grandma? Older women, parent visas, and Australia's migration program. *Au. Feminist Law J.* 42, 297–319. doi: 10.1080/13200968.2016.1258750
- Baldassar, L. (2014). 'Too sick to move': distant 'crisis' care in transnational families. *Int. Rev. Sociol.* 24:3, 391–405. doi: 10.1080/03906701.2014.954328
- Baldassar, L. (2016). De-demonizing distance in mobile family lives: co-presence, care circulation and polymedia as vibrant matter. *Global Networks*, 16, 2.145–163. doi: 10.1111/glob.12109
- Baldassar, L., Kilkey, M., Merla, L., and Wilding, R. (2016). "Transnational families, care and wellbeing," in *Handbook of Migration and Health*, ed. Felicity Thomas (Northampton, Massachusetts: Edward Elgar Publishing), p. 477–497. doi: 10.4337/9781784714789.00039
- Blanco, M., and Peeren, E. (2013). *The Spectralities Reader: Ghosts and Haunting in Contemporary Cultural Theory*. New York: Bloomsbury Publishing.
- Blouin, S., Gerson, S. M., and Cavalli, S. (2022). Assistance in dying across borders: How the transnational circulations of persons, terms and themes influence the construction of a public problem. *Death Stud.* 46, 1557–1568. doi: 10.1080/07481187.2021.1926632
- Bollmer, G. D. (2013). 'Millions now living will never die': cultural anxieties about the afterlife of information. *Inform. Soc.* 29, 3.142–151. doi: 10.1080/01972243.2013.777297
- Brandhorst, R., Baldassar, L., and Wilding, R. (2020). Introduction to the special issue: 'transnational family care' on hold? Intergenerational relationships and obligations in the context of immobility regimes. *J. Intergener. Relatsh.* 18:3, 261–280. doi: 10.1080/15350770.2020.1787035
- Bravo, V. (2017). Coping with dying and deaths at home: how undocumented migrants in the United States experience the process of transnational grieving. *Mortality* 22, 33–44. doi: 10.1080/13576275.2016.1192590
- Brubaker, J. R., Hayes, G. R., and Dourish, P. (2013). Beyond the grave: Facebook as a site for the expansion of death and mourning. *Inform. Soc.* 29, 152–163. doi: 10.1080/01972243.2013.777300
- Bryceson, D., and Vuorela, U. (2020). *The Transnational Family: New European Frontiers and Global Networks*. New York: Routledge. doi: 10.4324/9781003087205
- Ciobanu, R. O., and Hunter, A. (2017). Older migrants and (im) mobilities of ageing: an introduction. *Popul. Space Place*, 23, e2075. doi: 10.1002/psp.2075
- Clark, L. S. (2012). *The Parent App: Understanding Families in the Digital Age*. New York: Oxford University Press. Available online at: <https://academic.oup.com/book/6470>

- Cumiskey, K. M., and Hjorth, L. (2017). *Haunting Hands: Mobile Media Practices and Loss*. Oxford: Oxford University Press.
- Cuttitta, P., and Last, T. (2020). *Border Deaths: Causes, Dynamics, and Consequences of Migration-related Mortality*. Amsterdam: Amsterdam University Press.
- De Vries, B. (2019). *Kinship Bereavement in Later Life: A Special Issue of "Omega-Journal of Death and Dying"*. Routledge.
- De Vries, B., and Rutherford, J. (2004). Memorializing loved ones on the World Wide Web. *Omega J. Death Dying* 49, 5–26. doi: 10.2190/DR46-RU57-UY6P-NEWM
- Ebert, H. (2014). "Profiles of the dead: mourning and memorial on Facebook," in *Digital Death: Mortality and beyond in the Online Age*, ed. C.M. Moreman, and A.D. Lewis, (ABC-CLIO), 23–42.
- Eriksson Krutrök, M. (2021). Algorithmic closeness in mourning: vernaculars of the hashtag #grief on TikTok. *Soc. Med. Soci.* 7, 396. doi: 10.1177/20563051211042396
- Francisco, V. (2015). 'The internet is magic': technology, intimacy and transnational families. *Crit. Sociol.* 41, 173–190. doi: 10.1177/0896920513484602
- Gach, K., and Brubaker, J. (2021). Getting your Facebook affairs in order: User expectations in post-mortem profile management. *Proc. ACM Hum.-Comput. Interact.* 5, CSCW1, Article 174 (April 2021), 29 pages. doi: 10.1145/3449248 (accessed June 14, 2023).
- Gibbs, M., Meese, J., Arnold, M., Nansen, B., and Carter, M. (2015). Funeral and Instagram: death, social media, and platform vernacular. *Inform. Commun. Soc.* 18(3), 255–268. doi: 10.1080/1369118X.2014.987152
- Gibbs, M., Nansen, B., Carter, M., and Kohn, T. (2014). *Selfies at Funerals: Remediating Rituals of Mourning*. AoIR Selected Papers of Internet Research. Daegu.
- Gibson, M. (2008). *Objects of the Dead: Mourning and Memory in Everyday Life*. Melbourne: Melbourne Univ. Publishing.
- Gibson, M. (2014). "Digital objects of the dead: negotiating electronic remains," in *The Social Construction of Death: Interdisciplinary Perspectives*, eds L. Van Brussel and N. Carpentier (Palgrave: Houndmills), 221–238.
- Gibson, M. (2015) Automatic and automated mourning: messengers of death and messages from the dead. *Continuum.* 29, 339–353. doi: 10.1080/10304312.2015.1025369
- Giralt, R. (2019). Bereavement from afar: transnational grieving and the emotional geographies of migration. *Child. Geograph.* 17, 578–590. doi: 10.1080/14733285.2018.1447087
- Gotved, S. (2014). Research review: death online—alive and kicking! *Thanatos.* 3, 1.
- Graham, C., Gibbs, M., and Aceti, L. (2013). Introduction to the special issue on the death, afterlife, and immortality of bodies and data. *Inform. Soc.* 29, 133–141. doi: 10.1080/01972243.2013.777296
- Gray, S. E., and Coulton, P. (2013). "Living with the Dead: Emergent Post-mortem Digital Curation and Creation Practices," in *Digital Legacy and Interaction. Human-Computer Interaction Series*, ed. C. Maciel and V. Pereira (Springer, Cham).
- Hillyer, R. S. (2021). Staying connected: effects of online platforms on transnational family relations and social capital. *Contemp. Japan.* 33, 3–23. doi: 10.1080/18692729.2020.1847389
- Hinkson, G. M., Huggins, C. L., and Doyle, M. (2022). Transnational caregiving and grief: an autobiographical case study of loss and love during the Covid-19 pandemic. *OMEGA-J. Death Dying.* 4, 5689. doi: 10.1177/00302228221095689
- Horsti, K. (2019). Digital materialities in the diasporic mourning of migrant death. *Eur. J. Commun.* 34, 671–681. doi: 10.1177/0267323119886169
- Huang, S., Yeoh, B. S. A., and Toyota, M. (2012). Caring for the elderly: the embodied labor of migrant care workers in Singapore. *Global Networks* 12, 195–215. doi: 10.1111/j.1471-0374.2012.00347.x
- Jiménez-Alonso, B., Bresco, de., and Luna, I. (2022). Griefbots. A new way of communicating with the dead? *Integrative Psychol. Behav. Sci.* 3, 1–16. doi: 10.1007/s12124-022-09687-3
- Kasket, E. (2019). *All the Ghosts in the Machine: The Digital Afterlife of your Personal Data*. London: Hachette UK.
- Kovras, I., and Robins, S. (2016). Death as the border: managing missing migrants and unidentified bodies at the EU's Mediterranean frontier. *Polit. Geography* 55, 40–49. doi: 10.1016/j.polgeo.2016.05.003
- Lagerkvist, A. (2019a). *Digital Existence*. Milton: Routledge. doi: 10.4324/9781315107479
- Lagerkvist, A. (2019b). "Numerical Being and Non-Being," in *A Networked Self and Birth, Life, Death*, ed. Z. Papacharissi (New York, N.Y.: Routledge), 11–34. doi: 10.4324/9781315202129-2
- Lagerkvist, A., and Andersson, Y. (2017). 'The grand interruption': death online and mediated lifelines of shared vulnerability. *Fem. Media Stud.* 17, 550–564. doi: 10.1080/14680777.2017.1326554
- Le Gall, J., and Rachédi, L. (2019). "The emotional costs of being unable to attend the funeral of a relative in one's country of origin" in *Transnational Death*, ed. S. Saramo, E. Koskinen-Koivisto, and H. Snellman, (Helsinki: Finnish Literature Society/SKS), 65–84.
- Leaver, T. (2019). "Co-Creating Birth and Death on Social Media," in *A Networked Self and Birth, Life, Death*, ed. Z. Papacharissi (New York, N.Y.: Routledge), p. 35–49. doi: 10.4324/9781315202129-3
- Leaver, T., and Highfield, T. (2018). Visualising the ends of identity: pre-birth and post-death on Instagram. *Inform. Commun. Soci.* 21, 30–45. doi: 10.1080/1369118X.2016.1259343
- Leurs, K. (2014). The politics of transnational affective capital: digital connectivity among young Somalis stranded in Ethiopia. *Crossings J. Mig. Cult.* 5, 87–104. doi: 10.1386/cjmc.5.1.87_1
- Lingel, J. (2013). The digital remains: Social media and practices of online grief. *Inform. Soc.* 29, 190–195. doi: 10.1080/01972243.2013.777311
- Maciel, C., and Pereira, V. C. (2013). *Digital Legacy and Interaction: Post-Mortem Issues*. Cham: Springer. doi: 10.1007/978-3-319-01631-3
- Madianou, M., and Miller, D. (2012). *Migration and New Media*. Florence: Routledge. doi: 10.4324/9780203154236
- Marwick, A., and Ellison, N.B. (2012). There isn't WIFI in heaven! Negotiating visibility on Facebook memorial pages. *J. Broadcast. Elect. Media.* 56, 378–400. doi: 10.1080/08838151.2012.705197
- Matyska, A. (2019). "Doing death kin work in Polish transnational families," in *Transnational Death*, ed. S. Saramo, E. Koskinen-Koivisto, and H. Snellman (Helsinki, Finland: Finnish Literature Society/SKS), 49–64.
- M'charek, A., Black, J., Cuttitta, P., and Last, T. (2020). "Engaging Bodies as Matter of Care: Counting and Accounting for Death during Migration," in *Border Deaths* (Amsterdam: Amsterdam University Press), 85–101. doi: 10.2307/j.ctvt1sg26.9
- Morse, T., and Birnhack, M. (2022). The posthumous privacy paradox: privacy preferences and behavior regarding digital remains. *New Media Soc.* 24(6), 1343–1362. doi: 10.1177/1461444820974955
- Nesteruk, O. (2018). Immigrants coping with transnational deaths and bereavement: the influence of migratory loss and anticipatory grief. *Family Process* 57, 1012–1028. doi: 10.1111/famp.12336
- Neustaedter, C., Pang, C., Forghani, A., Oduor, E., Hillman, S., Judge, T. K., et al. (2015). Sharing domestic life through long-term video connections. *ACM Transact. Comp. Human Interact.* 22, 1–29. doi: 10.1145/2696869
- Nunez, L., and Wheeler, B. (2012). Chronicles of death out of place: management of migrant death in Johannesburg. *African Stud.* 71(2), 212–233. doi: 10.1080/00020184.2012.702966
- Pasquali, F., Bartoletti, R., and Giannini, L. (2022). 'You're just playing the victim': online grieving and the non-use of social media in Italy. *Soc. Med. Soc.* 8, 4. doi: 10.1177/20563051221138757
- Pennington, N. (2013). 'You don't de-friend the dead: an analysis of grief communication by college students through Facebook profiles. *Death Stud.* 37(7), 617–635. doi: 10.1080/07481187.2012.673536
- Petrozzi, G. (2023). *Requiem for my Mother's Data Project Proposal: Ritual for Performing Grief in the Digital Age*. Mediamatic. Available online at: <https://www.mediamatic.net/en/page/386358/requiem-for-my-mother-s-data> (accessed June 14, 2023).
- Refslund Christensen, D., and Sandvik, K. (2015). Death ends a life not a relationship: timework and ritualizations at Mindet. *Dk. New Rev. Hyperm. Multimed.* 21, 57–71. doi: 10.1080/13614568.2014.983561
- Root, B. L., and Exline, J. J. (2014). The role of continuing bonds in coping with grief: overview and future directions. *Death Stud.* 38, 1–8. doi: 10.1080/07481187.2012.712608
- Saramo, S. (2019). "Introductory Essay. Making transnational death familiar," in *Transnational Death*, eds. S. Saramo, E. Koskinen-Koivisto, and H. Snellman (Helsinki: Finnish Literature Society/SKS), 1–8. doi: 10.21435/sfe.17
- Schwartz-Marin, E., Cruz-Santiago, A., and Cruz-Santiago, A. R. L. Y. (2016). Pure corpses, dangerous citizens: transgressing the boundaries between experts and mourners in the search for the disappeared in Mexico. *Social Res.* 83, 483–510. doi: 10.1353/sor.2016.0038
- Sconce, J. (2000). *Haunted Media: Electronic Presence from Telegraphy to Television*. London: Duke University Press.
- Stokes, P. (2012). Ghosts in the machine: Do the dead live on in facebook? *Philos. Technol.* 25, 363–379. Available online at: <https://philpapers.org/rec/STOGIT>
- Stokes, P. (2015). Deletion as second death: the moral status of digital remains. *Ethics Inf Technol.* 17, 237–248. doi: 10.1007/s10676-015-9379-4
- Stokes, P. (2020). Dealing with digital remains. *ADI Policy Briefing Papers, Australia.* 1, 3. [Epub ahead of print].
- Tariq, A., Muñoz Sáez, D., and Khan, S. R. (2022). Social media use and family connectedness: a systematic review of quantitative literature. *New Med. Soc.* 24, 815–832. doi: 10.1177/14614448211016885

- Thimm, C., and Nehls, P. (2017). Sharing grief and mourning on Instagram: digital patterns of family memories. *Communications* 42, 327–349. doi: 10.1515/commun-2017-0035
- Tronto, J. C. (1993). *Moral Boundaries: A Political Argument for An Ethic of Care*. New York: Routledge.
- van der Beek, S., Hoondert, M., Bruin-Mollenhorst, J., Matthee, N., Kreek, d. e., Wenz, M. K., et al. (2019). *Ritual in a Digital Society*. Amsterdam: Institute for Ritual and Liturgical Studies, Protestant Theological University and Institute for Christian Cultural Heritage, University of Groningen.
- van Ryn, L., Kohn, T., Nansen, B., Arnold, M., and Gibbs, M. (2017). “Researching Death Online,” in *The Routledge Companion to Digital Ethnography*, eds. L. Hjorth, H. Horst, A. Galloway, and G. Bell, (New York, N.Y: Routledge), 112–120.
- Vetere, F., Smith, J., and Gibbs, M. (2009). “Phatic interactions: being aware and feeling connected,” in *Awareness Systems* (London, U.K: Springer), p. 173–186. doi: 10.1007/978-1-84882-477-5_7
- Wagner, A. J. (2018). Do not click “like” when somebody has died: the role of norms for mourning practices in social media. *Social Med. Soc.* 4, 1. doi: 10.1177/2056305117744392
- Walter, T. (2015). Communication media and the dead: from the stone age to Facebook. *Mortality*. 20, 215–232. doi: 10.1080/13576275.2014.993598
- Walter, T., Hourizi, R., Moncur, W., and Pitsillides, S. (2012). Does the Internet change how we die and mourn? Overview and analysis. *Omega: J. Death Dying* 64, 275–302. doi: 10.2190/OM.64.4.a
- Wilding, R., and Baldassar, L. (2018). Ageing, migration and new media: The significance of transnational care. *J. Sociol.* 54, 226–235. doi: 10.1177/1440783318766168
- Wilding, R., Baldassar, L., Gamage, S., Worrell, S., and Mohamud, S. (2020). Digital media and the affective economies of transnational families. *Int. J. Cult. Stud.* 23, 639–655. doi: 10.1177/1367877920920278
- Wortham, J. (2015). Ghosts in the machine. Social media has changed the way we mourn, for the Better, *The New York Times*, 23 December. Available online at: <https://www.nytimes.com/2015/12/27/magazine/ghosts-in-the-machine.html> (accessed April 20, 2023).
- Wright, N. (2014). Death and the internet: the implications of the digital afterlife. *First Monday* 19, 6. doi: 10.5210/fm.v19i6.4998
- Zaveri, M. (2019). ‘R.I.P. to a startling Facebook feature: reminders of a dead friend’s birthdays. *The New York Times*, 10 April. Available online at: <https://www.nytimes.com/2019/04/10/technology/facebook-dead-users-happy-birthday.html> (accessed April 20, 2023).