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## Understanding animal-oriented social media collaboration in Australia's 2019–20 bushfire crisis

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In the past decade, social media has served as a vehicle for sharing information and coordinating actions during sudden crises. However, much of the research has focused on local communities directly affected by crisis and the human recipients of aid. This paper explores a case where handicraft makers across the globe collaborated on social media—namely Facebook—to help Australian wildlife during the 2019-20 bushfire crisis. Based on 12 semi-structured interviews, we report how animal-centered visual content spread through a broader hybrid media system, arousing emotions that played a crucial role in increasing awareness of the crisis and catalyzing action. The findings highlight how participants actively sought possibilities for utilizing their knowledge and expertise within the project and experienced receiving immaterial rewards and benefits as compensation for their efforts. The findings also show how participants had various roles in the collaborative initiative-alternating between online and offline environments. However, the ongoing crisis coupled with the related pressure and stress, the rapidly increasing number of helpers, communication ambiguities, and technological challenges, led to chaos, heightened emotions, and fueled dissension within the group. These factors posed challenges to collaboration, further highlighting the negative and toxic communication cultures of social media. This paper enriches our understanding of how social media can enable, but also challenge, bottom-up communitydriven, animal-oriented solidarity actions and long-distance crisis collaboration.

KEYWORDS

animals, collaboration, collaborative media, craftivism, social media, societal crises, solidarity, volunteering

### **1** Introduction

Due to the accelerating environmental crisis, weather extremes, such as heatwaves, droughts, bushfires, and floods, have become increasingly common. This has been demonstrated in Australia, where weather extremes have emphasized how human suffering cannot be seen in isolation from the suffering of non-human others. During the 2019/20 Black Summer Bushfires – the catastrophic bushfire season in scale and impact – an ongoing drought and record-breaking heat resulted in bushfires that burnt millions of hectares of land and killed billions of animals (WWF Australia, n. d.). In addition, numerous species, including endemic koalas and kangaroos, became injured, orphaned, and homeless (The University of Sydney, 2020; WWF Australia, 2023).

As one of the bushfire rescue initiatives, the Australia-based Animal Rescue Craft Guild put on its Facebook group a call for volunteers to make shelters and other items to aid animals. The group expanded rapidly and globally as the call brought together volunteer crafters who knitted, crocheted, and sewed mittens for koalas' burned paws and pouches for orphaned marsupials, among others (Animal Rescue Craft Guild, 2020; Reuters, 2020; The Guardian, 2020). The call for volunteers resulted in multiple sub-groups as people organized at national and local levels in their own Facebook groups. One of these sub-groups was established by one individual in Finland, on the opposite side of the Earth, named Suomen käsityöläiset Australian eläinten avuksi [tranl.: Finnish crafters to help Australian animals]. The group expanded rapidly and aimed to share instructions and tips for how to help Australian wildlife by making handicrafts and to coordinate a joint donation from Finland to Australia. As a result of the joint effort, a total of 110 kg, including 1,600 individual handicraft items, was shipped to Australia, which is a significant amount considering the relatively small Finnish population (Iltalehti, 2020; Suomen käsityöläiset Australian eläinten avuksi, 2020).

The action described above is a part of the development where people's environmental crisis awareness and engagement are constantly increasing due to the prominent role of social media (Filho et al., 2018; Mavrodieva et al., 2019; Östman, 2014). The prominent role of social media in increasing environmental crisis awareness and engagement is reflected by various scholarly interests in interdisciplinary academic fields. Social media's diffuse, diverse and even conflicting information (Skoric et al., 2016), enables public discussion (Fernandez et al., 2016; Gil de Zúñiga et al., 2012), facilitates environmentally conscious behavior by information acquisition and attitude formation (Anderson, 2017; Melville, 2010; Oakley and Salam, 2014; Williams et al., 2015), and mobilizes individuals around their personal lifestyles and values to engage with environmental activism and participation (Bennett and Segerberg, 2012; Karhu et al., 2019; Zhang and Skoric, 2018), to name a few. The volume of aid to Australian wildlife-from Finland as just one of many countries-illustrates how Australia was inundated with crafts aiming to help the animals suffering from the ecological crisis. This crafting phenomenon demonstrates how social media and the social networks relying on it make it possible to turn environmental crisis awareness into response action where people can contribute collaboratively.

The present case study explores social media-based environmental crisis collaboration through interviews with Finnish crafters who contributed their skills to help the Australian animals. It is not new that people help those in need through social media. However, typically, the recipient of help (often monetary) is a human being. In this case, collaboration takes place outside official infrastructures and organizational coordination attempts to offer non-monetary help to animals far abroad. Whereas related work has focused mainly on crises occurring in people's immediate surroundings, we aim to provide a rich empirical understanding of social media-based collaboration cultures in a long-distance crisis context where the crisis does not immediately affect the participants themselves.

In this study, we analyze interviews of 12 voluntary helpers to ask: 1) What drove the collaborative actions, i.e., what made people knit, crochet, and sew huge quantities of shelters and other items to aid Australian wildlife? 2) What forms of effort were identified? 3) How was social media—and the Facebook group—perceived as a platform for collaboration? Understanding these drivers and sociotechnical conditions makes it possible to nourish social media projects and platforms that increase bottom-up communities' capacity to collaborate in societal crises.

### 2 Related work

### 2.1 Animal-oriented solidarity

Our study is strongly related to "solidarity with animals," i.e., a feeling about being connected with other animals and a greater desire to help animals as well as to engage in collective actions on their behalf (Amiot et al., 2020). Researchers have emphasized a need to expand the lens of solidarity from domesticated to wild animals in an aim to reflect our multi-species communities (Cojocaru and Cochrane, 2023). Overall, people's capacity to empathize is important in concern and care that people have for the conservation of wildlife and nature (Myers et al., 2009; Taylor and Signal, 2005). In our study, the volunteer crafters knitted, crocheted, and sewed mittens for koalas' burned paws and pouches for orphaned marsupials, among others to provide protection and shelter (Animal Rescue Craft Guild, 2020; Reuters, 2020; The Guardian, 2020). Due to the quickly scaling efforts, local communities in Australia become overwhelmed with donated goods (BBC, 2020). On the other hand, one might ask if the crafted items really help animals or not (e.g., Time, 2015). Although the necessity and concrete benefit from the crafted items can be disputed, the phenomenon shows that people have a large-scale desire to help animals in distress.

Visual communication can trigger a strong emotional response (Casas and Webb Williams, 2018; Jenni, 2005; Kharroub and Bas, 2015; Whitley et al., 2021) and it has been recognized that visuals play a significant role in viewer's awareness and mobilization in animal advocacy issues (Cherry, 2016). On the other hand, prior research indicates that there is a great variation in people's attitudes toward animals, which depends, both animal and individual human attributes as well as cultural factors (Serpell, 2004). According to the research evidence, people show more concern for animals they perceive aesthetically appealing or "cute" (Gunnthorsdottir, 2001; Prato-Previde et al., 2022; Stokes, 2007). That is related to the concept of "charismatic megafauna"-i.e., particularly appealing animals-that are utilized in media for directing public attention toward conservation and preservation of the natural environment (Barney et al., 2005). In their research, Albert et al. (2018) ranked a list of the most charismatic animals and emphasize how most of the ranked species are large exotic, terrestrial mammals.

Research literature also emphasizes how humans prefer and show more concern for "human-like" animals (Batt, 2009; Herzog and Burghardt, 1988; Serpell, 2004). That is linked to people's tendency to project human thoughts, feelings, motivations, and beliefs to nonhuman animals—i.e., anthropomorphism (Serpell, 2003). Prior research suggests anthropomorphism increases prosocial behaviors toward animals (Butterfield et al., 2012; Williams et al., 2021) and is a key factor in stimulating a wildlife value shift in which wildlife are seen as part of one's social community (Manfredo et al., 2020). Further elaborated, Tam (2019) concluded that people who anthropomorphize nature are more likely to feel guilty for environmental degradation and in turn to take more steps toward environmental action. To understand what drives citizens' crisis- related (animaloriented) solidarity activities on social media, it is useful to look at the concept of 'post-humanitarian solidarity', coined by Chouliaraki (2013). Post-humanitarian solidarity describes how contemporary solidarity has moved from "common humanity' towards a morality of 'the self' as the main motivation for action" (Chouliaraki, 2018). Therefore, post-humanitarian solidarity emphasizes solidarity as a pursuit of personal interests, self-fulfillment, and minor gratifications in a spirit of what's-in-it-for-me ethics (Chouliaraki, 2013). All these perspectives may have an explanatory potential for what drives people to use social media collaboratively in crises in an aim to help animals, but the information is fragmented and based on different contexts.

#### 2.2 Social media use in crises

Today's crisis events emphasize the hybrid nature of media. In the hybrid media system (Chadwick, 2013), meanings are formed through the endless circulation of texts, visuals, and meanings in closely interwoven practices of professional, journalistic, and social media (Sumiala et al., 2018). In other words, social media is part of a broader hybrid media environment. Since the second half of the 21st century, a rapidly growing research field represented by scholars from different disciplines with different theoretical and methodological approaches has drawn attention to the role of social media in crises (Reuter and Kaufhold, 2017). The research cases are especially related to natural disasters (Liu et al., 2008; Starbird and Palen, 2011; Yates and Paquette, 2011), terrorist attacks (Palen and Liu, 2007; Perng et al., 2013; Wiegand and Middleton, 2016) as well as political uprisings (Starbird and Palen, 2012; Wulf et al., 2013). However, most studies have focused on local communities directly affected by these crisis events. Less is known about the use of social media in crises that are physically distant to the participants.

Altogether, it is evident that social media has broadened citizen participation in crises and made it more visible (Palen and Liu, 2007). When paying attention to communication among citizens as a social media usage pattern in crises (Reuter and Kaufhold, 2017), research interests in how social media enhances crisis awareness and how people make sense of the crisis events within an online network get particularly emphasized. It becomes evident that during crises, people turn to social media to look and share information (Hughes and Palen, 2009; Palen and Liu, 2007; Starbird and Palen, 2011; Takahashi et al., 2015; Yates and Paquette, 2011) that spreads through online social networks rapidly and dynamically (Albris, 2018) broadening its reach. In this informational sphere, social media also serves as a platform for collective emotion formation (Valaskivi et al., 2019). Overall, social media has been researched as a means to organize different types of individual and collective actions (Enjolras et al., 2013; Lim, 2012; Tufekci and Wilson, 2012), and this organizational capacity of social media seems to play a significant role in the creation of new movement forms (Bennett and Segerberg, 2012; Segerberg and Bennett, 2011; Theocharis, 2013). These movement endeavors can be scaled up (Mundt et al., 2018) as social media enables communication not only within the affected areas but also with the rest of the world (Takahashi et al., 2015; Valaskivi et al., 2019) by bridging the local and the global (Enjolras et al., 2013). All this is closely linked to how people can coordinate and organize their crisis response efforts (Albris, 2018; Sarcevic et al., 2012; Starbird and Palen, 2011; Takahashi et al., 2015), and how the ones in need of help can be connected to those offering it (Albris, 2018) through social media.

When paying attention to syntheses about the use of social media in crises—it is central how collaboration is mentioned as one aspect among the lists introducing how social media are used during these events (e.g., Alexander, 2014; Bukar et al., 2022; Spence et al., 2015). Nevertheless, when the research focuses on citizens' collaborative activities during crises, these activities are often lower-threshold micro-tasks, such as crisis mapping (*cf.* Liu, 2014). Also, most of the research focusing on the use of social media in crises concentrates on Twitter (Reuter and Kaufhold, 2017)—a microblogging service that serves the immediate needs for information (Valaskivi et al., 2019) and thus again emphasizes the above-highlighted interests that are related to making sense of the crisis events. However, little is still known about crisis collaboration, which requires more extensive efforts from its participants.

# 2.3 Spontaneous solidarity and craftivism on social media

The efforts that enhance mutual support and help, particularly during crisis events, can be understood in terms of 'media solidarities'. According to Nikunen (2019), media solidarities refer to how media expresses and enhances solidarity through various representations and engagements. The activities include, e.g., creating, "liking" or sharing content about social issues, signing online petitions, and donating to a cause (Gil de Zúñiga et al., 2013; Miller, 2015; Vicente and Novo, 2014; Warren et al., 2014). Though the described types of contributions have been referred to with terms such as "micro-activism," "slacktivism" (Dennis, 2019), or post-humanitarian solidarity (Chouliaraki, 2018), small gestures get multiplied when done by substantial amounts of people and create an environment that can inspire people to mobilize in larger and more coordinated ways (Miller, 2015). The mobilization is related to how digital volunteers form 'emergent groups' to support crisis response (Cobb et al., 2014; Palen and Liu, 2007; Reuter and Kaufhold, 2017; Starbird and Palen, 2011, 2013). Following the logic of "connective action" (Bennett and Segerberg, 2012), these groups are self-organizing, quickly scaling, and highly flexible bottom-up movements. However, the criticisms verbalized in terms such as slacktivism are well-aligned with the above-described notions about how low-threshold micro-tasks get emphasized in crisis collaboration-and apparently in solidarity actions as well.

On the other hand, people actually do things together in terms of solidarity by making use of social media in different ways (Nikunen, 2019). For instance, there are social media groups organized around craftivism (Black, 2017; Clarke, 2016; Nikunen, 2019)—a practice that draws on new social movements and social media and focuses on the use of crafts for activism (Nikunen, 2019). In contrast with today's digitally native social movements that are "initiated, organized, and coordinated online without any physical presence or pre-existing offline campaign" (Li et al., 2021), craftivism is participation that is "mobilized and enhanced through media but extends beyond media." Social media has expanded craftivism, and there are various social media sites where craftivists plan and organize their projects. Craftivism highlights the importance of makings and entails many different versions, from demonstrations to art exhibitions and aid work (Nikunen, 2019).

Combined, these research contributions form a background for understanding the phenomena related to our case study in which we explore how handicraft makers united by Facebook collaborated to help Australian wildlife during the Black Summer Bushfires. Although crisis-related social media movements have been actively studied, prior literature includes few empirical cases that combine the use of social media to show animal-oriented solidarity in a remote crisis, particularly looking into the motivations of collaboration, the forms of collaboration in practice, and perceptions of technological affordances for collaboration.

### **3** Methods

### 3.1 Data collection

The data collection began by becoming familiar with the 'Finnish crafters to help Australian animals' Facebook group in Spring 2020. The first author did not participate in the community but acted as an outside observer (Rafaeli et al., 2004) for identifying active participants and potential interviewees (Hine, 2015, pp. 79) among the group. Identified potential interviewes were then contacted initially through private messages for requesting an interview. In addition, an open call for interview arrangements and practices were agreed upon with the interviewee by phone or email according to the interviewee's preference.

The research has followed the research ethics procedures of University of Lapland, Finland. With communication technology mediated interviews, conducted remotely with participants, the informed consent for participation is retrieved orally, before starting the actual research study interview part. The study participants do not represent a vulnerable participant group and the interview does not address any sensitive personal information. This procedure is valid accordingly to the local legislation and the university research policies.

For eliciting participants' individual reflections on social mediabased environmental crisis collaboration, altogether 12 interviews were arranged in March-April 2020: ten via online meeting platforms or phone and two via email. Interviewees included the founder of the group, other group admins as well as 'ordinary' participants. The semistructured interview was selected as an interview method as it allows openness and flexibility by proceeding loosely and focusing on pre-planned themes (Bryman, 2012; Hirsjärvi and Hurme, 2022) but leaving room for participant-driven discussion as well as participants' own interpretations and meaning-making. The interviews were conducted in Finnish and covered four main themes: the role of news and social media in increasing crisis awareness and engagement, drivers for collaboration, forms of efforts, and the role of Facebook as a platform for collaboration. Though two of the interviews were conducted through email, they allowed the above-mentioned 'participant-driven discussion' in a written format. The 10 interviews conducted via online meeting platforms or phone were audio recorded with the interviewees' consent. The duration of those interviews was, on average, 35 min, varying according to the interviewees' openness and number of examples discussed.

### 3.2 Data analysis

The interviews were transcribed from the recordings, and the data was anonymized at this stage. The dataset was subjected to thematic analysis (Burnard, 1991) for identifying, classifying, and analyzing different themes that arose from participants' individual reflections. One researcher identified the initial codes and emerging themes and established a thematic codebook by searching, reviewing, refining, and naming the themes. The codebook was reviewed by two other researchers. After that, the researcher who established the codebook conducted the first analysis round. To enhance the reliability of the analysis, a second researcher independently went through the interview data and coded it according to the codebook. A third researcher decided on the codes in cases where the two researchers had given different codes to a data item.

### 4 Findings

In this section, we report key findings from the interviews. After presenting the drivers for collaboration, we present how collaboration was organized and maintained, and how participants perceived the technological framework for their collaborative efforts. The participant quotes have been translated from Finnish to English when writing the paper.

### 4.1 Drivers for collaboration

### 4.1.1 Visual communication of suffering animals as catalysts for the sense of crisis

The case study highlights how news stories and social media content – as a broader hybrid media environment – generated both crisis awareness and the sense of crisis as well as promoted a chance to take part in the craft guild initiative.

"It was hard not to notice that news coverage [...] Those koalas and others were on the forefront of the [social media] feed" (P4).

"Someone linked the Facebook group to me, then another one, and then a third one... And it had been talked about in a newspaper. It kind of jumped to my eyes from many different media" (P2).

Following the bushfire crisis through hybrid media raised emotions that drove collaboration in the craft guild. Participants described the horror caused by the situation.

"People were sincerely horrified by the situation, and I think this sincere horror caused the positive movement. People felt a sting in their hearts and wanted to do concrete things in an aim to help" (P6).

Visual communication of Australian animals in distress played a crucial role in arousing the described emotions. The participants of the group shared continuously plenty of images related to suffering animals by themselves too. The images were shared from news stories as well as other social media sources, including the main Australia-based Animal Rescue Craft Guild group. There were also photos that presented the handcrafted aid "in action": kangaroos in pouches and koalas with mittens among others. According to participants, photos and videos presenting suffering animals got them to act.

"There were posts and news from every channel about how koalas had burnt themselves and how kangaroo puppies were without a mother. I got hopeless and needed to do something" (P12).

Overall, this is attached to an animal-related emotional bonding which was a central driver in getting participants to collaborate as a part of the craft guild. Participants emphasized their close relationship with nature and animals. Also, Australian animals' uniqueness and certain kind of cuteness played a role in catalyzing participants' actions.

"I was aware of how unique flora and fauna is in there, and how great loss it would be to the Earth if they were permanently destroyed" (P11).

"Even though Australia is very far away, everyone knows what a koala looks like. And everyone knows what a kangaroo looks like" (P2).

"It was also affected by such cuteness. I believe that if they had asked to craft something for crocodiles in there, people would not have been so much activated" (P9).

### Participants also emphasized how animals are innocent beings that must be helped in human-made crises.

"For some reason, it is easier for people to start helping animals than other humans. [...] Compared to elderly people, for example, many may think that they have their relatives and money, let them buy their blankets" (P2).

"Animals and children are those who are completely innocent in this world. They should be helped. [...] Grownup people here do what they do, and that has certain consequences. [...] Yes, this Australian disaster is, in a way, human made. [...] It was a matter of time before this bomb exploded" (P3).

### 4.1.2 A chance to deploy the right combination of interests and skills

A chance to deploy the right combination of interests and skills was a central driver for collaboration in the craft guild. As one of the participants summed up:

"It is great in these projects that you can combine all the tools you have on the table" (P6).

#### At first, making handicrafts was a beloved hobby for many.

"Sometimes, I cannot come up with what I could craft for myself when I have already done so many things" (P4). In addition to crafting as a hobby, some participants had an education or profession in the field, willing to deploy their skills for the volunteer project.

"I have a craft education as one profession, and I craft a lot anyway. So, it kind of clicked immediately that 'okay there, I am going participate in this" (P9).

Therefore, participants felt there was a low threshold to participate in the project that matched their interests and skills.

"For me, sewing is a bit like putting shoes on. It is not an effort of any kind" (P2).

Participants generally emphasized the significance of clear and easy instructions that lowered the threshold for participation. The instructions were visual and, in addition, plenty of photos of finished crafts were shared in the group.

"It was easy to get involved because there were clear instructions on what kind of pouches the kangaroos should have. [...] It made it very easy to get excited" (P5).

Though most participants had a background in handicrafts—a hobby or even a profession—some learned new crafting skills in the project that they perceived exciting.

"Everyone who knows me said, okay-now you have even started knitting. I have been the worst in the world to make any crafts. But I got a new hobby, and I am excited about it" (P6).

Crafting skills were just some of the skills that participants got to utilize in the craft guild. Many had previous background and experience in, e.g., (animal) volunteering and that thus worked as a driver for collaboration.

"I do a lot of charity work in any case. [...] So the first thought that came to my mind was what kind of help Australia needs in this situation. What would be a concrete, useful way to help" (P6).

Specific skills were needed in the craft guild, and those participants whose skills matched the needs recognized themselves and offered to help. The group administrators asked whether there were participants able to, e.g., translate the instructions or craft sewed items.

"There was a discussion among the administrators that the instructions should be translated. So, I wrote there [in the Facebook group] that if you needed a translator, I could translate too" (P4).

"The administrators asked whether there was anyone who was able to sew because there were already loads of knitted and crocheted items. [...] It was such an alarm to me" (P2).

Overall, participants experienced that collaborating in the craft guild was a concrete way to contribute with their interests

and skills and help Australia in the bushfire crisis. Participants also emphasized that they were willing to help in non-monetary ways.

"Financially, I would not have an opportunity to help. For once, it was such 'yay', I can do something too" (P5).

#### 4.1.3 Rewards and benefits

In the interviews, participants described versatile rewards and benefits they experienced receiving, and that therefore drove them to take part in the collaborative effort. At first, participating in the craft guild was a way to channel one's craft enthusiasm. Participants brought up how they craft a lot in any case for the joy of doing—whether the items were needed or not. Now handicrafts had recipients awaiting them.

"It is good that the frenzy of doing can now be gutted into something necessary" (P2).

In addition, one of these rewards and benefits was a chance to utilize material stocks that participants had, according to their own words, "cabinets in full."

"I had extra fabric, which fits well with such a purpose. [...] I like the idea that no stuff and no fabrics are wasted, but some purpose must be found for them. [...] That was my motive" (P10).

Also, the rewards and benefits wrapped around various immaterial aspects: from getting a theme for a kid's birthday party to finding pedagogical synergies with work in early childhood education.

"This year, we held birthdays on this theme [crafting aid items together with guests at kid's birthday party]. So, in a way, it also had such a selfish perspective that I got a solution to one of the birthday parties" (P2).

For some, the reward was simply to get to do things together.

"Then I believe in the power of the community. And in doing something together. It is always really motivating" (P6).

# 4.2 Organizing and maintaining the collaboration

#### 4.2.1 A need for administrators

Participants had various roles in the craft guild. In the first place, administrators were responsible for setting up the group. In addition, the group of administrators took care of practicalities, such as communicating up-to-date information to group members, coordinating domestic item shipments, and negotiating transportation sponsors to the end destination in Australia. As one of the administrators described in the interview:

"I was mainly involved in the group's maintenance activities and provided technical support. I ensured that all the information needed was found in the group, it was easy to find and understand, and everything went smoothly online" (P11).

As a detail, being an administrator or conducting administrative activities was not self-evident, but there were also struggles regarding who had the right to do what in the group.

"They started to solo—for instance, asking all kinds of sponsors and did not collaborate with us [named administrators]. We administrators had the big picture about what should be done and how" (P1).

### 4.2.2 A variety of different roles

Making handicrafts was at the core of participation for many. Participants crocheted, knitted, and sewed items for Australian animals:

"I started knitting small animal bag covers. In particular, I crocheted bird nests" (P9).

In addition, participants took care of various support tasks. These included, e.g., coordinating material donations and item shipments, translating crafting instructions, and sharing information and news among the participants as well as in participants' networks outside the group.

"People started sending me messages that they would like to bring used sheets and towels [...] because there was a wish that recycled materials are used for crafting the items" (P3).

"I collected the donations in our region and mailed them to the domestic collection point [hub]" (P9).

"I translated a large part of those crafting instructions" (P4).

"I was pretty active [in the Facebook group]. I shared much news in there" (P5).

"It [information about the crafting event] was shared into different [Facebook] groups. [...] I also shared information, for example, to *marthas* [a Finnish non-profit organization that engages in advocacy work] and seniors in the area" (P6).

### Participants described how visual communication played a central role in documenting and sharing the activities.

"In the group, there was a picture of a large pallet, which was full of cardboard boxes of the same size, tightly packed. It was probably 2.5 meters high. So, there were quite a lot of handicrafts from Finland overall" (P3).

"I published a picture on my social media of the girls sewing the items. Many said that oh no, I would have liked to participate too. But it was already too late" (P2).

Some participants also arranged offline events for crafting the items together. Next, this form of participation will be looked at in more detail.

#### 4.2.3 From online to offline participation

Making handicrafts is an offline activity by nature, and people arranged gatherings and events for crafting the items together. Interviewed participants' experiences describe the variety of these get-togethers, from meetings with friends to children's birthday parties and open events with a wide audience.

"I organized an event here in my residential area with a local knitting cafe. People were allowed to attend—to come to the place to knit, exchange ideas, and bring their ready-made items within a certain time" (P6).

### Experiences from offline events further illustrate the ability to participate in different roles.

"There was so much that people could do. Some said that I cannot sew; I have never sewed. So, I said okay, but you can cut. There were some tasks for everyone" (P3).

The interviewed participants emphasized the significance of experiences from offline events. The significance arose from, e.g., community spirit. Participants also felt it was essential to increase awareness about the bushfires when meeting people face to face.

"Many thanked us all for the warm-hearted discussion and such power of community. [...] We all come from different paths in life. Nevertheless, it is not what matters. What matters is that we are in that situation and doing something for good together" (P6).

"I also noticed that there are people who just do not know about things. Some were quite unaware about the bushfires" (P3).

# 4.3 Experiences from the technological framework of collaboration

### 4.3.1 Reach and rapid expansion of the group

Participants emphasized how Facebook was an incomparable channel to reach people. It is descriptive that the group was established on Facebook because it was the only platform that was familiar to the administrator who established the group.

"I cannot use anything else. I am so foolish that I do not know any other [platforms] than Facebook" (P1).

In addition, participants brought up how craft-makers can be reached from Facebook as a particular platform.

"It seems that a lot of middle-aged people have joined Facebook. Furthermore, those people also have more crafting skills [...] Like-minded people then find each other" (P4).

On the other hand, news media reporting supported the reach of the Facebook group as news pieces about the craft guild were published. That highlights the hybrid nature of media. Many people joined the group due to the reach supported by these news pieces, as one of the administrators described in the interview: "At first, there were about a hundred people, but when there was a story in a tabloid, it kind of exploded, and there were quickly over 5,000 people" (P1).

# 4.3.2 Sharing and structuring up-to-date information

At first, crafting instructions were shared in the Facebook group. In addition, utilizing Facebook as a platform for collaboration offered the possibility to ask and give advice, serving as a site for peer support and an interactive and communal way of doing things.

"Australia[n authorities] had come up with instructions on what to do. [...] It felt straightforward. [...] You can just print the patterns and instructions" (P3).

"If someone asked that she does not get how this should be done [...] there were people who immediately told how to do it" (P5).

In terms of sharing and structuring up-to-date information, the amount of volunteer crafters did not explode only in Finland but also globally. Due to that, the situation was in flux all the time in Australia. No one could have expected such an amount of donations, and volunteers in Australia had to sort the avalanche of crafts to give up-to-date information about the items that were still needed. The challenges caused by the enormous volume of aid affected the activities of the Finnish group.

"I would have done more, but there were announcements that you must stop crafting; nothing can be done now because there were so many items already. [...] The situation of whether to craft or not was constantly monitored" (P7).

Sharing up-to-date information describes how the Facebook groups enabled a multidirectional flux of information from the Australian parent organization to and within local craft guilds around the globe. Participants told how one of the benefits of Facebook was the ability to share real-time (*in-situ*) information.

"I think this group did an excellent job of constantly informing people that 'do not do this, do this, now there is a need for this" (P6).

"There were also members from Australia, who sent photos and updates from the spot to see the situation in there. It somehow diminished the world and made it more relatable" (P4).

Visual communication played a key role in sharing and structuring up-to-date information. As mentioned above, the group shared, for instance, a lot of pictures of animals in distress as well as crafts and instructions for making the crafts. Moreover, visuality was present in the group's communication, for example, in the form of emojis.

"And if there was terribly sad news, there were those teary-eyed signs" (P5).

#### 4.3.3 Dissension and heated emotions

Due to the ongoing crisis, the situation and conditions were constantly changing in Australia. Simultaneously, the number of crafters sending aid increased exponentially and globally. Aid was delivered simultaneously from many continents and time zones. Though updates about the crafts needed were constantly published in the group, providing up-to-date information was challenging and confusion easily arose. At the same time, the acute crisis created pressure and stress—and made people long for quick action. Together, the circumstances created a challenging equation that caused dissension and heated emotions in the group.

"Some are such that give everything to me immediately and does everything not progress in a second. What is now needed, and what is not needed, and am I doing it in vain? There was such a commotion. [...] Many were upset that this was not going faster, and now there is a rush. There the forests burn, and we here do not even get the package sent" (P2).

Participants described how people in the group expected realtime communication and rapid response that, on their part, contributed to above-described dissension and heated emotions.

"Some get angry when they do not get an answer. [...] You join the group and do not get the answers you seek. So then comes the frustration that you are not being listened to, what is happening now, and this is a badly organized project" (P4).

### Participants also described actual trolling and bullying that occurred in the group.

"Then there was one, well, a troll. It was such terrible harassment and making personal remarks against me" (P1).

"The administrators received harassing messages. It seems that even when we try to do something good, there are always side effects like this" (P4).

On the other hand, participants discussed that the described dissension and heated emotions reflected the overall Facebook communication cultures that they perceived as negative.

"You cannot expect any great reception or constructive discussion on Facebook, which is not the forum for that. To put it ugly, it is more for those who want to bicker. Or otherwise, mix things up in some way" (P6).

Overall, the described aspects connect to participants' perceptions that Facebook is not a state-of-the-art platform for this kind of collaborative action.

### 4.3.4 Facebook is not designed for collaborative action

Overall, participants felt that Facebook is not designed for collaborative action demonstrated by the craft guild.

"Although it is a good place to connect people, it seems that it is not designed for such collaborative activities. In fact, this action and this platform do not fit together" (P4). At first, participants described how Facebook does not adapt to the needs of individual groups.

"Facebook group page is designed for a general use. Harnessing it to a particular purpose is trickier. [...] It lacks the flexibility that would have been needed" (P4).

Often, participants were looking for the latest information, and Facebook's algorithmic logic confused them.

"That system has changed so much. The posts are not in a chronological order [...] The challenges get even more emphasized when you should stay up to date. And Facebook messes that up" (P4).

There were also challenges in Facebook's communication practices as people constantly asked the same questions in new comment threads. The challenges got emphasized as the group rapidly expanded.

"When people get excited, they ask all kinds of things. They did it by posting or commenting. Then there were loads of side chains that repeated the same things" (P9).

"If you are an active Facebook user, you may read every comment and all the conversations. Surely it is quite confusing" (P2).

### In addition, reasons for Facebook's impracticality as a collaboration platform were found in participants' skills in IT and social media.

"For some reason, not all people could find or retrieve those files and attached publications" (P9).

"However, I am already over 60, so for me, using Facebook and understanding where everything is located is not always so clear" (P7).

### 5 Discussion

We first highlight the trinity of drivers for collaboration, followed by a discussion on the division of labor in the interplay between global and local and between online and offline action. Finally, we discuss balancing between the reach of Facebook and its adaptability for crisis collaboration.

# 5.1 The trinity of drivers for collaboration: appealing to emotions, reason, and values

Concerning participants' motives, the chance to help the affected wildlife by crafting appealed to this unique interest group's emotions, reason, and values. Participants emphasized how they received visual news reports and social media content about suffering endemic Australian animals from multiple channels—highlighting the hybrid nature of media – and how that offered a relatable manifestation of the distant events. Reinforced by the algorithmic logic in recommendations on social media, the flood of alarming information on people's social media feeds inspired individuals to not only share information, opinions, and experiences but also to act. Participants'

vivid expressions of burning koalas and fleeing distressed kangaroos seem to be significantly related to suffering as a cause for emotion and action (Chouliaraki, 2010, 2018), and how imageries of pain and emotional language of emergency play a key role in that (Calhoun, 2010). Regarding emotional dimensions, it has been argued that circulating affects play a crucial role in gaining attention in hybrid media (Sumiala et al., 2018). Further elaborated, Papacharissi (2014) has focused on how the expression of sentiments mobilizes and connects crowds in the digital age – and coined the term affective publics to describe these practices. This is related to how solidarity becomes articulated through emotions that social media makes use of (Nikunen, 2019) and how social media can be a site for collective affect management in the immediate phase of a disaster (Valaskivi et al., 2019).

Historically, images of attractive and appealing animals are widely used, e.g., in NGOs' animal advocacy campaigns (Milton, 2011). Our findings illustrate how visual content of suffering yet attractive animals was central to arousing emotions such as anxiety, horror, and fear. According to widespread scholarly understanding, people find cute furry animals attractive and appealing, and therefore worth protecting and conserving (Colléony et al., 2017; Gunnthorsdottir, 2001; Milton, 2011). Still, as pointed out by Milton (2011), the appearance of animals (e.g., cuteness or ugliness) is related to how animals are made as objects of concern and protection following changing cultural priorities. In Milton's example, Australians and New Zealanders perceive possums differently though it is the same animal. That is interestingly interwoven with a question about whether people are more concerned about the environmental crisis if it threatens cute animals than unappealing ones (Milton, 2011). In our study, the participants experienced that it was important to help endemic Australian animals-without underrating their cuteness. As one of the participants pointed out, a certain kind of cuteness of Australian animals such as koalas played a role in driving the solidarity actions. She believed that people would not have been activated if crafts had been asked to do, for example, for crocodiles. In general, Finnish people are known for their close relationship with nature. According to a survey conducted in 2021, 90% of Finnish people consider nature important to themselves (The Finnish Innovation Fund Sitra, 2021). It is remarkable how, in our study, many participants argued to have a special bond with animals: for example, some had prior volunteer experience in animal rescue work.

Invoking reason was based largely on participants' experiences about matching skills and needs. They had relevant interests and skills - be it a hobby or profession among handicrafts, experience in volunteerism, or collaboration expertise such as translation skills. That is related to how social media provides an opportunity to become active in issues close to one's heart and use one's skills (Nikunen, 2019). What is also interesting here is how Finns are traditionally craftspeople. A hobby that is important to one was now even more important, and participants got to help with this 'superpower' they had. As suggested by Nikunen (2019), craftivism combines technological individualism with collaborative collectivity and emphasis on care, and by doing so, seems to respond to the current calls for solidarity. Joey poaches and koala mittens crafted by the participants may be understood in terms of optimistic emissaries of the solidarity of strangers (Malkki, 2015). What also supported the dimension of reason was a perception of an easy way to participate and offer concrete aid instead of donating money. Nevertheless, selfless activities were combined with self-interest when participants experienced getting rewards and benefits from the action. These were, for example, getting rid of accumulated material storage or simply getting praise from others. It describes how altruist pursuits were combined with egoist dimensions. Combined, these drivers for collaboration describe the ethos of post-humanist solidarity, which emphasized a morality of 'the self' as the primary motivation for humanitarian action (Chouliaraki, 2013).

It was noticeable that participants did connect the bushfires to broader global themes, such as the climate crisis, but this was not remarkably verbalized in the interviews. Instead, the animal emergency gave a concrete form of occurrence to an environmental crisis and invoked, e.g., participants' ecological values. As suggested by Tschakert (2022), more-than-human solidarity and multispecies justice are interesting approaches to encompass both the human and the natural world and the interconnections between them in the environmental crisis. One might think that people have more empathy for animals than they do for other people. For instance, the participants in our study emphasized how innocent animals suffered from the human-caused crisis. The empirical research by Cameron et al. (2022) shows that context plays a major role when people's willingness to choose empathy for animals versus humans is researched. According to their findings, people emphasize with animal suffering but disregard it when it conflicts human needs (Cameron et al., 2022). We may ask if people empathize with animals as long as it is not out of their interests. In other words, whether the suffering of animals leads to actions to prevent climate crisis and thus extreme weather events when people should compromise for their achieved advantages. Also, previous research has posed a question about whether these kinds of actions are only momentary experiences of solidarity (Nikunen, 2019) and pragmatic management of suffering or do they offer a basis and carry a vision for a meaningful social change (Chouliaraki, 2018). Nikunen has suggested that craftivism as a means of making things together may result in more lasting ties for political participation than social media activism often does (Nikunen, 2019). This is a question that would require long-term studies and remains therefore intriguing.

# 5.2 Dividing labor in the interplay between global and local and between online and offline action

Overall, the case demonstrates an inspiring project that successfully mobilized individuals. Participants' roles in the craft guild describe a division of labor in the collaborative action. Participants did not only knit, crochet, and sew items but also administered the Facebook group and took responsibility for various support tasks, such as coordinating material donations and item logistics, translating handicraft instructions, acquiring sponsors for transporting the items to Australia, sharing information including updates on the spot from Australia on Facebook, and arranging offline events for crafting together—to name a few. Visual communication was connected to each role in one way or another. The participants described how crafts and instructions for making them, as well as other group activities such as donated materials and organized offline events were documented in photos shared in the group. On the other hand, this division of labor illustrates how collaborative media creates collaborative communities oriented towards shared goals and action. Various activities were built around the core activity that needed their authors. A suitable way of participation was found for everyone. Previous research has suggested that "slacktivist" cultures are "rife in the era of social networking [...] and encourage people to click and contribute to online polls and issues, but that does not enable an engagement with real issues in the world of the here and now." (Thomas, 2014). In our case, people were empowered to do concrete things to help Australian wildlife. What was also interesting was how there were also participants who learned new skills to make handicrafts. This poses a question about how these phenomena inspire people to participate, even it requires extra effort.

On the other hand, the project emphasized 'the ease' of giving material aid. Although making handicrafts requires an effort, some participants brought up how rewarding it was to get rid of their material storage. The 'hubs' were drowned in old sheets and other material donations that people eagerly wanted to give away. This is related to (also criticized) forms of solidarity, where people are used to getting rid of, e.g., their old garments by donating them to countries "in need." Also, e.g., in the Ukraine war, it has been seen how people eagerly donate goods and act outside of official structures, e.g., giving rides to Ukrainians fleeing the war to other countries.

The research also illustrates the interplay of actions on global, national, local, and individual levels. The volunteers were organized on a national level, as illustrated by the case study on hand. In addition, national groups were further divided into local units where people, for example, gathered donations in the region and made handicrafts together in face-to-face events. At the heart of it all, individual efforts-be it making handicrafts or helping in the abovedescribed support tasks—were combined to achieve a collective goal. This interplay demonstrates in a very concrete way how environmental crisis as a global phenomenon creates global movements that act locally. The relationship between collaborative media and offline action was also notable in the research case. This is aligned with the notions about how craftivism as participation that is mobilized and enhanced through media but extends beyond media-settling in the intersections of digital and material realms that are increasingly intertwined due to the ubiquitous media (Nikunen, 2019). The donated number of handicrafts illustrates how the online platform catalyzed offline action with a remarkable global volume. Making handicrafts is not only an offline activity by nature, but participants also organized offline events for crafting donated items together. That poses a question about the role of online spheres in these kinds of collaborative crisis action cases. In this research case, it was mainly building awareness, reaching people, sharing information, planning collaborative activities, and coordinating the joint effort.

# 5.3 Balancing between Facebook reach and its adaptability for crisis collaboration

The findings indicate how reaching and engaging people in a crisis initiative requires a use social media platform that people use anyway in their everyday lives. In our case study, Facebook was an incomparable way to reach people, and participants saw that it could reach the mass with which the right participants could be found and engaged. This is also the case considering the statistics. In 2020, Facebook was the most followed community service in Finland where 58% of the population used the service. In comparison, 39% of Finns used Instagram, 13% Twitter, and 6% TikTok (Tilastokeskus, 2020). Often, people belong to Facebook groups according to their hobbies and other interests. In this case, many participants were members of different kinds of nationally and globally organized craft groups where they learned they could help Australian animals by making crafts. This points out how these groups created around these preexisting hobbies and interests have a role in bringing about action. Facebook also serves as a means to reach older adults (Sinclair and Grieve, 2017), which also often includes the makers of handicrafts. Reaching people is also a question about the linkages between social media and a broader hybrid media environment as news stories generated both crisis awareness and the sense of crisis as well as promoted a chance to take part in the craft guild initiative.

The reach of Facebook is linked to sharing and obtaining information as a primary function of social media in crisis situations (Eismann et al., 2016). Our case study demonstrates a multidirectional flux of information from the Australian parent organization to and within local craft guilds around the globe. That enabled the abovediscussed interplay between global and local levels and peer support among participants, e.g., asking and giving advice and dealing with the situation together. Overall, visual expressions played a key role in the group communication. For example, lots of pictures were shared of suffering animals, crafted items, as well as instructions for making the crafts. The communication of the participants in the group was otherwise visually emphasized. The participants referred, for example, to the use of emojis in the group communication.

However, participants experienced that it was problematic to successfully organize the information that was in constant flux during an ongoing crisis. Fast-paced communication led to challenges, that were especially emphasized in cross-continental cooperation where people were in different time zones. As a result, it took much work for participants to find the answers needed. They expected rapid responses to their questions, which was not always possible when sorting out information from a country on the other side of the world in a completely different time zone. At the same time, the acute crisis created pressure and stress. All in all, the rapidly growing group was in chaos at times. The described circumstances caused dissension and heated emotions in the group. In a bigger picture, that is related to the toxicity of social media (Almerekhi et al., 2019; Pascual-Ferrá et al., 2021) as a broader phenomenon, and the participants also discussed how these negative communication practices of social media were present in the project. Dealing with crisis contexts, it has been regarded that as crises progress over time, social media becomes increasingly a space for conflicts that may construct social distance (Valaskivi et al., 2019).

In sum, our case study highlights balancing between Facebook's reach and its adaptability for crisis collaboration. The findings illustrate the potential of utilizing and harnessing existing social media community services as platforms for collaboration during societal crises. In general, social media have been successfully used in crisis response due to their adaptability. This means that people adapt social media to fit their needs during a crisis (Yates and Paquette, 2011). Consequently, the rise of new media formats and practices may speed up during crises. For instance, the Fukushima nuclear disaster in 2011 was a breakthrough moment for Twitter in Japan as people actively sought new information channels (Valaskivi et al., 2019). However, our case study demonstrates how this type of collaborative action and Facebook as an existing social media

community service did not fit together. Our participants' experiences highlight how the action takes place according to terms and legalities not designed for the specific action in principle-and how the action is affected by the pre-existing social media communication practices and cultures that may be toxic. In contrast, craftivist projects are often operated on smaller self-organized platforms outside the main commercial social media (Nikunen, 2019). On the other hand, participants brought up how everyone involved did not have sufficient technological skills to use Facebook. That poses a question about whether the technological challenges were an issue with the platform itself or with the group moderators' and members' social media literacy. In the light of our research results, both factors played a role, and the question is interesting for further research. However, the results indicate that it might be challenging to introduce entirely new platforms for the needs of crisisrelated collaborative projects. Overall, the research sheds light on collaboration as a social media affordance that refers to the possibilities of action that materialize in the interplay between the actor and technological boundaries (Faraj and Azad, 2013; Sumiala et al., 2018).

### 5.4 Limitations

We acknowledge the bias due to the participant sample and its geographic limitation, as the study was run in one European country. In addition, we acknowledge that our research is limited by the method, which relies on people's own expressions. However, we believe our research brings interesting viewpoints from people's subjective experiences. We provide an overview of the versatility of themes related to participants' experiences of the drivers for collaboration, organizing and maintaining collaboration, and technological framework for their collaborative efforts. In doing so, our research contributes to the research discussion on social mediaenabled collaboration in (long-distance) crisis contexts.

### 6 Conclusion

In this paper, we have presented why and how craft-makers far abroad united and helped Australian wildlife in the 2019-20 bushfire crisis and how they perceived the technological framework of the collaboration. Based on 12 semi-structured interviews with Finnish helpers, the findings report the trinity of drivers for collaboration as the chance to help the affected wildlife by crafting appealed to this unique interest group's emotions, reason, and values. Visual news reports and social media content-i.e., hybrid media environment-presenting suffering yet attractive endemic Australian animals played a crucial role in arousing emotions-such as horror, anxiety, and fear-that catalyzed action. Overall, the participants experienced that visual expressions played a key role in group's communication. The crucial role of visual content emphasizes how representations are employed to support human collaborations that are catalyzed by non-human actors. In terms of reason, participants actively sought possibilities for utilizing their knowledge and expertise within the project. Further elaborated, selfless activities were combined with self-interest when participants experienced getting rewards and benefits as compensation for their efforts. The animal emergency gave a concrete form to the environmental crisis and invoked participants' ecological values, pointing out their willingness for more-than-human solidarity actions.

Participants' roles in the craft guild describe a division of labor in the collaborative action, where activities in online and offline environments alternated. Facebook enabled an incomparable reach and lead to a rapid expansion of the group. On the other hand, the ongoing crisis with the related pressure and stress, rapidly increasing number of helpers, communication ambiguities, and experienced technological challenges caused chaos, heated emotions and fueled dissension in the group. This posed challenges to collaboration, further highlighting the negative and toxic communication cultures of social media. While the research illustrates the potential of utilizing and harnessing existing social media community services as platforms for collaboration during societal crises, it highlights how the action takes place according to terms and legalities not designed for the specific action in principle. It became evident from the study that toxic social media communication practices challenged collaboration and negatively affected the group's atmosphere. Overall, the paper enriches understanding of how social media enables, but also challenges bottom-up communities' animaloriented solidarity actions and long-distance crisis collaboration.

### Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

### Ethics statement

Ethical review and approval was not required for the study on human participants in accordance with the local legislation and institutional requirements. Written informed consent from the patients/participants or patients/participants legal guardian/next of kin was not required to participate in this study in accordance with the national legislation and the institutional requirements.

### Author contributions

MK: Writing – original draft, Writing – review & editing. AR: Writing – original draft, Writing – review & editing. TO: Writing – original draft, Writing – review & editing. JH: Writing – original draft, Writing – review & editing.

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### **Conflict of interest**

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

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