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Challenge on Picturing Indonesian Disaster Through Drone Journalism

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ABSTRACT (10PT)

Every year, various natural disasters strike Indonesia, and journalism activities play an important role in disaster communication. This study aims to find out how the challenges of picturing natural disasters in Indonesia through drone journalism are. For this reason, the researcher chose key informants who have international reputations, namely Willy Kurniawan from Reuters and Budi Candra who represent the National News Agency, Antara. By using thematic analysis, the results of in-depth interviews will be selected and grouped and visualized using the miro application. The results of the study show that drone journalism is a form of disaster communication that presents aerial photographs which function to show the impact and escalation of disasters. The challenges of drone journalism include ethical factors, copyrights, and technology for sending images during a disaster. In the aspect of disaster management and disaster communication, drone journalism plays a role as a supplement aerial information for evacuation and mitigation in the "during disaster" and "after disaster" phase. The next challenge is in the non-disaster phase, where the collaboration of multiple stakeholders is needed to make drone journalism can become a tool for educating people in disaster-prone areas.

1. Introduction

Indonesia constantly struggles with the issue of natural disasters. The geographical features of Indonesia, which include beaches, the sea, land, mountains, hills, and forests, increase the likelihood that natural disasters would strike with very high severity. According to statistical information from the National Disaster Management Agency (BNPB), there have been more than a thousand natural disaster incidences annually during the past ten years, which is a significant quantity. In order to effectively communicate during a tragedy, media credibility becomes crucial. Information about disasters is made more focused and fact-based through journalists, whether they be reporters or photographers. Communicating disasters to a larger audience require the application of journalistic methods, which are very helpful, besides social media (Widyastuti, 2021). In the event of a disaster, photos captured by drones can serve as a starting point for the community to learn about the disaster's impact. With the advent of drone technology, disaster communication activities will be more useful for the BNPB in dealing with disasters and disaster mitigation efforts that should cope with fast and precise principles (Astuti & Rimawati, 2021). However, not all Media companies provide their photojournalist with drones.

Since the popularity of drones, several studies on drone journalism have been conducted over the last few decades. On reader's perspective, drone journalism is welcomed by the audience when covering traffic and investigative stories, but not by celebrities and politicians. According to a survey of 548 Americans, drone journalism has implications for newsrooms, implying that transparency and outreach to educate people on the technology could help build trust (Duncan & Culver, 2020). On a

visualization perspective, the imagery produced by drone journalism is a visual analogy to statistical summaries and, more recently, data journalism. Drone imagery aggregates space visually, its broad visual field revealing large-scale spatial patterns in ways analogous to statistical data capture/analysis (Hamilton, 2020). By the advantage of technology, Drone journalism has already spread from a few pioneering organizations to a large number of newsrooms in Finland, including regional and mid-sized newspapers among 80 media outlets (Uskali et al., 2020). Drone journalism, as a new form of journalism, is the advancement of communication technologies, which leads to new possibilities and opportunities for field reporting (Yegen, 2018).

The drone's bird's-eye view, on one hand, is extremely useful for visualizing the disaster in Indonesia. It is a part of the visual communication that essential in disaster management because it facilitates the process from mitigation to post-disaster recovery (HH, 2012) and then the information of disaster spread on social media, as one of the most effective ways to let the public know about the damage (Widyastuti, 2021). Other research find that social media helping BNPB in disseminating disaster information (Sholikah & Anindyo, 2022). On the other hand, the challenge is that the number of drones used in disaster reporting in Indonesia remains low. The aim of this article is to spark a broad discourse about the significance of drone journalism and to explain the challenges of doing drone journalism as part of disaster communication. Researchers attempt to investigate both national and international photojournalists' perspectives in order to achieve this goal.

2. Method

This research uses thematic analysis as a qualitative approach to get a depth overview between drone journalism and disaster communication. Thematic analysis is one method of analyzing data with the goal of identifying patterns and themes in dataset collected by researchers (Heriyanto, 2018). Therefore, dataset should be build according to the main purpose of the research (Widiatmojo & Fuad, 2021). First step is conducting in-depth interviews with national agency ANTARA photojournalist Budi Candra and International Agency Reuters photojournalist Willy Kurniawan. As an open interview, a list of questions is presented. First, talk about the guidelines for reporting disasters, safety orientation, standard operating procedures, and field preparation. The second is communication disaster, including visual story-telling, the development of drones and how it will affect disaster communication, followed by open discussion on drone journalism as new genre. Finally, discuss the challenges of drone journalism, beginning with the technology, the price, and ethics. Next step is presenting data that should be logic without any repetitiveness (Nowell et al., 2017). The interview data will be coded and visualized utilizing Miro Software to spark further discussion based on disaster communication concept.

3. Result and Discussion

Based on the results of in-depth interviews, the resulting mapping with the quadrant system is as follows:

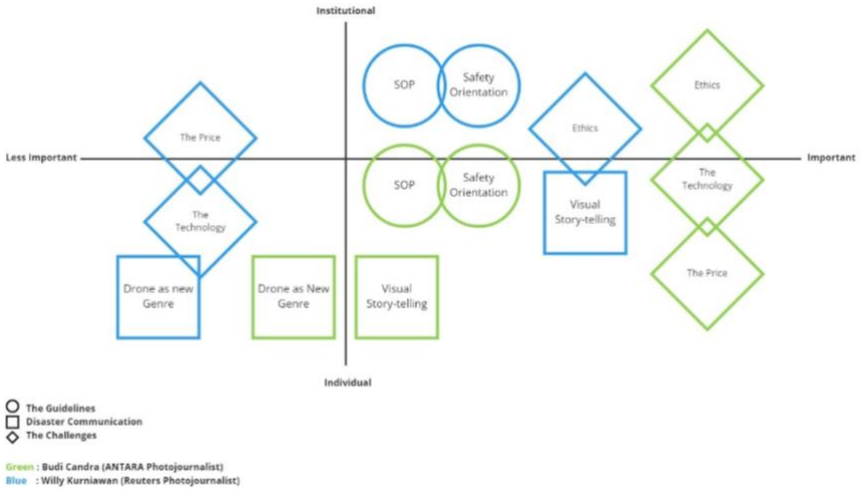

Fig. 1. Interview Mapping

Based on the mapping above, the aspects of guidelines for disaster coverage, there are two standards that are quite different. At the Reuters news agency, SOPs and Safety Orientation are both important and institutional. The photographers were provided with Hostile Environment Training organized by Key Objective Pty Ltd. The training covers safety standards in every type of disaster, be it earthquakes, forest fires, floods, landslides, to emergencies, such as demonstrations and riots. Photographers are put through a simulation of an emergency scenario, such as looking for exit points, reading the scale of the disaster and its escalation and self-safety skills. Meanwhile, at the Antara News Agency, SOPs and safety orientation are personal because safety training is carried out independently according to the needs of photographers in the field.

In terms of standard operating procedures, the Reuters News Agency has quite strict regulations. Photographers without a Hostile Environment Training certificate will not be allowed to cover critical events such as disasters or riots. In order to go on disaster coverage, photographers must report themselves, along with the equipment they bring and must equip themselves for seven working days, although it is not certain how long they will cover in the disaster area. Meanwhile, at the Antara News Agency, standard operating procedures are in the form of safety appeals for photographers covering disasters. What is noteworthy is that the safety of live is number one.

According to interview data, visual storytelling with drones is a vital and personal form of disaster communication. The Antara News Agency and Reuters did not become involved in the production of aerial images. The best way to graphically report a disaster will depend entirely on the needs in the field. Drone footage typically consists of footage that demonstrates the extent of the devastation so that viewers may get a sense of how much harm a tragedy has inflicted. In contrast, the two key informants noted that categorization within a genre is not very significant in the field of photojournalism when discussing the drone notion as a new genre.

In terms of challenges, Willy Kurniawan, a foreign media photographer, believes that determining the cost of a drone is unnecessary because the office has provided drones. The price will undoubtedly have an effect on the technology of the drone. As a result, the price and technology aspects became less important, allowing Reuters photographers to concentrate on creating visuals from the drone. In contrast to Budi Candra, who purchased drones on his own, drone prices are extremely important. Budi Candra, a technology expert, stated that mastering the features of drones was critical. According to his experience, misunderstanding will result in drone damage. Concerning ethical issues, the two key informants agreed that ethics is an institutional and significant challenge.

The presence of drone technology in the world of photojournalism broadens the scope of disaster coverage. Visualizations created in the air differ greatly from those created on the ground.

> *"Drone photos show a broad scale, or general views, by utilizing composition of photography. For example, during the coverage of Semeru eruption 2021, we can clearly see the effects of destruction that photographs from the ground cannot provide." (Data from an interview with Willy Kurniawan)*

> *"The obtained angle will be very different. Drones provide different perspectives, and the information obtained can be more detailed." (Data from an interview with Budi Candra)*

Even though the visuals presented give an idea of the scale or impact of a disaster, what needs to be considered is the essence of the journalism activity itself. Oscah Motullah stated that photojournalism will always be related to all human beings (Wijaya, 2014). Even so with Kenneth Kobre who stated that photojournalism is not always related to beautiful visualization, but rather to the quality of the information presented (Kobre, 2016). This means that drone journalism activities must still accommodate news values in terms of impact and importance. Budi Candra gave an example of the application of drone journalism when reporting on the 2021 Semeru Eruption disaster. The photo produced by Budi Candra gave the BNPB team an idea of the bridge's breaking point. Willy Kurniawan also stated that with drone photos, the Reuters news agency could find out how the forest fires in Kalimantan escalated.

However, the two informants highlight an ethical issue on drone journalism. First issue is about copyright. Due to the small number of drone owners at the time of disaster coverage, existing drones could be used by many parties, including photographers from other media. According to Willy, even

if a photojournalist cannot control a drone, if he directs the drone pilot to fly at a specific point with the photographer's composition, the photo credit can be assigned to the photographer. The name of the drone pilot must be included in come case. However, this is less common done photojournalism.

Second, the freedom of the drone's visual range raises concerns about privacy. Willy stated that when flying a drone, he must be careful.

> *"There are numerous regulations that must be followed when flying a drone. It is not permitted to photograph private property without first obtaining permission. If it is published and the owner is angry, it should be avoided. However, in some sensitive cases, if information is required for the public interest, it must be provided in accordance with journalistic principles and codes of ethics" (Interview data with Willy Kurniawan).*

Budi Candra acknowledged this as well. When flying drones in certain areas, this privacy issue is a concern. In the case of natural disasters, however, drones continue to be a differentiator in terms of visual information presented to the public. Budi Candra has never flown a drone higher than 100 meters. Even during disaster coverage, such as the Semeru eruption, he kept his drone below a height of 100 meters. For him, those altitude is sufficient to capture an image of the disaster's impact. As a result, the image assists the BNPB in carrying out evacuation efforts and disaster mitigation measures.

One of the challenges of covering a disaster is sending pictures. Willy stated that technology plays an important role in disaster communication.

> *"It's meaningless when it comes to disaster sites but can't send pictures. It means nothing. It happened in the Palu earthquake, when local journalists were late in sending photos because they were not equipped with satellites" (Interview data with Willy Kurniawan).*

Actual news values cannot be achieved if pictures are sent late. Drone images can be sent directly to news agencies using satellite technology, giving those involved in the evacuation process a complete picture of the extent of the damage. This demonstrates the significance of effective disaster communication and management.

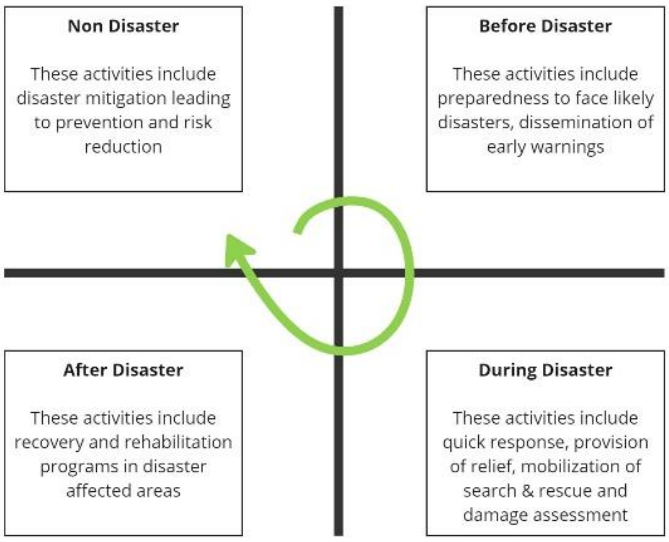

Fig. 2. Disaster Management by Shaw, Srinivas, Sharma (HH 2012)

In terms of disaster management, drone journalism can play a role in during and after disaster phases. The resulting footage can be a form of disaster communication during a disaster. Data that comes from drone journalism can help the quick response process. As stated by Budi Candra, drones can present a different perspective from photos on the ground, so that they can become additional information for teams conducting search and rescue for victims of natural disasters.

The challenge for drone journalism in non-disaster times stems from these four phases. Collaboration among various parties is required to provide disaster education to the public via drone photos, particularly in disaster-prone areas.

4. Conclusion

This study demonstrates that drone journalism is a type of aerial visual reporting that demonstrates the impact of disasters and disaster escalation. The challenge of drone journalism in disaster communication is the minimal number of drone-certified journalist photographers, which raises copyright issues over photo copyrights. On the other hand, there is a need for satellite technology to send images during a disaster. In terms of disaster management, drone journalism plays a role as a form of disaster communication in the during and after disaster phases. In the non-disaster phase, the challenge arises to educate the public about disaster mitigation through photographs that have been produced from drones.

5. Acknowledgement

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