

RESEARCH ARTICLE

# A Study on the Appearance of the Kahramanmaraş Earthquake on Social Media

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## Abstract

*This study is aiming to reveal how the earthquake, dated February 6, 2023, with the epicenter of Kahramanmaraş, appears on social media. In the study, content analysis method was used, and a total of 500 images (still images with or without sound) shared with the hashtag "6 February" on Instagram were examined and how the earthquake was reflected with these contents was tried to be determined. Shared images were classified under certain themes and recorded by counting. Then, the images selected as samples and the obtained numerical data were analyzed and interpreted qualitatively. This analysis enabled us to reveal the meanings and representations produced by the visuals. The results obtained in the study were also compared with the results of similar studies in the literature. As a result of the study, it was seen that the earthquake dated February 6, 2023 was heavily represented on social media with dramatic and manipulative posts.*

**Keywords:** Social media, Instagram, earthquake, representation, sharing.

## Öz

*Bu çalışma 6 Şubat 2023 tarihli merkez üssü Kahramanmaraş olan depremin sosyal medyada nasıl görüldüğünü ortaya çıkarmayı amaçlayan bir araştırmadır. Çalışmada içerik analizi yönteminden yararlanılmış olup, Instagram'da "6şubat" hashtag'i ile paylaşılmış olan toplam 500 görsel (sesli ya da sessiz hareketsiz görüntü) incelenmiş ve depremin bu içeriklerle nasıl yansıtıldığı belirlenmeye çalışılmıştır. Paylaşılan görseller belirli temalar altında sınıflandırılmış ve sayılarak kaydedilmiştir. Ardından örneklem olarak seçilen görseller ve elde edilen sayısal veriler nitel olarak analiz edilmiş ve yorumlanmıştır. Bu analiz, görsellerle üretilen anlamları ve temsilleri ortaya çıkarmamızı sağlamıştır. Çalışmada elde edilen sonuçlar alan yazındaki benzer çalışma sonuçları ile de karşılaştırılmıştır. Çalışma sonucunda 6 Şubat 2023 tarihli depremin sosyal medyada yoğun olarak dramatik ve manipülatif içerikli paylaşımlarla temsil edildiği görülmüştür.*

**Anahtar Kelimeler:** Sosyal medya, Instagram, deprem, temsil, anlam

## Introduction

Social media is one of the most widely used media platforms currently and it is outmost affective on societies. Social media emerged with the development of new communication technologies. New communication technologies have developed rapidly in the world and with that development, the traditional media concept has begun to leave its place to the concept of "new media". Interactive television, digital radio, e-broadcasting, mobile communication and social media are among the basic tools of new communication technologies. The "traditional media," which is one-way and uses a passive user, has started to make way for the "new media," also known as interactive media, which is two-way and uses an active user. Social media represents one of the most important components of this process. The emergence of social media with the spread of Web 2.0 technology has fundamentally altered communication and produced a totally different media environment than what existed previously. Social media is the name of the system where the user can produce content and interfere with the produced content, interact with other individuals, institutions, and organizations, and are represented as an active entity. In the traditional media era, social media enabled the content produced and controlled by media professionals to be produced and controlled by users and made the ordinary individual a part of this process.

In this context, this study aims to shed light on what kind of environment social media created in regard to the earthquake of February 6, 2023, and what kind of a representation it created in conveying the earthquake. The study's goal is to look at how the February 6, 2023, earthquake, which has a significant global impact and is regarded as one of the largest earthquakes ever recorded, appeared on social media. Furthermore, this study demonstrates how social media might contribute to the interpretation of social events. As a result, it has been attempted to ascertain the mental representation and policies made by social media, which after traditional media comprises a significant global force, in conveying natural disasters. In the study, the sample of Instagram representing social media was studied. Still images

(photos, pictures, cartoons, tables, figures, etc.), text and text samples shared with the hashtag "6 February" on this social network were examined and it was tried to determine how the earthquake was reflected with these contents.

In this context, content analysis method was used in the study, and a total of 500 images (still images with or without sound, text, and text) related to the earthquake that occurred on February 6, 2023, and whose epicenter is Kahramanmaraş and shared on Instagram with the hashtag "6 February" were chosen as the sample. Shared images were classified under certain themes and counted and recorded. These themes were created in order to reveal the demonstrations of the earthquake. Then, the images selected as samples and the numerical data obtained were analyzed qualitatively and interpreted. This analysis enabled us to reveal the meanings and representations produced in the images. With this analysis, it was tried to determine what kind of sub-meanings were formed behind the examined visuals and which mental representations of the earthquake were reflected.

Although there have been some studies on the use and visibility of social media during natural disasters, it appears that no previous research has been done about the February 6 Kahramanmaraş earthquake on Instagram. In particular, there was no study related to the appearance of the earthquake dated February 6, 2023, on social media, similar to the content and method of this study. This study, which explores how an earthquake, whose impacts and reflections are relatively vast in the world, appears on social media and what kind of meanings are formed, is regarded to make a valuable contribution to the literature. This study is also important in terms of revealing the meaning-making potential of social media. It is believed that the research done under this framework is crucial for a better comprehension and utilization of social media. In the first part of the study, the internet and new communication technologies, the concept of new media, the web 2.0 period, the basic dynamics of social media and the features of Instagram were discussed. In the second part, the method was explained and how the application is carried out is emphasized. In the third part, the social media

images that make up the sample were analyzed by tabulating them under the determined categories. In the fourth and the last section, conclusion and recommendations were given.

### **New Communication Technologies, New Media Concept, Basic Dynamics of Social Media and Instagram**

The world's first computer network bearing the name ARPANET emerged on September 1, 1969, when the first four connections of the network were made "at the University of California in Los Angeles, the Stanford Research Institute, the University of California in Santa Barbara and the University of Utah" (Castells, 2008, p. 59). The invention and the development of the internet and internet-connected communication networks in the world have forever differentiated the system of new communication technologies, the architecture of the network, the culture and communication styles of the people around the network (Castells, 2008, p. 473). New communication technologies are the basic technologies that enable the emergence of new spatial systems, interactions and trends (Morley and Robins, 1997, p.110).

According to Sager et al. (1996, p. 42), new communication technologies are microchips, microelectronics, computers and telecommunication applications that offer new opportunities or improve existing ones and create more control and interaction opportunities for individuals. According to Geray (1994, p. 32), new communication technologies are tools that enable and develop communication between users and between users and information, using microprocessors.

In our age, computer, internet environment, which finds widespread usage practices in all areas of daily life day by day, causes a radical transformation of daily life practices even if we are not aware of it, whose usage area is gradually expanding due to various needs of social life, which has become an element of the body, "mobile phones, game consoles, ipod or palm data bank recorders and communicators", each of the digital technologies mentioned in a different way is called new media (Binark, 2007, p. 21). According to

Lister et al. (2009, p. 13), new media includes digitality, interactivity, containing texts with links, virtuality, having a network structure, and simulation features. According to Binark (2007, p. 23), while the new media individualizes people on the one hand, they also socialize them in the virtual world on the other. New media tools are primarily based on individual use. It also includes qualities such as interactivity and multimedia stylistic in its structure (Binark, 2013, p. 165).

The term Web 2.0 was first mentioned in the world in 2004. As a matter of fact, it has emerged as a platform where all of the users are involved in this process as participants and collaborators, and the content can be changed by individuals, rather than the content and applications are no longer produced and shared by certain people. The term, whose popularity has spread widely as of 2005, is used to refer to different forms of media content mostly open to the public and produced by end users (Kaplan and Haenlein, 2010, pp. 60-61). With the Web 2.0 era, the user as an active participant is a marketing parameter that directs the transition of market power from productive forces to consumer individuals and from traditional media platforms to personalized new media platforms (Constantinides and Fountain, 2008, p. 232).

Social media utilizes 'mobile-enabled and web-based technologies' to create interactive platforms where individuals and groups share, discuss and differentiate user-generated content. Considering the enormous exposure of social networks in today's popular press, it can be said that we are in a completely new communication landscape (Kitzman et al. 2011, p. 242). According to Boyd and Ellison (2007, p. 211), social media are virtual spaces where individuals prepare fully or partially public profiles for themselves, create and share a list of individuals they interact with, and see the profiles and relationships of other social media users. Kaplan and Haenlein (2010, p. 59-61) define social media as "a group of user-generated internet-based applications that allow content production and sharing, which was built on the ideological and technological foundations of web 2.0".

Social media is one of the areas that make dialogue possible. Social media reveals activities

and actions among masses of people who come together online to share knowledge, experience, and ideas by creating an environment of dialogue. Speech environments are web-based applications that make it possible to produce and simply share content in the form of words, pictures, videos, and sounds (Safco and Brake, 2009, p. 4-6).

Social networks can be roughly classified as follows (Dawley, 2009, p. 111):

Social sites: MySpace, Facebook, Twitter.

Photo Sharing Sites: Flickr, PhotoBucket.

Video Sharing: YouTube.

Professional Networking Sites: LinkedIn, Ning.

Blogs: Blogger.com, Wordpress.

Wikis: Wetpaint, PBWiki.

Content labeling: MERLOT, SLoog.

Virtual Word: SL, Active Worlds, There, Whyville, Club Penguin, HiPiHi.

One of the most basic features of social networks is that users turn into content producers with the content they create in the network environment. The functions of these networks can be listed as follows (Carlık and Terzi, 2020, p. 733): "Identity, conversation, sharing, presence, relationship, fame and group". Myfield (2008, p. 6) lists the basic forms of social media as follows: "Social networks, blogs, wikis, podcasts, forums, content communities, microblogs".

One of the most popular tools of social media is Instagram. Instagram places art culture in a broad cultural and historical context, including photography, cinema art, graphic design, design trends, music and k-pop practices. Common social media tools use Instagram as "a window to the identities of a young global generation connected by cultural sensitivities and visual aesthetics" (Manovich, 2017, p. 4). Instagram, which emerged as a platform for the iPhone on October 6, 2010, has become the new age face of mobile photography, unlike older desktop photo sharing sites as Flickr. In September 2015, Instagram announced in a blog post that it had reached 400 million users, 75% of whom were outside the United States, and that 80 million posts were shared every day. Instagram is a platform that millions of users use in countless different ways. During the 19th and 20th centuries, the photographic culture, which was reflected in different forms, was combined in a simple

application. In this single platform, it is possible to take, edit, share photos, see photos of other users, find other photos via search, interact with them (by liking, commenting, resharing, forwarding to other networks), communicating with photo authors and other individuals on the platform (Manovich, 2017, p. 11).

### **Use of Social Media Tools in Natural Disasters and Crisis Management Process**

The natural disaster that resulted in the greatest loss of life and property in Türkiye to date was a pair of earthquakes with magnitudes 7.7 and 7.6, which struck on February 6, 2023, and whose epicenter was Kahramanmaraş. In the earthquake that affected a total of 11 provinces, namely Kahramanmaraş, Hatay, Gaziantep, Adana, Adıyaman, Diyarbakır, Malatya, Kilis, Osmaniye, Şanlıurfa and Elazığ, it was reported by the Ministry of Internal Affairs that there were 50 thousand 500 casualties as of April 14 (<https://www.bbc.com>).

Natural phenomena, technology incidents, and human-caused events all contribute to disasters. Individuals and groups suffer physical, economic, social, and environmental setbacks as a result of them, disrupting routine everyday life and activities. When a community lacks the capacity to manage and recover from such occurrences using local resources, the situation can quickly deteriorate into a disaster. The presence of these elements determines the likelihood of an occurrence developing into a disaster (Ergunay and Gulkan, 2008, p. 302).

Social media is unquestionably one of the settings that contribute significantly to disaster and crisis circumstances. With the effective use of social media, the effects of destruction caused by natural disasters or crises can be reduced and an important communication network can be created. When the crisis management process is broken down into its three stages crisis preparation, crisis improvement, and crisis intervention, it can be said that social media can be used for information sharing, disaster planning and education, collaborative problem solving, decision-making, and information gathering activities in all of these processes. Many international organizations use

social media tools to improve crisis management capacity (Zincir and Yazıcı, 2013, pp. 72-75).

The emergence of numerous social media platforms has significantly differentiated the landscape of crisis management in recent times, and “social action possibilities” have now become reality. With social media tools such as online discussion groups and news aggregators, institutions and organizations can now convey information to large audiences more quickly and efficiently and obtain the information they need. Although social media has the potential to prevent a crisis from getting out of control, it can also cause the emerging crisis to worsen. At the beginning of the crisis, “crisis managers and response teams” use social media to help understand the “source and seriousness of the crisis” and convey the necessary messages to the affected areas. In addition, social media platforms can also be used to improve a community’s potential to predict and prepare for a crisis (Chan, 2013, pp. 2-5).

Social media plays an important role in managing the process related to natural disasters by allowing people to transfer information and request help. Social media is also of great importance for recovery efforts following crises that require the rebuilding of infrastructure and where stress management is of vital importance. The wide range of social media tools makes it possible for individuals experiencing disasters to quickly communicate with the necessary resources. There are many groups on popular social media sites around emergency awareness that allow people to communicate in certain areas, transfer information to each other and create a discussion environment. However, an individual’s natural tendency to sensationalize information might result in a significant misinterpretation of crucial information, which can give rise to rumors that can mislead people. During this process, confidential information may be lost, and victims may not be correctly informed about the changed security measures. As a matter of fact, lack of continuous communication flow can lead to confusion (Velev and Zlateva, 2012, pp. 41-44).

In short, it can be said that social media tools have a key role in the process of eliminating the effects of natural disasters and crises. During

natural disasters, an interactive environment is created with social media tools, and the information needed by both earthquake victims and individuals in society can be conveyed through social networks. Social networks are also of great importance in terms of collecting aid and creating an environment of social solidarity. Social media networks, which can be utilized efficiently in crisis management, may, in addition to these aspects, also carry the risk of disseminating false information to society and fomenting falsehoods. In this regard, these tools should be used with extreme caution during times of crisis.

### **Related Studies in the Literature**

The literature on the topic was also examined within this study on how the February 6, 2023, Kahramanmaraş earthquake was discussed on social media. Important studies that have been done both internationally and in our country are listed below:

In their study titled “Communicating on Twitter during a disaster: An analysis of tweets during Typhoon Haiyan in the Philippines”, Takahashi et al. (2015, p. 392-393) examined Twitter usage during and after Typhoon Haiyan, which hit the Philippines. In the study, the researchers investigated the use of social media by individuals (e.g., those affected by the disaster, journalists, celebrities, etc.) and organizations (e.g., government organizations, media, non-governmental organizations, etc.) during and after a natural disaster. Content analysis method was used in the research. The research results revealed that social media is used extensively by different stakeholders for the transfer of second-hand information, coordination of relief efforts and commemoration of disaster-affected people. In the study titled “Analysis Of The Regionality Of The Number Of Tweets Related To The 2011 Fukushima Nuclear Power Station Disaster: Content Analysis”, Aoki et al. (2018) carried out a regional analysis of the number of tweets related to the 2011 Fukushima Nuclear Power Plant Disaster using the content analysis method. The study reveals how the number of tweets sent by citizens about the disaster on Twitter varies regionally.

Gurman and Ellenberger (2015, p. 687) in their study titled "Reaching The Global Community During Disasters: Findings From A Content Analysis Of The Organizational Use Of Twitter After The 2010 Haiti Earthquake" aimed to reveal whether organizations' Twitter usage has changed after the earthquake that occurred in Haiti in January 2010. Research results show that the way organizations use Twitter varies over time. According to the analysis, there has been a decrease in the rate of organizations using certain strategies, such as the use of links, to convey information via Twitter. In the study titled "Influence Of Content And Creator Characteristics On Sharing Disaster-Related Information On Social Media", Li et al. (2021) aimed to reveal the effects of social media users' content types, locations and social capital on the virality of disaster-related information. The research revealed that the virality of different types of information about the Yiliang Earthquake differs according to the social capital of the users who share the said information.

The aim of Splendiani and Capriello's (2022) study titled "Crisis communication, social media and natural disasters – the use of Twitter by local governments during the 2016 Italian earthquake" was to examine the data in four regions of Italy during the 2016 Italian earthquake and to reveal the role of Twitter in crisis communication by examining the Twitter posts of local public authorities. Research results revealed that Italian regions affected by the earthquake used Twitter only to convey information, without reflecting a full and detailed view of the disaster. Subba and Bui (2017, p. 284) in their study titled "Online Convergence Behavior, Social Media Communications And Crisis Response: An Empirical Study Of The 2015 Nepal Earthquake Police Twitter Project" aimed to reveal how the police force used Twitter to communicate with the public during the 2015 Nepal Earthquake. In the study, Tweets of Nepal Police after the 2015 Nepal Earthquake were analyzed by content analysis. The research results revealed that Twitter serves as an environment that enables public authorities and citizens to communicate effectively. Muralidharan et al. (2011, p. 175) in the study titled "Hope for Haiti: An analysis of Facebook and Twitter usage

during the earthquake relief efforts", based on framing theory, they analyzed Facebook and Twitter posts shared by non-profit organizations and media organizations and revealed the differences between these organizations regarding social media use. According to the study findings, non-profit organizations and media organizations effectively provided the transfer and disclosure of information, but they weren't able to adequately benefit from the two inherent aspects of communication of social media tools.

Cho et al. (2013, p. 28-38) in their study titled "Social Media Use During Japan's 2011 Earthquake: How Twitter Transforms The Locus Of Crisis Communication" analyzed the use of social media during the earthquake that occurred in Japan in 2011 by using the content analysis method. In this context, the posts made on Twitter during the earthquake and the posts made by the Japanese government on its Twitter account were examined. Study findings show that Twitter was used effectively in "initiating search/rescue operations, collecting donations, providing emotional support, and creating, transmitting, and sharing information" during the 2011 Japan Earthquake. Amiresmaili et al. (2021-7) questioned the role of social media in earthquakes in their study titled "Role Of Social Media In Earthquake: A Systematic Review". Study findings revealed that social media can be used effectively to exchange information between earthquake victims and other people and has important functions in the earthquake management process. In their study titled "Earthquake: Twitter As A Distributed Sensor System", Crooks et al. (2013, p. 124-144) examined the use of Twitter during the earthquake that occurred on the East Coast of the United States on August 23, 2011. Study findings reveal that environmental geographic information received from Twitter has great potential to improve situational awareness. Additionally, it has been revealed that geographical information has evolved from traditional media (maps, images, etc.) and authoritative sources to the content that Twitter disseminates. Kongthon et al. (2014) in their study titled "The Role Of Social Media During A Natural Disaster: A Case Study Of The 2011 Thai Flood" aimed to reveal how Thai people used social media during the 2011 Thailand Flood,

one of Thailand's biggest disasters. One of the methods used in the study was content analysis, Twitter posts were examined with content analysis. The study was conducted to understand the role of social media in natural disasters. Kim and Hastak (2018) in their study titled "Social Network Analysis: Characteristics of Online Social Networks After a Disaster" examined the interaction environment created by social media users with Facebook and Twitter during the disaster. Research findings reveal that social media consists of three units: "individuals, emergency agencies, organizations". According to the findings, user interaction on Facebook was higher than Twitter during emergency interventions. In their study titled "The Social Role of Social Media: The Case of Chennai Rains", Yadav and Rahman (2016, p. 1-10) aimed to determine what role social media played in the Chennai flood incident in India. Study findings revealed that during natural disasters, social media, and especially Twitter and Facebook, play an important role in conveying facts and real-time details of the disaster. The study identified six key uses of social media during the Chennai Flood: "situation awareness, crowdsourcing, survival response, social cohesion and remedial initiatives, donations, and sharing and observing emotions."

Some of the studies conducted in Türkiye are as follows:

Ünal and Sezer (2023), "Tweets Directed to the Ministry of Health Following the 2023 Kahramanmaraş Earthquakes: A Content Analysis of the Earthquake Disaster in Türkiye, Koçyiğit (2023) "Fighting Against Disinformation on Social Media and Crisis Communication in Emergency Situations: An Analysis on the Kahramanmaraş Earthquake", Şahin and Demirbilek (2023), "The Effect of Social Media on Natural Disaster and Crisis Management: A Study on the Kahramanmaraş Centered Earthquake Disaster", Arın (2023) "Social Media Use in Natural Disasters: Twitter Example in the 2023 Kahramanmaraş Earthquake", Ebru (2020), "Media In Disaster Crisis Management: 30 October 2020 Izmir Earthquake."

## Method

Content analysis method was used in the study. According to Berelson (1952), content analysis can be expressed as a research technique that reveals objective, systematic and quantitative definitions of the explicit (written/explicit) content of communication. With content analysis, various written texts, photographs, videos, and texts containing audio elements, communication patterns between individuals can be examined (as cited in Berg and Lune, 2015: 381). Content analysis is a research technique used to draw systematic and unbiased conclusions from certain characters presented in a text (Stone, Dunphy, Marshall, 1966: 213). According to Krippendorff (1980: 25), content analysis is a research technique used to draw reproducible and valid conclusions from data about its content. In content analysis, qualitative research data is analyzed in four stages: These are the stages of "(1) coding the data, (2) finding the themes, (3) organizing the codes and themes, (4) defining and interpreting the findings" (Yıldırım and Şimşek, 2011: 228).

In this framework, the universe of the study is the shared content (containing moving or still images, sound, text, or script) on social media sites related to the earthquake on February 6, 2023, the epicenter of which is Kahramanmaraş and affecting 11 provinces. In the study, 500 Instagram images with the hashtag "February 6" that contained still images (still images with or without sound, photos, pictures, tables, figures, cartoons, etc.) were studied as a sample. Images were selected by random sampling technique. This is because the subjects under which the shared images are featured without restriction can be established objectively. Then, the images forming the sample were numerically classified under the determined themes. The goal of this categorization was to identify the representations that were present in the shared images and at what level. The themes related to the examined images were determined by counting and the numerical data obtained were analyzed qualitatively. Shared images could be counted under one or more themes. That is, each image may contain more than one theme, not a single theme. The themes were

revealed through examining the visual (moving or fixed image), written text, news and literature on the earthquake dated February 6, 2023. In this context, the themes are as follows:

- The physical appearance of the earthquake (sharing related to the occurrence and appearance of the earthquake)
- Sharing with dramatic content (sharing with pain and sadness)
- Sharing of political content

Positive political sharing (positive posts related to state administration, government or opposition party representatives, municipalities, contractors)

Negative political sharing (negative posts related to state administration, representatives of ruling or opposition parties, municipalities, and contractors)

- Sharing with social content

Sharing with social integrity and solidarity

Sharing with social criticism (critical sharing against the society and those responsible for the earthquake)

- Sharing about earthquake aids

Sharing about what the aids are

Sharing about how the aids should be

Sharing of international aids

- Sharing with advertising content
- Sharing with informative and educational content
- Religious sharing
- Legal sharing
- Earthquake reminder sharing
- Getting well soon and condolence sharing

Within the framework of the above themes, 500 images (still images with or without sound, text, and script) selected by random sampling technique on Instagram were examined and a qualitative analysis was carried out in the context of the numerical data obtained. This analysis was carried out to reveal which meanings, sub-messages and representations related to the earthquake were included in the images. All elements in the images, including still images, sound, text, and script, were examined and it was tried to determine which meanings and representations were produced through these elements.

## Findings

In the study, the numerical data obtained as a result of the content analysis related to the appearance of the earthquake on 6 February 2023, the epicenter of which was Kahramanmaraş, on social media are tabulated below:

*Table 1. Number of Social Media Posts Related to the Earthquake of February 6, 2023*

Themes of shares	Number
The physical appearance of the earthquake (sharing related to the occurrence and appearance of the earthquake)	126
Sharing with dramatic content (sharing with pain and sadness)	244
Total sharing with political content	56
Positive political sharing (positive posts related to state administration, government or opposition party representatives, municipalities, contractors)	7
Negative political sharing (negative posts related to state administration, representatives of ruling or opposition parties, municipalities, and contractors)	49
Total sharing with social content	93
Sharing with social integrity and solidarity	62
Sharing with social criticism (critical sharing against the society and those responsible for the earthquake)	31
Total sharing about earthquake aids	47
Sharing about what the aids are	18
Guided sharing with how the help should be	27
Sharing with international aid	2
Sharing with advertising content	10
Sharing with informative and educational content	112
Religious sharing	21
Legal sharing	8
Earthquake reminder sharing	35
Getting well soon and condolence sharing	130

## Analysis and Interpretation of Findings

### *Physical appearance of the earthquake (sharing related to the occurrence and appearance of the earthquake)*

As a result of the content analysis carried out in the study, a total of 500 images (with or without sound, still images, text, and script) shared with the hashtag "6 February" were examined and the "physical appearance of the earthquake" theme was encountered in 126 images. This means that a significant part of the earthquake shares made as of 6 February 2023 reflect the physical appearance



of the earthquake. In the shared images, the ruins of 11 provinces affected by the earthquake were seen. It is aimed to reflect the magnitude of the earthquake by sharing the destroyed buildings, structures, and the grave situation of the cities. With these shares, it is seen how much destruction the earthquake caused. The posts reflect different cities and the ruins of these cities and show the severity of the earthquake to social media users. These posts reveal the potential of social media to reflect and display natural disasters and social events to the society. A significant majority of individuals in the society perceive the earthquake through the visuals and texts they watch on social media, and representations about it are formed in their minds.

#### *Sharing with dramatic content (shares with pain and sadness)*

In the study, a total of 244 "sharing with dramatic content (shares containing pain and sadness)" themes were encountered in 500 images whose content was analyzed. This means that almost half of the images were shared with dramatic content. When these shares were examined, it could be stated that the images were very emotionally effective visuals that reflect the pain and sadness of the earthquake. Images are posts that aim to affect social media users emotionally and create a serious effect on them. In the posts, emotional states such as pain, sadness, tears, unhappiness, helplessness, loneliness, conscience were pointed out and it was aimed to leave emotional effects on individuals in the society. Instead of concentrating on the causes and consequences of the earthquake, these posts reflected dramatic and manipulative content, and in fact, it was tried to activate the feelings of pity and conscience of the society with the images shared. The fact that such posts contain almost half of the analyzed visuals means that dramatic and manipulative mental representations of earthquakes are created, and individuals are tried to be influenced in this way. It is thought that such posts related to earthquakes may cause significant pathological disorders by creating fear and anxiety in individuals instead of informing and raising awareness. These images can be

interpreted as sharing that reveals the media's policies to gain more viewers and users, and profit motivation. Despite this, it should not be forgotten that some of the images are shared by media professionals and a significant portion of them are shared by social media users. Although not all of the shares are made by media workers, it reveals the feature of social media to be used as a manipulative field.

#### *Total sharing with political content*

- Positive political sharing (positive posts related to state administration, government or opposition party representatives, municipalities, contractors)  
 - Negative political sharing (negative posts related to state administration, representatives of ruling or opposition parties, municipalities, and contractors)

In the study, the theme of "sharing with political content" was encountered in a total of 56 of 500 images analyzed by content analysis method. While 7 of these images were positive political posts, 49 were negative political posts. First, when all 500 images are considered, it can be stated that 56 images do not constitute a significant ratio. When these images were examined, it can be seen that there were intensely negative political posts. These posts contained criticisms such as not reaching the earthquake zones on time, not providing the necessary assistance to the earthquake zones, leaving the earthquake victims alone. In this context, it can be said that negative political contents are intensely related to power and state administration. At the same time, there were criticisms against the contractors as the earthquake caused great destruction and many people lost their lives. Such criticisms were also discussed under this theme. Visits and assistance provided to earthquake zones by officials of the government and opposition parties are considered positive political posts. However, it can be claimed that only 7 photographs received good political shares; so, in this sense, these shares constituted a low rate. When the images included in the category of "sharing with political content" were examined in general, it can be stated that social media offers an area of criticism to individuals, but the mechanism of criticism does not work properly in

this area. In this sense, while social media creates a great dramatic environment related to the earthquake, it is not seen as an area where the freedom of individuals to express their opinions and criticize is sufficiently exposed.

### **Sharing with Social Content**

In the examination, it is seen that 93 of 500 images are included in the theme of "sharing with social content". 62 of these images are in the theme of "sharing that includes social integrity and solidarity". These posts contained the message that the destructive effect of the earthquake could be eliminated through social solidarity and integration. The posts were intended to arouse in social media users a desire to unite and stand by those who were affected by the earthquake. The images under examination support and demonstrate the integrity and cohesion of society. In this respect, it can be stated that social media plays a significant role in terms of organizing and guiding society in order to diminish the damage caused by a natural disaster. In addition, it is seen that a total of 31 visuals are "shares containing social criticism (shares containing criticism against the society and those responsible for the earthquake)". These posts were generally about looters, thieves, and contractors in earthquake zones. Criticisms of contractors were included both in this theme and in the "negative political sharing" theme. For as much as, it is believed that this type of critique serves as both political and social criticism. At the same time, some of the posts included in the category of social criticism were related to the social reactions of the voters in the earthquake regions in the May 2023 General Elections, when they voted for the AK Party. After the election, the high AK Party votes in the cities where the earthquake was experienced caused a social reaction and some individuals expressed their reactions on social media. They shared reaction messages to the earthquake sufferers, expressing their disappointment that their help was ineffective. In this sense, it was observed that social criticism was shared against these messages and reactions were expressed to those who wrote these messages.

### **Sharing about earthquake aids**

- Sharing about what the aids are
- Sharing about how the aids should be
- Sharing of international aids

In the examination, it is seen that a total of 47 of 500 images are in the theme of "sharing containing earthquake aids". 18 of these posts are within the scope of the theme of "sharing that includes what the aids are". In these images, aids made to earthquake zones could be seen. These aids were physical needs materials or support and training activities. It can be stated that such shares were very few among 500 images. A total of 27 shares are seen as "directive sharing that includes how the help should be". These types of posts are posts that aim to direct the society to help and what kind of assistance should be given. These posts have an important function in terms of raising awareness and directing the society. It was seen that two of the examined images were "international aid sharing". These images demonstrated the earthquake relief efforts carried out by other countries. However, it may be claimed that there weren't many of these kinds of images. In short, it can be stated that the images inspected under this category are images that reflect and reveal social solidarity in order to eradicate the destructive impacts of the earthquake, but they are shared in few numbers.

### **Sharing with advertising content**

It can be noticed that 10 of the 500 graphics used in the study that were reviewed contain advertising. Even though these images had the hashtag "6 February" on them, they appeared to be more focused on advertising and sales. It can be said that the images contained images and texts for sales and advertising purposes related to the products or services of certain social media users or organizations. For this reason, it can be stated that although the 10 visuals examined were related to the earthquake, they had the purpose of activating the users associated with the product or service. Although some of the shares inspected belong to the people and organizations located in the

earthquake zone and promoting them on Instagram, while they were considered as helpful posts, the advertising target was quite clear in these 10 images rather than directing the society to help. However, it is evident that among the 500 photographs, there were not many such shares.

### **Informative and Educational Sharing**

It can be seen that the theme of "informative and educational sharing" was present in 112 of the 500 images that were subjected to the study's analysis. Some of these images included various information related to the earthquake, while the others provided educational content. In this regard, it is believed that the images were crucial for conveying the details of the earthquake that occurred on February 6th, its causes, and the circumstances surrounding it. It can be stated that instead of dramatic posts that have a manipulative effect and may lead to pathological situations by leaving the society in anxiety and fear, such information-content sharing will provide greater contributions to individuals. Educational posts also contain information and training topics that social media users can benefit from during the earthquake. It can be said that such posts are also functional for the earthquake process to be overcome more easily. It was observed that journalists post informational and instructional images most frequently. In the meantime, while social media fulfills the task of informing and raising awareness of the society with such posts, the political and ideological aspects of some posts were also remarkable. Some of the shares were thus also explored in relation to the political sharing theme. This situation reveals the potential of social media to inform and educate the society on the one hand, and to manipulate it with certain political ideologies on the other.

### **Religious Sharing**

It is clear that the study's 21 images, which were reviewed, fall under the category of "religious sharing." In light of the magnitude and devastation of the earthquake, these images in particular serve as a reference for the deeds of "prayer and taking

refuge in Allah." In the posts, the solidarity and integrity of the society were tried to be ensured around the traditional religion and belief system, and social media users were integrated around religious motifs. Images were set up with images of prayer and supplication to Allah. However, it can be stated that the rate of such images was low compared to the total number of images examined.

### **Legal sharing**

According to the study, 8 of the 500 photos contained the concept of "legal sharing" in them. These pictures were constructed around the concepts of law and rights in relation to the earthquake. In the posts, a critical attitude was displayed against those responsible for the destruction caused by the earthquake (political administration, municipalities, related institutions and organizations, contractors, etc.). As a result, these posts fall under the heading of "sharing with political content". It can be seen that the number of shares issued is rather low. This indicates that during the earthquake process, social media could not be used effectively in the context of criticism and freedom of expression. There is a significant issue with "media freedom" when a natural disaster that affects 11 provinces and is regarded as one of the largest earthquakes in history does not generate enough criticism and opinions on social media.

### **Earthquake reminding sharing**

As can be observed, the theme of "earthquake reminder sharing" is present in 35 of the 500 images that were analyzed for the study. These images are reminder posts that contain the message that the devastating effects of the earthquake still continue, even after a while. Images showing that 1 month or 6 months have passed since the earthquake were intensely shared. Some of these images were also included in the category of "sharing with dramatic content". In as much as, the fixed images and texts in the images had emotional and dramatic content. Earthquake reminder images are stimulating images that aim not to make individuals forget about the

earthquake. It was not, however, very prominent in the researched images.

### Getting well soon and condolence sharing

The theme of "get well soon or sharing condolences" is present in 130 of the 500 visuals that were investigated for the study. The images were either shared personally or institutionally. In images shared by institutions and organizations, the sadness over the earthquake is densely conveyed along with wishes for "get well soon" or "condolences". The number of these images was relatively high. Images, in particular, contained corporate representations and ensured the fulfillment of a social responsibility. Institutions and organizations demonstrated their sensitivity to earthquakes and sadness over these messages.

### Conclusion

Important information was gathered in this study's examination of how the social media community viewed the February 6, 2023, earthquake, which had Kahramanmaraş as its epicenter and affected 11 provinces. A total of 500 images shared with the hashtag "6 February" on Instagram were analyzed by content analysis method and these images were recorded under the determined themes. The themes were created by examining all images (video and still images), text, script, news, and related literature related to the earthquake dated February 6, 2023. The visuals examined by the content analysis method consist of still images, sound, text, and script elements. In the study, video images containing moving images were excluded from the sample. Images were counted under the themes they were related to. An image could be included in more than one theme. This is because some of the images contained different representations with the image, sound, text, and text elements.

It was seen that the posts made with the hashtag "6 February" on Instagram were mostly included in the "sharing with dramatic content" theme. A significant part of the images examined were evaluated as dramatic posts aiming to affect social media users emotionally. These were the posts that contain pain, sadness, tears, and that can affect

individuals emotionally and conscientiously at a high level. Dramatization in the visuals was provided with both image and sound, text, and text elements. Especially music was one of the important tools supporting this dramatization. These posts revealed the power of social media to manipulate society. While such sharing activates the emotions of individuals in the society, they can also lead to significant pathological disorders. Specifically, images that support the growth of fear, anxiety, and other psychological illnesses in people were shared. It can be stated that these posts do not create meaningful representations in order to eliminate the destructive effects and consequences of the earthquake. It has been perceived as manipulating images that are more worried about being viewed. It might be claimed that these social media messages put people who witnessed the earthquake and watched it in the news under a lot of psychological pressure.

It is seen that a significant part of the visuals examined in the study were "get well soon or sharing their condolences" related to the earthquake. Such images were shared especially by people with a high number of followers on Instagram or by institutions promoting products and services. These posts contained important representations for the fulfillment of social responsibility and social sensitivity. With this aspect, social media is an important area of integration and solidarity.

It is seen that an important part of the visuals examined in the study were in the category of "sharing that includes the physical appearance of the earthquake". Due to the mental representations, they convey, these images influence how earthquakes were perceived by social media users. These pictures were provided to people for use in describing the earthquake that happened on February 6. In this sense, social media uses the image element very effectively and produces mental representations of a natural disaster in this way. Images depict the magnitude and devastation caused by the earthquake, and people in the community construct certain images and meanings in their minds. The earthquake that occurred on February 6 is depicted in the images under investigation as a significant and severe

disaster. This demonstrates how effectively social media can frame and reflect current events.

In the examination, visuals related to the earthquake, with information or educational content, were also encountered. One of the most basic functions of social media is to inform the society. Individuals can access the information they need through the media. In this sense, it can be said that social media constitutes an important power and is one of the tools that fulfill the function of informing the society. Some of the visuals examined were visuals that aim to educate the society about the earthquake process. It can be claimed that these photographs have significant representations for those who experienced the earthquake firsthand and those who saw it on television. In this sense, it is thought that such posts can make significant contributions to individuals when interpreted carefully. However, the unquestioning approval of every information or educational sharing by individuals is also an important problem. These shares need to be supported and questioned by different sources.

In the context of the visuals examined in the study, the potential of social media to provide social integrity and solidarity has also been encountered. In order to mitigate the destruction and disaster caused by the 6 February earthquake in 11 provinces, calls for social integration and solidarity were made through social media, and the society was directed towards unity and solidarity and aid in earthquake zones. Social media, in particular, has contributed to the social atmosphere of sympathy that has brought earthquake sufferers both nationally and internationally. This shows that social media is used as a very important field in ensuring social integrity in natural disasters and catastrophes. However, it can be stated that the social solidarity shares examined in the study are not very intense. Because social media seems to be an environment where more dramatic content was shared during the 6 February earthquake. However, one of the most basic functions of social media is the socialization function. It is of great importance for solidarity to use this function and potential more intensively in natural disasters and catastrophes.

During the earthquake on February 6th, political posts were also made on social media. It is seen that these posts are mostly negative political posts. In these posts, political administration, representatives of power, municipalities and contractors are shown as responsible for the great disaster. In this sense, it can be said that social media has an important function as an area of "freedom of thought". Social media has the potential to be used as a space where individuals can freely express their opinions. However, in the analyzed visuals, political posts are not made intensively, and it is seen that social media did not fully realize this potential during the earthquake process. Regarding social media and the right to free speech, this situation is viewed as worrisome.

During the 6 February earthquake, religious posts were also made on social media. Social media also has the potential to establish social solidarity and integration around religious discourses and motifs in natural disasters and disasters. As a matter of fact, religious posts should also be considered in the context of freedom of thought. However, it is clear that in the sample under consideration, such shares are extremely low. In this sense, social media does not appear to be an area where religious discourse and content are evident during the 6 February earthquake. Few legal posts were made about the 6 February earthquake on social media. These posts were constructed around the ideas of rights and the law being used against those in charge of the disaster. Such posts make social media appear as an area of social criticism. However, it can be said that social media does not fully fulfill this function, as there are very few shares.

When the findings of this study were compared with similar studies in the literature, the following conclusions were reached:

Relevant studies in the literature appear to heavily include Twitter and Facebook samples. Takahashi et al. (2015), Aoki et al. (2018), Gurman and Ellenberger (2015), Splendiani and Capriello (2022), Subba and Bui (2017), Muralidharan et al. (2011), Cho et al. (2013), Crooks et al. (2013), Kongthon et al. (2014), Kim and Hastak (2018), Yadav and Rahman (2016), Ünal and Sezer (2023), Arğın (2023), Koçyiğit (2023), Şahin and

Demirbilek (2023) examined Twitter or Facebook in their study. Among these studies, no Instagram sample was encountered.

In this study, it is seen that social media tools are used as an important area of interaction of the society during natural disaster processes and have an important function, especially for the transmission of news and information. The result of the study is similar to some studies in the literature. Takahashi et al. (2015), Aoki et al. (2018), Li et al. (2021); Splendiani and Capriello (2022), Subba and Bui (2017), Muralidharan et al. (2011), Cho, Jung and Park (2013), Amiresmaili et al. (2021), Crooks et al. (2013), Kongthon et al. (2014), Kim and Hastak (2018), Yadav and Rahman (2016), Ünal and Sezer (2023), Arğın (2023), Koçyiğit (2023), Şahin and Demirbilek (2023), Ebru (2020) revealed in her studies that social media is used effectively for news and information transfer.

The study concluded that social media tools were used as tools that ensure social solidarity and cooperation during natural disaster processes. This situation is also seen in certain studies in the literature. Takahashi et al. (2015), Subba and Bui (2017), Cho et al. (2013), Amiresmaili et al. (2021), Yadav and Rahman (2016), Ünal and Sezer (2023), Arğın (2023), Şahin and Demirbilek (2023), Ebru (2020) revealed in her studies that social media is used for social solidarity and integration.

The study concluded that social media tools reflect the physical appearance of the earthquake (ruins, debris, etc.). This result is similar to some studies in the literature. Muralidharan et al. (2011), Cho et al. (2013), Amiresmaili et al. (2021), Crooks et al. (2013), Yadav and Rahman (2016), Arğın (2023), Ebru (2020) states in her studies that the physical appearance of the earthquake was reflected on social media.

The study concluded that social media tools were used extensively for dramatic content sharing during natural disasters. This finding does not stand out among research in the literature. In these studies, it is stated that social media is mostly used around the themes of information sharing, social solidarity, cooperation, help requests, suggestions, debris information, announcements and interaction. In the studies of Yadav and Rahman (2016), Cho et al. (2013) and Ünal and Sezer (2023), attention is drawn to the posts with emotional

content. The studies in the literature are extensively examinations on Twitter, therefore, it can be concluded that this study's findings regarding intensely dramatic posts reflect a feature of Instagram. Because Instagram is primarily a photo and video sharing platform rather than a text-based publishing platform like Twitter, emotional shares are more notable.

It was concluded in the study that although not intensively, social media tools were also used with the function of social and political criticism during natural disaster processes. Similar findings can be found in the investigations of Ebru (2020) and Ünal and Sezer (2023).

In summary, in this study, which examined the social media appearance of the earthquake dated February 6, 2023, it can be said that social media seems to be an area where intensely dramatic content is shared. Shares are manipulative posts that can cause sadness, unhappiness, fear and anxiety in individuals and may cause pathological disorders. This shows that social media is used as a profit-oriented field. With the posts that attract the attention of individuals and affect them emotionally, it may be possible to increase the destructive effects of the earthquake beyond being eliminated. For this reason, the functions of providing information, education, socialization, freedom of thought of social media should be used more accurately and clearly. Otherwise, the disasters experienced may negatively affect a much larger part of the society.

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