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## ‘Art lovers of the world unite to aid Florence’: techniques to motivate the crowd in post-disaster heritage crowdfunding

### Abstract

Crowdfunding relies heavily on public participation and public participation is subject to certain conditions, such as the motivation to participate and the effectiveness of the call to participate. Using the case of the 1966 Florence Flood, this article explores the techniques to motivate the crowd adopted by the Committee to Rescue Italian Art, a committee formed in the USA to help protect the heritage of Florence, and newspaper reports published in the USA between 1966 and 1968. Seven overlapping frames were evident in the news reports and the CRIA’s call: damage, fundraising, people, rescue, restoration, the committee and its actions, and the value of Florence. In essence, the techniques adopted to motivate people to participate in the post-disaster crowdfunding included: (1) the dependency on mainstream media; (2) frequent use of all available communication channels; (3) multiple types of calls for support; (4) emphasis on the value of Florence; (5) highlighting a shared sense of ownership; (6) giving a sense of urgency; and (7) evoking the memory of past disasters. While the news media worked to inform the public, CRIA worked to encourage them to participate. The media reports analysed did not leverage emotive content to attract crowd participation whereas the calls initiated by CRIA used some emotive content. The article concludes with a discussion on the implications for managing crowdfunding campaigns to utilise the power of decentralised collective action.

### Keywords

crowdfunding motivation; 1966 Florence Flood; disasters; cultural heritage; heritage crowdfunding; disaster response

### Introduction

The Historic Centre of Florence, a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage site since 1982, is well-known for its artistic achievements and as a symbol of the Renaissance. The city has several notable historic buildings, such as the Cathedral of Santa Maria del Fiore, the Church of Santa Croce, Palazzo Vecchio, Uffizi Gallery and Palazzo Pitti. Moreover, it is also well-known as an artistic centre, home to renowned artists and architects such as Botticelli, Michelangelo and Brunelleschi. The city, located on the banks of the River Arno, has been historically vulnerable to flooding.<sup>1</sup> Since the first recorded flood in 1177<sup>2</sup> the river has flooded on several occasions,<sup>3</sup> with the flood of 1966 considered to be one of the most devastating.

The 1966 Florence Flood severely damaged much of the cultural heritage of the city, including historic buildings and multiple items in archives, galleries, museums and libraries. Cultural institutions, particularly those located along the banks of the Arno, were gravely affected. A UNESCO report published in January 1967 estimated that:

‘... 885 works of art of the first importance, eighteen churches and some 10,000 other objects have suffered. Seventy libraries and learned institutions

1 Historically, the city has suffered during the Second World War and also a mafia bombing in 1993.

2 Gaia Pianigiani, ‘50 Years After a Devastating Flood, Fears That Florence Remains Vulnerable’, *The New York Times*, November 2016, <https://www.nytimes.com/2016/11/08/world/europe/50-years-after-a-devastating-flood-fears-that-florence-remains-vulnerable.html#:~:text=%E2%80%9CThe%20Arno%20reached%20this%20height,warn%20that%20Florence%20remains%20vulnerable> (accessed 17 February 2021).

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have been stricken. More than 700,000 volumes of archives comprising some 50 million items, of which 10,000 were of inestimable historical and scientific value, have been damaged.<sup>4</sup>

Experts claimed that the flood had caused more damage to heritage in Florence than World War II,<sup>5</sup> and estimated the cost to recover to be at least five times greater than the initial \$6.4 million that the Italian government had allocated for cultural properties.<sup>6</sup>

As a result of the severity and extent of damage to cultural heritage, a crowdsourcing initiative by the *Comitato del Fondo Internazionale per Firenze* (CFIF) was started in Italy. This committee was headed by Carlo Ludovico Ragghianti, a renowned Italian art historian. Consequently, committees were formed in many other countries, including the UK and USA, to support disaster relief and the recovery process for the heritage of Florence. The committees worked tirelessly in their countries to raise both awareness and funds for restoration. The committees also helped identify and support international experts in heritage restoration to work in Florence. Moreover, the committees from the UK, USA, Italy and other countries worked collaboratively.<sup>7</sup> It is believed that without international financial support, very little conservation work would have been possible in Florence.<sup>8</sup>

The US-based Committee to Rescue Italian Art (CRIA), under the honorary presidency of Jacqueline Kennedy, a former first lady of the United States, was formed soon after the disaster and included over 200 members across the United States. CRIA's goal was to raise \$2.5 million—the rough equivalent of \$20 million today—in order to support the rescue and restoration works in Florence.<sup>9</sup> The fundraising was carried out by organising events such as lectures, exhibitions and movies.<sup>10</sup> Moreover, CRIA also used letters, telegrams and audiovisual material to invite and motivate the crowd. As a result of these initiatives, 'art lovers of the world united to aid Florence',<sup>11</sup> and contribute money, materials and knowledge.<sup>12</sup> Additionally, several worked as volunteers in Florence to rescue the heritage damaged by the flood.

Previous research by the author has shown that there were four key factors in motivating the crowd in this case, including: (1) the call to participate; (2) the media; (3) 'influencers'; and (4) memories of the city.<sup>13</sup> In fact, a telegram requesting urgent newspaper coverage to help CRIA's actions exemplifies the reliance on media to achieve its crowdsourcing goals.<sup>14</sup> For international committees such as CRIA, motivating the crowd would have been a particularly challenging task for two reasons. Firstly, heritage may not be an immediate need or priority in disaster-struck societies.<sup>15</sup> Despite heritage being the focus in some international media during the disaster<sup>16</sup>, there is also evidence of the international community prioritising humanitarian relief over Florence's heritage.<sup>17</sup> Secondly, for many Italians the heritage of Florence is a part of their identity. However, heritage may not always be equally valuable for people outside the national boundaries. In fact, in recent years there is evidence of some indifference towards heritage during disasters.<sup>18</sup> Therefore, motivating people outside the national boundaries to contribute to save heritage can be a challenging task. Nonetheless, CRIA was very close to meeting its fundraising goal of \$2.5 million.<sup>19</sup> They also mobilised volunteers and experts to rescue and restore some of Florence's cultural heritage. Even though the committee was based in the USA, they also received contributions from other countries including Italy, as Nicolette Bingham recalls.<sup>20</sup> There are very few examples of large groups of internationally dispersed peoples contributing at this scale to save heritage in a post-disaster context in one country.

3 Giorgio Batini, *4 Novembre, 1966: l'Arno in Museo a Firenze: Gallerie, Monumenti, Chiese, Biblioteche, Archivi e Capolavori Danneggiati dall'alluvione* (Firenze: Bonechi, 1967).

4 United Nations Educational, Scientific and Cultural Organization, 'Florence, Venice: UNESCO Opens World Campaign', *The UNESCO Courier*, January 1967, <https://unesdoc.unesco.org/ark:/48223/pf0000078222> (accessed 22 May 2019).

5 In a draft letter by Comitato Fondo Internazionale per Firenze to all countries of culture, the committee highlighted 'The flood in Florence, the 4th of November 1966, has caused more damage to her artistic, cultural and historic heritage than that by the war'. This draft letter is stored in Box 1 of the collection *Alluvione di Firenze 1966—Comitato Fondo Internazionale per Firenze* in *Fondazione Centro Studi Sull'Arte Licia e Carlo Ludovico Ragghianti, Lucca, Italy*.

6 Bruno Molajoli, 'Years to Repair the Damage', *The UNESCO Courier*, January 1967, <https://unesdoc.unesco.org/ark:/48223/pf0000078222> (accessed 22 May 2019).

7 Correspondence items between the members of different committees suggest that the committees worked collaboratively. These are stored in the *Fondazione Centro Studi Sull'Arte Licia e Carlo Ludovico Ragghianti, Lucca, Italy* and *villa i Tatti* in Florence. See also, Helen Spande, ed., *Conservation Legacies of the Florence Flood of 1966: Proceedings of the Symposium Commemorating the 40th Anniversary* (London: Archetype Publications, 2009). Many conservators recollect their memories of working with professionals from other countries. For example, Kirsten Aschengreen Piacenti recalls how the UK committee worked with the other committees to help set up conservation laboratories.

8 Spande, *Conservation Legacies of the Florence Flood of 1966*.

9 Committee to Rescue Italian Art, 'The Story', <https://cria.itatti.harvard.edu/> (accessed 15 August 2021).

10 Fred Litch, 'Building a Network of Support for Conservation: The Committee to Rescue Italian Art', in Spande, *Conservation Legacies of the Florence Flood of 1966*, 154.

11 This quote is inspired by the headlines of various news reports of the time including Henry Gaggiottini, 'Help of Art Lovers Asked by Florence',

*Chicago Tribune*, 11 November 1966; 'Art Lovers Around World Rail Florence's Support', *Santa Cruz Sentinel*, 25 November 1966; 'Art Lovers of World Go to Florence's Aid', *Chicago Tribune*, 26 November 1966; 'Italian Floods Art Lovers Uniting to Save Treasures', *Prince George Citizen*, 30 November 1966. The quote has also been used in the title of the paper.

12 Pakhee Kumar, 'Crowdsourcing to Rescue Cultural Heritage during Disasters: A Case Study of the 1966 Florence Flood', *International Journal of Disaster Risk Reduction* 43 (2020): 101371.

13 Kumar, 'Crowdsourcing to Rescue Cultural Heritage during Disasters'.

14 The telegram was sent on 17 November 1966 by Sydney J. Freedberg, Vice Chairman, National Executive Committee of CRIA to Villa i Tatti in Florence and stated: 'urgently need daily Florentine newspaper coverage of art damage to help our salvation committee'. This telegram can be viewed at: <https://cria.itatti.harvard.edu/exhibits/show/the-committee/call-to-action>.

15 Kristy Graham and Dirk H.R. Spennemann, 'Heritage Managers and their Attitudes towards Disaster Management for Cultural Heritage Resources in New South Wales, Australia', *International Journal of Emergency Management* 3, no. 2–3 (2006): 215. See also Aparna Tandon, 'Post-Disaster Damage Assessment of Cultural Heritage: Are we Prepared', in *ICOM-CC 18th Triennial Conference Preprints, Copenhagen, Denmark*, ed. J. Bridgland (Paris: International Council of Museums, 2017), 4–7.

16 David Alexander, 'The Florence Floods—What the Papers Said', *Environmental Management* 4 (1980): 27.

17 For instance, in a letter sent to CFIF, Johnson wrote: 'I would like this money to help towards the poor people of Florence. I love the arts but people need it more'. The letter is available in Box 7 of the collection *Alluvione di Firenze 1966—Comitato Fondo Internazionale per Firenze in Fondazione Centro Studi Sull'Arte Licia e Carlo Ludovico Ragghianti, Lucca, Italy*.

18 Pakhee Kumar, 'Twitter, Disasters and Cultural Heritage: A Case Study of the 2015 Nepal Earthquake', *Journal of Contingencies and Crisis Management* 28, no. 4 (2020): 453.

19 Committee to Rescue Italian Art, 'The Story'.

There is still a gap in understanding how the media and the CRIA framed the disaster and what techniques were adopted to motivate the public to support the work. Aiming to bridge this gap, this article analyses 289 news reports published in the United States between November 1966 and November 1968, two official letters and three videos produced by CRIA to answer the following questions:

- (a) What frames were present in reporting the 1966 Florence Floods by the newspapers published in the USA between 1966 and 1968?
- (b) What frames were present in the calls initiated by CRIA?
- (c) Did the fundraising call in newspapers rely on any particular frame?

Addressing this gap is particularly needed in today's context because the intensity and frequency of disasters affecting cultural heritage have increased,<sup>21</sup> and post-disaster crowdsourcing in cultural heritage is a challenging task that requires preparation before a disaster strikes.<sup>22</sup> As such it is hoped that the findings of this research will be useful for those working to utilise the power of decentralised collective action in contemporary post-disaster response efforts.

## 1 Conceptual frameworks

The term crowdsourcing was coined in 2006<sup>23</sup> and, in recent times, the internet is perceived as an essential medium for crowdsourcing.<sup>24</sup> However, the practice pre-dates the internet age with several examples previously employed to achieve a variety of aims.<sup>25</sup> A few notable examples in the UK include the compilation of the Oxford English Dictionary in 1879 and the Mass Observation Movement in 1937.<sup>26</sup> While several definitions of crowdsourcing have been coined, this research defines crowdsourcing as 'an umbrella term for a variety of approaches in which a large group of people perform small tasks in order to achieve a collective goal'.<sup>27</sup> In this case tasks included donating money and materials, volunteering and contributing knowledge, and the goal to rescue and restore heritage of Florence.

Crowdfunding is understood to be a branch of crowdsourcing in which people are encouraged to financially back any initiative or project they care passionately about.<sup>28</sup> Like crowdsourcing, the roots of crowdfunding can be traced in the pre-internet age. For instance, in 1885 over 160,000 people donated more than \$100,000 to erect a pedestal for the Statue of Liberty.<sup>29</sup> In this article donation-based crowdfunding<sup>30</sup> is used as the framework to understand the fundraising efforts in post-disaster heritage rescue and restoration. However, as the author's previous research has established, the 1966 Florence Flood can be understood as an example of crowdsourcing as the crowd contributed not only money but also materials, knowledge and their time as volunteers.<sup>31</sup>

## 2 Scope

Acknowledging the vastness of the subject, it is important to mention that the scope of this article is narrow and focusses on the activities of CRIA and selected newspapers published in the USA from 1966 to 1968. Beyond this scope there are important works of other committees, particularly the Italian committee CFIF, that should be understood.<sup>32</sup> News reports published in other countries are also beyond the scope of the article. International news coverage is influenced by various internal and geopolitical factors, including things like the geographical location of the affected country and the nature of its political influence.<sup>33</sup> For example, research has shown that during the 1966 Florence Flood, the Italian press focussed on the dilemmas of the government whereas the British press concentrated

on the damage to the city's cultural treasures.<sup>34</sup> While an analysis of these kinds of factors is beyond the scope here, it is worth acknowledging that the media sources and reports used in this study should not be considered as neutral sources of information as the media arguably distorted the reality of certain points. For example, the late book conservator Christopher Clarkson recalled a television crew spreading mud and oil on walls in order to make news 'more realistic'.<sup>35</sup> Moreover, a then student Lucilla Kingsbury recalls the media as being disruptive to the ongoing conservation and restoration works.<sup>36</sup>

## Materials and methods

### 1 The dataset

This research uses letters and audiovisual material produced by CRIA and news media reports as data sources. These are considered appropriate sources in this research as they provide insight into the different motivation techniques and media used around the campaign. Letters and videos produced by CRIA aimed to inspire people to contribute. On the other hand, during disasters, news media plays an important role in informing, educating, agenda-setting and opinion-formation.<sup>37</sup> Due to their substantial readership, they can be an important source to motivate people in large numbers to contribute to post-disaster crowdsourcing.

This study utilises 289 media reports published in the United States between November 1966 and November 1968. The 2-year time period covers various stages of the disaster, including response, damage assessment, treatment and rehabilitation. While the restoration works continued even after 1968, the 2-year timeframe provides an insight into two phases of a disaster: (1) during the disaster; and (2) after the disaster.<sup>38</sup> The media reports utilised in this study are located in seven archives, most of which are available online via open access and are provided in Table 1. Table 2 provides details of the archives for the two letters and three videos produced by CRIA and used in the research (but for which dates are not known).

**Table 1** Details of the archives used to collect media report data.

Source	Number of archives	Main repository URL
California Digital Newspaper Collection, USA	41	<a href="https://cdnc.ucr.edu">https://cdnc.ucr.edu</a>
Fondazione Ragghianti, Lucca, Italy	4	<a href="https://www.fondazionezagghianti.it/">https://www.fondazionezagghianti.it/</a>
Illinois Digital Newspaper Collection, USA	1	<a href="https://idnc.library.illinois.edu">https://idnc.library.illinois.edu</a>
Illinois State University Milner Library, USA	1	<a href="https://videttearchive.ilstu.edu">https://videttearchive.ilstu.edu</a>
Proquest (Clarivate)	212	<a href="https://www.proquest.com">https://www.proquest.com</a>
Stanford Daily Archive, USA	17	<a href="https://archives.stanforddaily.com">https://archives.stanforddaily.com</a>
The Catholic News Archive, USA	13	<a href="https://thecatholicnewsarchive.org">https://thecatholicnewsarchive.org</a>

**Table 2** Details of archives used to collect CRIA letters and videos.

Source	Type	Number of items	URL
Committee to Rescue Italian Art	Letter	2	<a href="https://cria.itatti.harvard.edu/">https://cria.itatti.harvard.edu/</a>
Committee to Rescue Italian Art	Video	3	<a href="https://cria.itatti.harvard.edu/">https://cria.itatti.harvard.edu/</a>

**20** Spande, *Conservation Legacies of the Florence Flood of 1966*. In the section Oral History of the Florence Flood: Personal Recollections, Nicolette Bingham, assistant to the head of CRIA, recalls that the committee had received contributions from many countries including Micronesia, Belgium and Chile.

**21** June Taboroff, 'Cultural Heritage and Natural Disasters: Incentives for Risk Management and Mitigation', *Managing Disaster Risk in Emerging Economies 2* (2000): 71.

**22** Pakhee Kumar, 'Learning from the Past and Preparing for the Future: Cases and Tools for Cultural Heritage During Disasters' (PhD dissertation, IMT School for Advanced Studies Lucca, 2019).

**23** Jeff Howe, 'The Rise of Crowdsourcing', *Wired Magazine 14*, no. 6 (2006): 176.

**24** Enrique Estellés-Arolas and Fernando González-Ladrón-de-Guevara, 'Towards an Integrated Crowdsourcing Definition', *Journal of Information Science 38*, no. 2 (2012): 189.

**25** Henriette Roued-Cunliffe, 'Collection Building amongst Heritage Amateurs', *Collection Building 36*, no. 3 (2017): 108.

**26** Sally Ellis, 'A History of Collaboration, a Future in Crowdsourcing: Positive Impacts of Cooperation on British Librarianship', *Libri 64*, no. 1 (2014): 1–10.

**27** Since the term crowdsourcing was coined recently many definitions acknowledge the internet as its necessary medium. However, some researchers believe crowdsourcing to be a form of outsourcing. See, for example, Estellés-Arolas and González-Ladrón-de-Guevara, 'Towards an Integrated Crowdsourcing Definition'. As this research argues that crowdsourcing pre-dates the internet age, the author uses her earlier definition from Kumar, 'Crowdsourcing to Rescue Cultural Heritage during Disasters'. The definition was created using the eight components of crowdsourcing defined by Estellés-Arolas and González-Ladrón-de-Guevara, and include goal, process, task, medium, the call to participate, motivation, crowdsourcer and crowd. The author used several case studies from the literature on cultural heritage crowdsourcing to map the relationships between the eight components to create this definition. In this, the author found three components to be particularly important to

be included in the definition: large groups of people (crowd), tasks and collective goal.

**28** Vincent Rouzé, 'Crowdsourcing and Crowdfunding: The Origins of a New System?', in *Cultural Crowdfunding: Platform Capitalism, Labour and Globalization*, ed. Vincent Rouzé (London: University of Westminster Press, 2019), 15–33.

**29** Aki Kallio and Lasse Vuola, 'History of Crowdfunding in the Context of Ever-Changing Modern Financial Markets', in *Advances in Crowdfunding: Research and Practice*, ed. Rotem Shneor, Liang Zhao, and Bjørn-Tore Flåten (Cham: Springer International Publishing, 2020), 209.

**30** Alexander Simons, Lena Franziska Kaiser, and Jan vom Brocke, 'Enterprise Crowdfunding: Foundations, Applications, and Research Findings', *Business & Information Systems Engineering* 61 (2019): 113.

**31** Kumar, 'Crowdsourcing to Rescue Cultural Heritage during Disasters'.

**32** Those interested in further exploring this can refer to: Frances Clarke, 'The Italian Art and Archives Rescue Fund', in Spande, *Conservation Legacies of the Florence Flood of 1966*, 152. See also, Kumar, 'Crowdsourcing to Rescue Cultural Heritage during Disasters'; UNESCO, 'Florence, Venice'.

**33** Yongick Jeong and Sun Young Lee, 'What Determines International Disaster Coverage in the US News Media?', *Journalism* 20, no. 12 (2019): 1593.

**34** Alexander, 'The Florence Floods'.

**35** Christopher Clarkson, 'Training in Book Conservation after the Flood', in Spande, *Conservation Legacies of the Florence Flood of 1966*, 71.

**36** Spande, *Conservation Legacies of the Florence Flood of 1966*. Lucilla Kingsbury, who was a student at the Courtauld Institute in London, recalls working with media being disruptive as conservators had to pause their works.

**37** Michael D. Barnes et al., 'Analysis of Media Agenda Setting during and after Hurricane Katrina: Implications for Emergency Preparedness, Disaster Response, and Disaster Policy', *American Journal of Public Health* 98, no. 4 (2008): 604.

**38** Rohit Jigyasu and Vanicka Arora, *Disaster Risk Management of Cultural Heritage in Urban Areas: A Training Guide* (Kyoto: Research Center for Dis-

## 2 Methodology

This research was conceptualised after reading newspaper articles in the archives of *Fondazione Centro Studi Sull'Arte Licia e Carlo Ludovico Ragghianti*. These newspaper articles were published in the USA and a cutting of these articles was sent to CFIF possibly to illustrate the media attention on the disaster in the USA. The methodology adopted for this study is comprised of nine distinct steps including:

- (a) *Locating online news media archives*: the author created a list of online news media archives. Most of the online archives utilised in this study are open access, i.e. they do not have a paywall. The list of archives is available in [Table 1](#).
- (b) *Creating a list of news media reports available in archives*: online archives were searched using the term 'Florence Flood 1966'. This keyword was found to be the most appropriate term after testing other keywords such as 'Florence heritage' and 'Florence Flood heritage'. The author limited the search to a period from November 1966 to December 1968. No reports published in December 1968 were found in the online archives. The resultant news report's URL was tabulated on a Microsoft Excel sheet. The URL of each report was essential to tabulate in case the author needed to refer to the web source. Further, the author downloaded the reports and each was given a unique code for ease of identification and cross-referencing. For example, reports from *Stanford Daily Archive* were given codes SD01, SD02 and so on.
- (c) *Adding metadata in the list of media reports*: in the Microsoft Excel file, additional information such as date of publication, city and country of publication, name of news media source, and so on were manually added for each report. Information on unique code was also added for easy of cross-referencing. The section 'General observations' describes the results of this annotation.
- (d) *Transcribing the reports*: the identified newspaper articles were transcribed using an online Optical Character Recognition (OCR) tool. The audiovisual material was transcribed manually.
- (e) *Correcting transcription*: the articles transcribed using OCR were checked manually for any errors in automatic transcription. The corrected reports were added to the Microsoft Excel sheet. These reports were also stored as separate text files using their unique code, as described in step (b).
- (f) *Manual classification of reports*: two broad categories were identified for classification: heritage and others. Heritage is a broad term applicable to a wide variety of things and practices including individual buildings and sites to groups of buildings, historical areas, towns, environments, artifacts, artworks and so on, and as recognised at many different levels including international, national, regional and human. As such, this research focusses on valuable buildings and objects defined by the cultural institutions in Florence including the Uffizi, *Biblioteca Nazionale Centrale di Firenze*, *Museo Galileo*, *Museo archeologico nazionale di Firenze* and so on. While the destruction of personal heritage due to floodwaters may not be surprising, it is less likely to be covered by the international media. The two categories identified were not mutually exclusive, i.e. reports containing content about heritage could also contain other content including damage to infrastructure, the disaster's impact on people and so on.
- (g) *Qualitative analysis*: manual framing analysis of data using the grounded theory approach was done to understand the framing of

**Table 3** The 289 reports used in this research were published by 30 sources from the USA. The reports were published in 25 cities in the United States. The source for one report is unknown, however, it was sent in correspondence to CFIF. The correspondence mentioned NYC as the source city.

City in USA	Source	Number of reports
Atlanta, Georgia	The Atlanta Constitution	8
Baltimore, Maryland	The Baltimore Sun	17
Blue Lake, California	Blue Lake Advocate	1
Boca Raton, Florida	The Sun	1
Boston, Massachusetts	Boston Globe	19
	The Christian Science Monitor	9
Chicago, Illinois	Chicago Daily Defender	1
	Chicago Tribune	45
Davis, California	California Aggie	1
Gettysburg, Pennsylvania	Weekly Gettysburgian	1
Hartford, Connecticut	Catholic Transcript	2
	The Hartford Courant	13
La Habra, California	La Habra Star	4
Los Angeles, California	Los Angeles Times	33
Madera, California	Madera Tribune	3
Miami, Florida	The Voice	3
New Orleans, Louisiana	The Clarion Herald	1
New York City, New York	New York Times	50
	Unknown	1
	Wall Street Journal	1
Normal, Illinois	The Vidette	1
Palm Springs, California	Desert Sun	2
Palo Alto, California	The Stanford Daily	17
Philadelphia, Pennsylvania	The Catholic Standard and Times	3
Pittsburgh, Pennsylvania	Pittsburgh Catholic	4
San Bernardino, California	San Bernardino Sun	14
Santa Cruz, California	Santa Cruz Sentinel	13
San Francisco, California	The Jewish News of Northern California	1
Tustin, California	Tustin News	1
Washington DC, Washington	The Washington Post	19

aster Mitigation of Urban Cultural Heritage, Ritsumeikan University, 2012).

the disaster. In post-disaster contexts, heritage enthusiasts seek information on the events, their underlying causes and the appropriate actions. In this, framing analysis is useful as it utilises socially shared organising principles.<sup>39</sup> A grounded theory approach was used to analyse the data as analysing in small units and constant comparison of frames helped modify and refine the analysis.<sup>40</sup>

- (h) *Quantitative analysis*: quantitative analysis was done to generate overall patterns of data. It was also used to analyse the dominant frames and change of media attention over time.
- (i) *Statistical analysis*: to understand the strength of the association between fundraising and other frames, the phi correlation coefficient (phi) was calculated. The phi coefficient determines whether two variables co-vary.<sup>41</sup> The value of the coefficient ranges from 0 to +1.0, where a value of 1.0 means there is a perfect correlation. A low score (0–0.19) signifies no or a weak correlation (Table 3).

### 3 Limitations

The number of news reports, videos and letters used in the research is limited and it should not be considered representative of all the news reports published in the USA nor of the total of CRIA's activities. The research depends on open access data available in online archives; data that are not online or open access are not represented in this research. Moreover, archival practices may also pose certain limitations in this research and impact the results of this study. However, while the results

<sup>39</sup> Luke Winslow, 'Frame Analysis', in *The SAGE Encyclopedia of Communication Research Methods*, ed. Mike Allen (Thousand Oaks, CA: Sage, 2018), 584.

<sup>40</sup> Kathleen S. Valde, 'Grounded Theory', in Allen, *The SAGE Encyclopedia of Communication Research Methods*.

<sup>41</sup> Mary L. McHugh, 'Phi Correlation Coefficient', in *The SAGE Encyclopedia of Educational Research, Measurement, and Evaluation*, ed. Bruce B. Frey (Thousand Oaks, CA: Sage Publications, 2018), 2.

may not be representative, they still can provide some creative solutions for crowdfunding.

**Results**

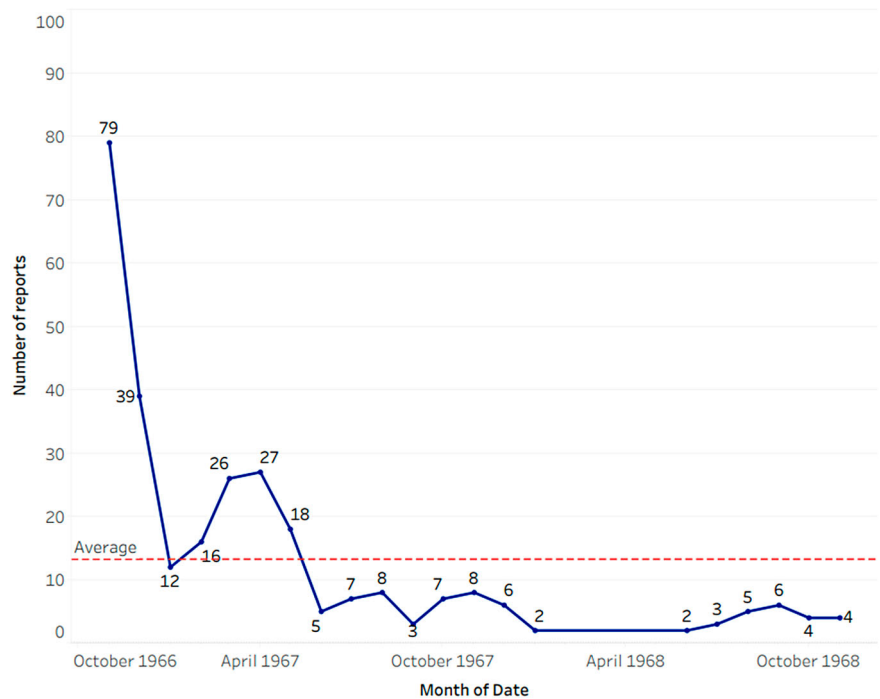
The results are divided into three parts. Part 1 describes the generic patterns from metadata analysis. Parts 2 and 3 describe the main findings of this research and present some answers to the main research questions posed in this article.

**1 General observations**

Figure 1 illustrates that the number of reports published sharply decreased after November 1966. Moreover, the intensity of reports decreased with time except in March 1967 where a spike is observed. No articles published in December 1968 were found. The flooding of the Arno River on 4 November 1966 was due to intense rainfall in a short time and very few media reports covered the flood during the first 2 days. The intensity of reports increased with time between 4 and 8 November 1966 after which the coverage fluctuated, as evident in Fig. 2.

Table 4 shows the number of reports which included visual information with the published report. The majority of the reports did not publish visuals with only about one third having visuals. These included illustrations, images and maps although information on four of the visuals is not available.

It is worth noting that some of the videos and letters produced by CRIA were narrated or written by prominent figures in the USA, including Elizabeth Taylor a prominent Hollywood actor and Ted Kennedy, a politician and senator who delivered CRIA’s call to participate.



**Fig. 1** Number of news reports published in the USA between November 1966 and November 1968, showing how the intensity of reporting decreased with time.



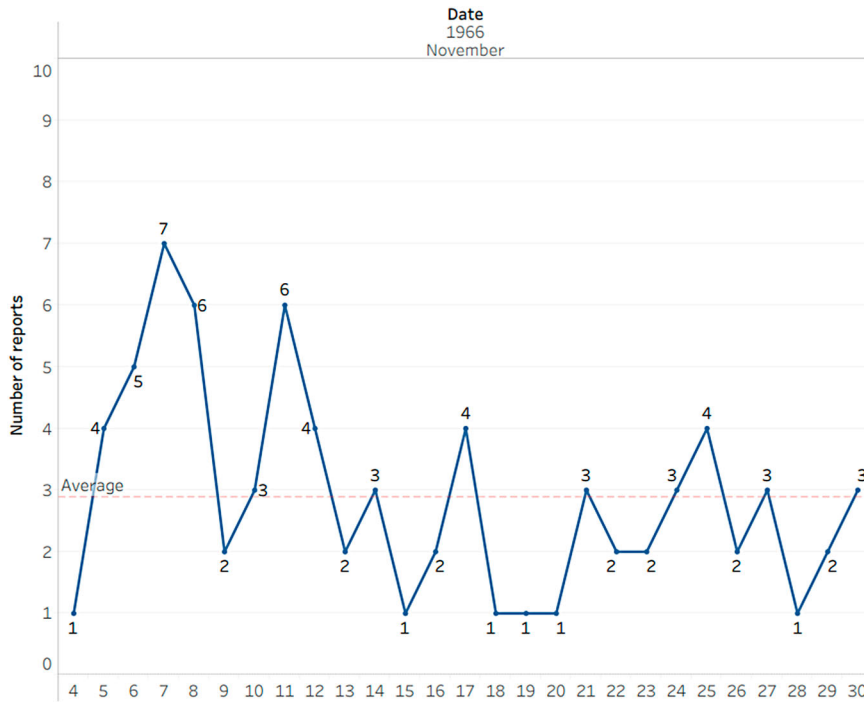


Fig. 2 Number of news reports published in the USA in November 1966. The graph shows that very few reports were published in the first few days of the disaster.

### 2 Frames used in characterising the disaster

The media reports were first tagged by the author to understand the content type of the reports and whether a report contained content related to heritage or not. Table 5 illustrates the result of tagging. Two reports listed in the table were not related to the 1966 Florence Flood and were on Florence in general. These reports were not analysed in this study. The 'Other' category in the table includes information on the disaster not related to heritage, such as infrastructural damage, effects on people, etc. Approximately 75% of the reports included content related to heritage and this article reports the analysis of those 218 news reports.

Twelve frames were identified in the media reports and the distribution of these frames is shown in Table 6. The maximum number of frames present in any one article was eight, whereas the minimum number of frames was one (Table 7).

#### 2a Damage in news reports

Damage to heritage was the most discussed frame in the media reports, as evident from Table 6. The news reports vividly described the damage to heritage, focussing on the number of artefacts, artworks, books, archives,

Table 4 Type and quantity of visual representations published in the news reports. Most of the reports used in this study did not use visual information. In three reports the visual content was missing.

Use of visual content	Type	Number
No	Not applicable	189
Yes	Illustration(s)	5
	Photograph(s)	87
	Image(s) and map	4
	Map	1
	Unknown	3

**Table 5** The coverage of heritage and other topics related to the 1966 Flood in 289 news reports. Most of the reports contained some information on the heritage of Florence.

Information on Florence's heritage	Other	Number	Total
No	No	2	71
	Yes	69	
Yes	No	110	218
	Yes	108	

records and buildings affected. Some reports estimated the value of heritage destroyed by the flood. Moreover, some reports also described the cause of damage to heritage. The floodwater, thick with mud and fuel oil, covered many buildings and heritage objects. Lastly, some reports also gave a detailed description of the damage to artworks and some artworks were covered by several reports, including 'The Crucifix' by Cimabue and 'The Bronze Doors' by Ghiberti. As evident from Fig. 3, the frame of damage appeared mostly in November–December 1966 reports.

### 2b Damage in audiovisual material and letters

CRIA's letters and audiovisual material described the situation in Florence and acknowledged that the full extent of damage to the city's art treasures was not known. They list the heritage that needed attention, such as paintings, frescoes, sculptures, libraries, archives and monuments. Some significant and popular artworks were also discussed. Lastly, the amount of heritage affected was also mentioned. For example, a film commentary stated that over 450,000 books and archival records were lost or damaged.

### 2c People in news reports

News reports that described people and their actions to save heritage were classified in this category. People had a crucial role in post-disaster recovery and rehabilitation. These included people working as committee members and volunteers, conservation experts, academics, heritage managers, media professionals, politicians and religious leaders. Analysis shows that people held multiple roles during the post-disaster recovery and rehabilitation process, including fundraising, event organisation, being financial or material donors to aid restoration, or identifying and involving experts, disseminating information, and being involved in

**Table 6** The 12 frames found in news reports.

Frame	Description
Damage	Contents highlighting the damage to heritage or information on the situation of heritage post-disaster
People	Description of people and their action to save heritage
Restoration	Contents highlighting the restoration works or planned restoration works in order to save heritage
Financial Aid	Description of money donated by different organisations, committees, governments and people for restoration of heritage
Reopening Committee	Contents highlighting post-restoration exhibitions and rehabilitation works
Value of Florence	The action of international committees to protect heritage
Fundraising	Contents highlighting the importance of Florence and its heritage to the world, particularly Western civilisation
Rescue	Call to donate money for restoration and rehabilitation of heritage in Florence
Memory	Contents highlighting rescue works carried out immediately after the disaster
Reaction	Recollection of events or facts (e.g. past disasters) in the context of Florence
Others	Contents highlighting expression of emotions
	Any themes occurring five times or less were placed in this category

**Table 7** Frames in news reports (left), audiovisual material and letters (right).

Frame	Number	%	Frame	Number	%
Damage	102	46.7%	Damage	4	80%
People	82	37.6.0%	People	1	20.0%
Restoration	80	36.6%	Restoration	1	20.0%
Reopening	63	28.8%	Financial Aid	0	0%
Financial Aid	57	26.1%	Reopening	0	0%
Committee	57	26.1%	Committee	2	40%
Value of Florence	39	17.8%	Value of Florence	5	100%
Fundraising	31	14.2%	Fundraising	5	100%
Rescue	23	10.5%	Rescue	1	20%
Memory	16	7.3%	Memory	0	0%
Reaction	16	7.3%	Reaction	0	0%
Others	17	7.7%	Others	0	0%

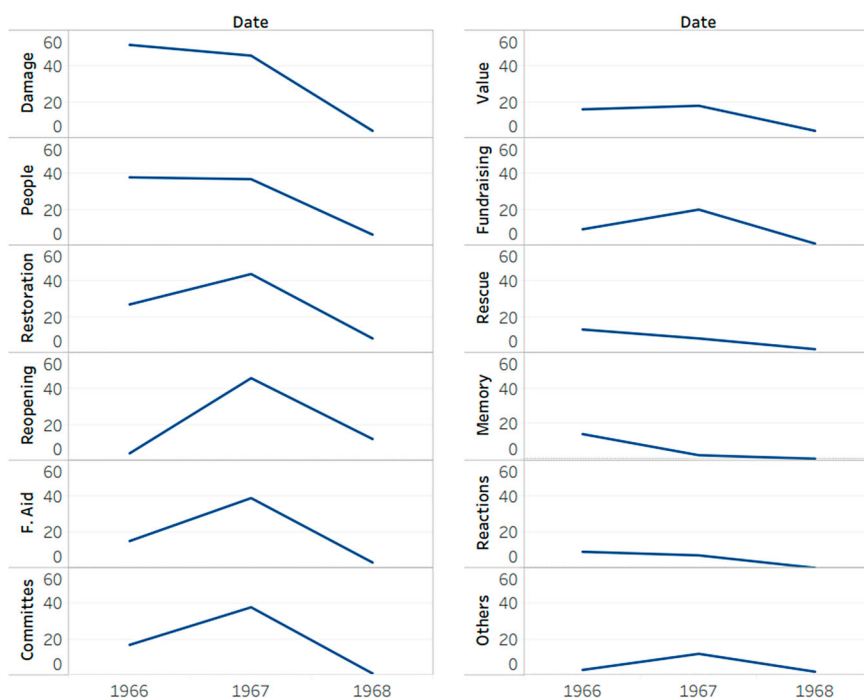
rescue and restoration. Figure 3 demonstrates that contents covering people and their roles declined with time, as did the overall number of news reports.

*2d People in audiovisual material and letters*

This frame occurred only once in the audiovisual material and letters produced by CRIA. In his appeal Senator Ted Kennedy highlighted the spirit of Florence’s citizens who were working 12–15h a day covered in mud in order to rescue the heritage affected by the flood.

*2e Restoration in news reports*

Content that highlighted the restoration works or planned restoration works in order to save heritage were classified in this category. The reports provided an estimated timeframe required to restore heritage. Some experts mentioned that the restoration would take at least 20 years. Moreover, some reports provided an estimate of more than \$30 million for restoring damaged heritage. Techniques adopted to restore



**Fig. 3** The attention on frame as changed over time.

heritage objects were also described in detail. Details of newly established restoration centres and the work of conservation experts were also provided in the reports. Figure 3 illustrates that even though the content covering restoration declined with time, the interest in the subject remained subject to the media's attention.

#### *2f Restoration in audiovisual material and letters*

This frame occurred only once in the audiovisual material and letters. A letter written by Jacqueline Kennedy describes restoration as a challenging task that will need scholarship and take years.

#### *2g Financial aid in news reports*

Content that described money donated by different organisations, committees, governments and people for the rescue and restoration of heritage were classified in this category. Contributions were reported as being received from many influential people. For instance, Pablo Picasso donated a painting that was auctioned on behalf of CRIA and other reports claimed that CRIA had raised about \$2.5 million. UNESCO campaigned to raise \$10 million. The reports also describe the contributions or a promise to contribute made by governments. For example, the Australian government provided \$30,000 towards restoration. Lastly, contributions from individuals were also acknowledged, for example, detailing how American school children not only raised money but also wrote letters to support the people working in Florence. Figure 3 illustrates that financial aid to rescue and restore heritage in Florence started coming in as early as November 1966 and even though the number of media reports declined with time, media attention remained high until May 1967.

#### *2h Financial aid in audiovisual material and letters*

This frame did not occur in the audiovisual material and letters produced by CRIA. CRIA did not mention about money donated by different organisations, committees, governments and people.

#### *2i Reopening in news reports*

Rehabilitation works, post-restoration exhibitions and reopening of heritage institutions were classified in this category. The media reported that some of the institutions were prepared to reopen as early as December 1966. The Florence Opera House had announced a performance series starting on 27 November 1966. Some institutions opened without their masterpieces with, for example, the Duomo opening without the five panels affected by floodwaters from Ghiberti's celebrated 'Door of Paradise' to the Baptistery. Similarly, Santa Croce opened without several of its paintings. The post-disaster reopening of Florence was also mentioned as the 'twentieth-century renaissance' or rebirth of Florence.<sup>42</sup> Exhibitions were also planned post-restoration and some were organised in the United States as a sign of gratitude to the Americans who helped rescue and restore the artworks. In Florence itself, a large exhibition was planned to exhibit some 1500 Italian paintings and sculptures executed between 1915 and 1935 and reported as the biggest exhibition since World War II. Figure 3 demonstrates that reopening was the only frame that gained media attention with time.

#### *2j Reopening in audiovisual material and letters*

This frame did not occur in the material produced by CRIA.

<sup>42</sup> Nick Mikos, 'A New Italian Renaissance—In Tourism', *New York Times*, 26 February 1967.

### *2k Committees in news reports*

The action of international committees to protect heritage were classified in this category. International committees played a crucial role in organising post-disaster relief. On 7 November 1966, some reports mentioned the formation of CRIA in the United States under the honorary presidency of Jacqueline Kennedy as well as the formation of several other small committees there with the same aims as CRIA. Similar committees were formed in other countries including the UK committee formed under Sir Ashley Clarke which went on to raise \$408,000 for the restoration of damaged heritage. CRIA also organised expert technical assistance including conservation experts and trainees who travelled to Florence to help restore damaged heritage. They also organised events such as film screenings, concerts, lectures, exhibitions and auctions. Figure 3 demonstrates that the international committees' works were discussed regularly in news reports until December 1967, after which only one report mentioned their works. The work of the Italian committee *Comitato del Fondo Internazionale Italian Firenze* was not covered extensively by the international media and the committee was mentioned only once in the reports included in this study.

### *2l Committees in audiovisual material and letters*

Description of the committee's works occurred twice in the audiovisual material and letters and were limited to CRIA's activities. The works of other committees were not described by CRIA. A letter written by the CRIA described the committee as being composed of art historians, curators and conservators. A film of Senator Ted Kennedy highlights that the purpose of CRIA was to preserve the objects of art and books.

### *2m Value of Florence in news reports*

Content highlighting the importance of Florence and its heritage to the world were classified in this category. Florence is well-known for its art and as a symbol of the Renaissance. The news reports highlighted the importance of Florence as the greatest city of art in the Renaissance that belongs to everyone. The value of Florence, particularly to Western civilisation, was highlighted with attention given to renowned artists, scientists, architects, designers, poets and sculptors including Michaelangelo, Donatello, Botticelli, Cellini, Leonardo, Galileo, Giotto, Ghiberti, Brunelleschi, Raphael, Delia Robbia, Del Sarto, Dante and so on. Some reports also included a detailed description of their contributions. Florence was also referred to as one of the great museum cities of the world, 'La Bella' (The Beautiful) and the 'City of Flowers'. The reports also highlight Florence as a centre for learning and research.

### *2n Value of Florence in audiovisual material and letters*

This frame occurred in all the audiovisual material and letters by CRIA. The heritage of Florence was framed as both Western heritage and all our heritage and was not limited to the heritage of either Florentines or Italians only. The letters and videos mentioned that the artistic heritage of Florence has been cherished for centuries and that it represents an immeasurable heritage that Italian art has given to the world.

### *2o Fundraising in news reports*

Any call or effort to collect money for the restoration and rehabilitation of heritage in Florence was classified in this category. Renowned art professionals and heritage managers of Florence appealed to the world to contribute funds to restore damaged heritage. The reports claimed that people from diverse backgrounds from at least 35 countries contributed

to the restoration efforts. There was a sense of urgency in the appeals to draw people's attention towards the irreversible loss that could occur if funds were insufficient. Artists were requested to donate their paintings for auction with the proceeds going to Florence's heritage treasury. Several influential people including Pope Paul VI, Giuseppe Saragat, the then President of Italy, and Piero Bargellini, the then Mayor of Florence, were reported as appealing to people to donate. Fundraising events were also organised in several cities outside Italy. However, donations were reported to have slowed down after a period of time.

#### *2p Fundraising in audiovisual material and letters*

All the audiovisual material and letters covered this frame. Renowned members of the public in the US, such as Jacqueline Kennedy, Ted Kennedy and Elizabeth Taylor, appealed to the public to contribute. The appeals were emotional and they drew attention to the sense of irreversible loss. They also highlighted the initial estimate of money required for emergency rescue work and described how the actual sum may be much larger once the full extent of the damage is known. Elizabeth Taylor mentioned that people can only help with money, and that all the love in the world won't do it and Ted Kennedy requested any kind of support. The audiovisual material and letters also highlighted why people should contribute. For instance, one letter mentioned that the action taken by the public will help save culture for the generations to come and Taylor also suggested that people owed this to their children. Fundraising efforts were also described as an action that would help and assist Florentines. Rewards for participating were also discussed by CRIA in the context of contributors knowing that they had helped to give back to the world. Lastly, the fundraising efforts were also highlighted as a tax-deductible contribution.

#### *2q Rescue in news reports*

Content highlighting rescue works carried out immediately after the disaster were classified in this category. [Table 6](#) highlights that such content occurred only about 35 times in the reports, mostly during November and December 1966, as [Fig. 3](#) illustrates. The reports mentioning rescue works in the aftermath of the disaster illustrate the spirit of volunteers. The volunteers, popularly known as 'Mud Angels', were Italians, internationals, students and citizens working with heritage managers to rescue damaged objects. For example, a report from January 1967 mentioned that Sergio Camerani, the Director of the Archives, had organised a human chain to rescue the volumes from the cellar to the upper floors. People were reported to have been working long hours for more than 3 weeks and although crying and hungry they continued digging with bare hands through oily mud to rescue irreplaceable art treasures. Some of the rescued artworks were also described.

#### *2r Rescue in audiovisual material and letters*

This frame occurred only once in the audiovisual material and letters produced by CRIA. Ted Kennedy, after his two visits to Florence, described the rescue efforts being carried out in Florence, including how students were working shoulder-to-shoulder with their professors.

#### *2s Memory in news reports*

Any recollection of events or facts in the context of Florence was classified in this category. These recollections mainly happened in November 1966, immediately after the floods. The disaster was compared with other floods such as the previous worst flood in 1277. Several reports also claimed that

the floods had done more damage to the city and its heritage than was done in World War II. Parallels were also drawn with disasters outside the city, such as the fire at the *Biblioteca Nazionale Universitaria di Torino* in 1904.

*2t Memory in audiovisual material and letters*

This frame did not occur in the material produced by CRIA.

*2u Reaction in news reports*

Any expressions of emotion or personal narrative were classified in this category. As evident from [Table 6](#), such reflections were found to have occurred only 20 times and [Fig. 3](#) shows that there was a rapid decline after November 1966 in coverage of this topic. Personal narratives of the event included any eyewitness accounts that described the situation affecting Florence's heritage. People who witnessed the disaster mentioned that the water level was 20ft above the street close to the Uffizi gallery. Missing artworks were also remembered and people also described their participation in rescue actions. Some were reported as being distraught about the loss of heritage, including some international students, with the loss appearing to be like a personal tragedy.

*2v Reaction in audiovisual material and letters*

This frame did not occur in the material produced by CRIA.

*2w Others in news reports*

Any frame occurring five or less times was categorised here and there were mainly three subcategories: non-fundraising events, expressions of gratitude and threats of further disaster. Non-fundraising events included the screening of a film on the floods by Franco Zeffirelli while people, particularly influential people, were reported as expressing gratitude to those who contributed during the disaster and the-then Mayor, Piero Bargellini, was reported to be taking a 20-day trip in the United States visiting 10 cities where a large sum was raised towards restoration. The threats of similar flooding were also discussed in some news reports.

*2x Others in audiovisual material and letters*

This frame did not occur in the material produced by CRIA.

**3 The relationship of fundraising to other frames**

The strength of association between the frame of 'Fundraising' was calibrated with the other frames and is reported in [Table 8](#). As evident from [Table 8](#), the phi coefficient ranged from 0.00 to 0.17 indicating that no sig-

**Table 8** Strength of association between fundraising and frames, where N=number, X<sup>2</sup> = chi square, df = degree of freedom, phi = phi correlation coefficient.

Frame	N	X <sup>2</sup>	df	phi	Interpretation
Committee	289	10.82	1	0.19	No correlation or a very weak correlation
Damage	289	0.14	1	0.02	No correlation or a very weak correlation
Financial Aid	289	3.45	1	0.11	No correlation or a very weak correlation
Memory	289	0.35	1	0.04	No correlation or a very weak correlation
Others	289	3.09	1	0.10	No correlation or a very weak correlation
People	289	15.06	1	0.23	Weak correlation
Reaction	289	3.60	1	0.01	No correlation or a very weak correlation
Reopening	289	1.61	1	0.01	No correlation or a very weak correlation
Rescue	289	0.14	1	0.00	No correlation or a very weak correlation
Restoration	289	0.45	1	0.01	No correlation or a very weak correlation
Value of Florence	289	0.21	1	0.00	No correlation or a very weak correlation

nificant relationship was found between the frame of fundraising and the other frame. It should be noted that the sample size of letters and videos interrogated is too small to draw any inferences with regard to any correlation.

## Discussion

In a post-disaster context, the motivation for people to participate in any disaster response effort can be diverse, complex and context-dependent.<sup>43</sup> However, the techniques to motivate people to participate in crowdfunding during disasters that affect cultural heritage remain relatively unexplored. Even though no significant relationship was found between fundraising and the other frames found in media reports about the flooding of Florence in 1966, there are arguably lessons there for those working to utilise the power of decentralised collective actions in any future response initiatives.

### 1 Implications for managing crowdfunding campaigns: a survey of techniques

#### 1a Understanding the importance of mainstream media

Media plays an important role in information dissemination during disasters. In 1966, the reach of the USA's daily newspapers was estimated to be more than 60 million readers per day.<sup>44</sup> While we cannot estimate the exact impact of newspaper articles in motivating people, the importance of mainstream media in disseminating 'the call' cannot be overlooked. A vast amount of literature is available on the role of media in motivating the crowd to participate in cultural heritage crowdsourcing,<sup>45</sup> and studies illustrate how media coverage generates interest in a community that leads to their participation.<sup>46</sup> Furthermore, in the case of Florence some of the leading newspapers in the US including *The New York Times* published several articles in the span of 2 years and with their large readership the 'call' would have reached a vast number of people, thereby potentially increasing the amount of money contributed.

#### 1b Understanding differences in priorities

Crowdsourcers and fundraisers should be aware that media sources are never neutral sources of information and that their priorities may differ. This is evident in many news reports published in the USA in 1966 and shortly after which focus on CRIA's activities, often bypassing other committees including the Italian *Comitato del Fondo Internazionale per Firenze* (CFIF). The priorities of Italian, British and American media were also different during the disaster. The Italian press highlighted the dilemmas of the government, whereas the British press mainly covered the artistic losses.<sup>47</sup> The American press, as this research illustrates, provided a rather more balanced view of the disaster with, as [Table 5](#) illustrates, how 177 out of 289 news reports were published regarding aspects other than heritage.

#### 1c Awareness of trends

Analysis in this study demonstrates that the intensity of news reporting declined with time. Most of the reports ( $n=101$ ) were published in November 1966 although not many reports were published during the first 2 days of flooding ( $n=5$ ). The decline in the intensity of media reporting around disasters has emerged in several research outputs,<sup>48</sup> and it is evident that the mass media and public interest in events decline with time. However, a decline in interest does not signify a decline in the needs on the ground as reflected in heritage managers' statements in the reports which mentioned the timeframe for restoration was likely to be at least

43 Kate Starbird, 'Crowdwork, Crisis and Convergence: How the Connected Crowd Organizes Information During Mass Disruption Events' (PhD dissertation, University of Colorado at Boulder, 2012).

44 Pew Research Center, 'Newspapers Fact Sheet', 29 June 2021, <https://www.pewresearch.org/journalism/fact-sheet/newspapers/> (accessed 16 August 2023).

45 Tim Causer and Melissa Terras, 'Many Hands Make Light Work. Many Hands Together Make Merry Work: Transcribe Bentham and Crowdsourcing Manuscript Collections', in *Crowdsourcing our Cultural Heritage*, ed. Mia Ridge (Farnham: Routledge, 2016), 57.

46 Previous research on crowdsourcing during the 1966 Floods shows that media coverage generated interest in the community. See Kumar, 'Crowdsourcing to Rescue Cultural Heritage during Disasters'. This is evident not only in disaster crowdsourcing and crowdfunding but also for events and festivals. See, for example, Ros Derrett, *Festivals & Regional Destinations: How Festivals Demonstrate a Sense of Community & Place*, *Rural Society*, 13, no.1 (2003): 35.

47 Alexander, 'The Florence Floods'.

48 Ano Lobb, Nancy Mock, and Paul L. Hutchinson, 'Traditional and Social Media Coverage and Charitable Giving Following the 2010 Earthquake



20 years. This suggests that crowdsourcers and fundraisers should seek creative ways to engage with the crowd in order to retain the interest of the crowd if needed.

### 1d Frequency of communication

Although the frequency of news reports declined with time, some reports covered the disasters even after 2 years. The shift in media attention to different frames over time is evident in Fig. 3. Moreover, media attention to frames was also asymmetrical in that certain frames received more attention than others. Damage to heritage was the most discussed frame and was mostly covered immediately after the disaster. The memory of past disasters was also discussed immediately after the disaster. With time, media attention changed and a discussion of reopening after the disaster received the most attention in the rehabilitation phase. Researchers have highlighted how media framing changed over time during crises and media actively presenting varying frames as events unfold.<sup>49</sup> This is based on the theoretical concept of the issue–attention cycle,<sup>50</sup> i.e. an issue remains in focus in public attention for a short period and then gradually fades while new issues emerge. This is believed to 'keep the story fresh and moving'.<sup>51</sup> This illustrates the importance of engaging the crowd and frequently updating them.<sup>52</sup> These are believed to be of key importance for success of crowdfunding.<sup>53</sup>

### 1e Different type of calls

It is obvious that different means of communication were used in the calls for participation in crowdfunding efforts after the Florence disaster. In the 1960s, the technological landscape was different than in the present times. The introduction of social networking sites has changed the dynamics of disasters wherein the public no longer passively consume information circulated by mass media channels.<sup>54</sup> Instead, they instantaneously create and circulate information during disasters. Crowdsourcers and fundraisers must be aware of current technologies and use it creatively to engage the crowd. Different mediums may require different types of calls as we see in the case of 1966 Florence Flood.

Interestingly, where damage was the frame most covered in newspapers, the value of Florence and fundraising were the most covered frames in the audiovisual material and letters (see Table 7). This difference in priority may not be a coincidence. While newspapers aimed to inform the public, CRIA worked to persuade people to participate. Researchers claim that disaster news reporting plays an important role in emergency fundraising post-disasters<sup>55</sup> and is often deeply embedded around emotions.<sup>56</sup> However, the media reports in this study did not leverage emotive content to attract crowd participation in fundraising; as Table 8 illustrates, this frame had no close association with any other frame.

In contrast the call to participate initiated by CRIA did leverage emotive content to some degree. A discussion on who delivered the call to participate is necessary here as while many of CRIA's members were professionals from the arts and allied fields, it also included prominent figures in the USA and the 'call' was delivered by these people. This may have had an influence on the crowd in judging the credibility of the initiative. As other researchers note, such endorsements may increase the exposure of the project to a larger audience and also be taken to reflect the quality of the project participants are being asked to contribute to.<sup>57</sup> With new means of communication such as social networking sites in which people may have limited time and attention, this is particularly important to attract the attention of public.

in Haiti', *Prehospital and Disaster Medicine* 27, no. 4 (2012): 319.

49 Samuel Mochona Gabore and Deng Xiujun, 'Do National and International Media Cover the Same Event Differently? The Online Media Framing of Irreecha Festival Tragedy', *Communication* 44, no. 1 (2018): 55.

50 Anthony Downs, 'Up and Down with Ecology: The Issue–Attention Cycle', in *Agenda Setting: Readings on Media, Public Opinion, and Policymaking*, 1st edn, ed. David Protesse and Maxwell E. McCombs (New York: Routledge, 1991), 64.

51 Hsiang Iris Chyi and Maxwell E. McCombs, 'Media Salience and the Process of Framing: Coverage of the Columbine School Shootings', *Journalism & Mass Communication Quarterly* 81, no. 1 (2004): 22.

52 Abhishek Behl and Pankaj Dutta, 'Engaging Donors on Crowdfunding Platform in Disaster Relief Operations (DRO) using Gamification: A Civic Voluntary Model (CVM) Approach', *International Journal of Information Management* 54 (2020): 102140.

53 Jake Hobbs, Georgiana Grigore, and Mike Molesworth, 'Success in the Management of Crowdfunding Projects in the Creative Industries', *Internet Research* 26, no. 1 (2016): 146.

54 Minjung Sung and Jang-Sun Hwang, 'Who Drives a Crisis? The Diffusion of an Issue through Social Networks', *Computers in Human Behavior* 36 (2014): 246–57.

55 Roger Bennett and Rita Kottasz, 'Emergency Fund-Raising for Disaster Relief', *Disaster Prevention and Management: An International Journal* 9, no. 5 (2000): 352.

56 Mervi Pantti, 'Disaster News and Public Emotions', in *The Routledge Handbook of Emotions and Mass Media*, ed. Katrin Döveling, Christian

von Scheve, and Elly A. Konijn (New York: Routledge, 2010), 235.

<sup>57</sup> Goran Calic and Elaine Mosakowski, 'Kicking off Social Entrepreneurship: How a Sustainability Orientation Influences Crowdfunding Success', *Journal of Management Studies* 53, no. 5 (2016): 738.

<sup>58</sup> Brian Graham, Greg Ashworth, and John Tunbridge, *A Geography of Heritage: Power, Culture and Economy* (New York: Routledge, 2016).

<sup>59</sup> Daniela Angelina Jelinčić and Marta Šveb, 'Financial Sustainability of Cultural Heritage: A Review of Crowdfunding in Europe', *Journal of Risk and Financial Management* 14, no. 3 (2021): 101.

<sup>60</sup> Mousumi Roy, *Sustainable Development Strategies: Engineering, Culture and Economics* (Oxford: Butterworth-Heinemann, 2020).

<sup>61</sup> See Senator Edward M. Kennedy's remarks at a symposium in Spande, *Conservation Legacies of the Florence Flood of 1966*.

<sup>62</sup> Spande, *Conservation Legacies of the Florence Flood of 1966*. Lucilla Kingsbury mentioned working with media was considered very important as publicity was necessary.

<sup>63</sup> Pakhee Kumar, 'Social Media, Disasters, and Cultural Heritage: An Analysis of Twitter Images of the 2015 Nepal Earthquake', *Visual Communication Quarterly* 29 (2022): 34–46.

<sup>64</sup> Carlos Castillo, *Big Crisis Data: Social Media in Disasters and Time-*

### 1f Communicating the value of heritage

The value of Florence was a particularly important frame in CRIA's letters and videos and illustrated why people should care about the city. Some of CRIA's appeals were aimed at motivating people by suggesting how much power they had to help. CRIA also emphasised why people should contribute by framing the heritage of Florence as an intergenerational exchange whereby people owed it to future generations.<sup>58</sup> Although this frame was not very evident in media reports from the time, its importance in crowdfunding has been highlighted more recently with research illustrating how the willingness to donate arguably implies that people recognise the value of heritage and want to protect it for future generations.<sup>59</sup>

### 1g Cultivating a shared sense of ownership

The media and CRIA framed Florence as a pinnacle of Western heritage and a city that belongs to everyone. This technique was aimed at giving people in the USA a sense of shared ownership to protect Florence's heritage. Recent research has endorsed the claim that if a cultural project is geographically or culturally similar, people are more likely to donate money.<sup>60</sup> This is underlined in the case of Florence when on the 40th anniversary of the flood in 2006, Ted Kennedy highlighted how Americans cherish their relationship with Italy, not only due to the Italian ancestry of millions of Americans but also due to the contributions of Italians in the US.<sup>61</sup> The importance of understanding likely allies in any disaster preparation helps in understanding who is likely to contribute. Knowing what groups of people can be associated with the affected heritage can help organisations be better prepared for targeted crowdfunding in response to a particular disaster.

### 1h Communicating a sense of urgency

The request to take action in the case of the Florence Flooding was often accompanied by statements that gave a sense of urgency by highlighting what might happen if nothing was done immediately. Although the post-disaster restoration of Florence's heritage was primarily the responsibility of the regional and national governments, the media reports of the time explained the limitations confronting the Italian government. The situation in Florence after the floods was grave. Several cultural organisations were seriously affected. To get people in the USA to participate, communicating the situation on the ground was important. This included not only the damage that had been done but also the efforts of Florentines in the rescue operations where they worked tirelessly to rescue the affected items. As Lucilla Kingsbury notes, publicity of destruction and conservation works was important for fundraising.<sup>62</sup> Defining the problem at hand would have given a sense of what lay ahead in the future.

### 1i Evoking memories

At this point, a discussion on frame of memory is necessary. News media reports recalled past floodings of Florence and compared the damage to heritage due to the 1966 Flood with damage during World War II.

Remembering past significant disasters that had affected heritage is evident even in present times.<sup>63</sup> Memory plays an important role during disasters, even though this frame is arguably unique to disasters affecting cultural heritage.<sup>64</sup> In Florence, the memory of the city was one of the factors which motivated people to contribute towards the rescue and restoration of its heritage.<sup>65</sup> The 1966 Floods are also a part of the living memory of people. The disaster has been collectively remembered and commemorated on numerous occasions, including its 40th and 50th anniversaries which also honoured 'Mud Angels' (*Angeli del Fango*).<sup>66</sup>

## 2 Effectiveness of techniques

While this research has highlighted some of the techniques for motivating people in crowdfunding in a particular and historic disaster, it is impossible to analyse which techniques were most effective. Techniques are used to varying degrees in crowdfunding initiatives and their effectiveness needs more comprehensive study. Overall, the success of crowdfunding depends on many factors such as the policy framework, the nature of the project, the management of the campaign,<sup>67</sup> effective communication<sup>68</sup> and so on. Other researchers also emphasise that the success of crowdfunding should not only be based on the amount of funds collected but also the strength of community development and promotion.<sup>69</sup>

### Concluding remarks

By using the case of the 1966 Florence Flooding, this article offers an understanding of the techniques adopted by CRIA and media to motivate participation in the post-disaster crowdfunding to support to the rescue of Florence's cultural heritage. The findings of this research suggest that CRIA and the media focussed on five main aspects:

- firstly, the severity of the damage to Florence's cultural heritage;
- secondly, the ongoing rescue efforts by the city's inhabitants;
- thirdly, the issues facing the rescue efforts, including the lack of funding and the length of time required for restoration;
- fourthly, the importance of Florence to Western civilisation; and
- finally, the urgency of the need for international support to save the city's cultural heritage.

While newspapers did not leverage emotional content to aid in calls for support, CRIA did use more emotive content.

The article also offers insight into the difference in priorities for action in a post-disaster context and the importance of mobilising memory as a technique when organising crowdfunding to rescue heritage in more contemporary times. The scope of this work can be extended to include the calls from other committees such as the Italian *Comitato del Fondo Internazionale per Firenze* (CFIF) and the UK-based Italian Art and Archives Rescue Fund (IAARF). Analysis of other post-disaster crowdfunding campaigns can provide an understanding of the effectiveness of techniques. A systematic analysis of the present-day technologies and their affordances in post-disaster heritage crowdfunding is necessary to provide in-depth understanding of the dynamics of crowdfunding.

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### Résumé

«Les amateurs d'art du monde entier s'unissent pour aider Florence' méthodes pour inciter la population au financement participatif du patrimoine après sinistre»

Le financement participatif repose fortement sur la participation du public or la participation du public est soumise à certaines conditions telles que la motivation à participer et l'efficacité des appels à la participation. En étudiant les réponses aux inondations de Florence en 1966, cet article explore les méthodes employées pour motiver la population, adoptées par le Comité pour sauver l'art italien (CRIA), un comité formé aux États-Unis pour aider à protéger le patrimoine de Florence, et celles rencontrées dans les articles de journaux publiés aux États-Unis entre 1966 et 1968. Sept pôles imbriqués étaient évidents dans les reportages et les

*Critical Situations* (Cambridge: Cambridge University Press, 2016).

**65** Kumar, 'Crowdsourcing to Rescue Cultural Heritage during Disasters'.

**66** Paul Conway and Martha O'Hara Conway, eds, *Flood in Florence, 1966: A Fifty-Year Retrospective* (Michigan: Michigan Publishing, 2018). See also, Silvia Messeri and Sandro Pintus, 4 novembre 1966: *l'alluvione a Firenze* (Firenze: Ibiskos Editrice Risolo, 2006).

**67** Jelinčić and Šveb, 'Financial sustainability of cultural heritage: A review of crowdfunding in Europe'.

**68** Behl and Dutta, 'Engaging Donors on Crowdfunding Platform in Disaster Relief Operations (DRO)'.

**69** Jaakko Suominen Anna Sivula and Maria B Garda, 'Incorporating Curator, Collector and Player Credibilities' *Special Issue. Journal of Media Studies and Popular Culture* 174 (2018): 96.

appels de la CRIA: les dégâts, la collecte de fonds, les personnes, le sauvetage, la restauration, le comité et ses actions ainsi que la valeur de Florence. Essentiellement, les méthodes adoptées pour motiver les gens à participer au crowdfunding après sinistre comprenaient: (1) l'utilisation des médias grand public; (2) l'utilisation fréquente de toutes les voies de communication disponibles; (3) différents types d'appels à l'aide; (4) l'accent mis sur la valeur de Florence; (5) l'accent sur un sentiment d'appartenance commune; (6) un sentiment d'urgence; et (7) l'évocation du souvenir des catastrophes passées. Tandis que les médias s'efforçaient d'informer le public, le CRIA s'efforçait de l'encourager à participer. Les reportages médiatiques analysés n'ont pas exploité le contenu émotionnel pour attirer la participation du public alors que les appels lancés par CRIA contenaient un certain contenu émotionnel. L'article se

termine par une discussion sur les implications de la gestion des campagnes de crowdfunding pour utiliser la puissance de l'action collective décentralisée.

### Zusammenfassung

„Kunstliebhaber der Welt vereinigt euch um Florenz zu retten': Methoden zur Motivation der Öffentlichkeit beim Crowdfunding für Kulturerbe nach einer Katastrophe“

Crowdfunding ist in hohem Maße von der Beteiligung der Öffentlichkeit abhängig, und die Beteiligung der Öffentlichkeit unterliegt bestimmten Bedingungen wie der Motivation zur Beteiligung und der Wirksamkeit der Aufrufe zur Beteiligung. Bei der Untersuchung der Reaktionen auf die Flutkatastrophe in Florenz im Jahr 1966 untersucht dieser Artikel sowohl die Methoden, die das Committee to Rescue Italian Art (CRIA), ein in den USA gegründetes Komitee zum Schutz des florentinischen Kulturerbes, zur Motivation der Öffentlichkeit einsetzte, als auch jene, die in den zwischen 1966 und 1968 in den USA veröffentlichten Zeitungsberichten zu finden waren. In den Zeitungsberichten und den Aufrufen des CRIA waren sieben sich überschneidende Themenbereiche zu erkennen: Schäden, Finanzierung, Menschen, Rettung, Restaurierung, das Komitee und seine Maßnahmen sowie der Wert von Florenz. Im Wesentlichen wurden folgende Techniken angewandt, um die Menschen zur Teilnahme am Crowdfunding nach der Katastrophe zu motivieren: (1) die Nutzung der Mainstream-Medien; (2) die häufige Nutzung aller verfügbaren Kommunikationskanäle; (3) verschiedene Arten von Aufrufen zur Unterstützung; (4) die Hervorhebung des Wertes von Florenz; (5) die Betonung des Gefühls der gemeinsamen Verantwortung; (6) das Hervorheben der Dringlichkeit; und (7) das Erinnern an vergangene Katastrophen. Während die Medien die Öffentlichkeit informierten, bemühte sich CRIA darum, die Öffentlichkeit zu motivieren. Die analysierten Medienberichte setzten keine emotionalen Inhalte ein, um die Menschen zur Teilnahme zu bewegen, während die von CRIA initiierten Aufrufe durchaus emotionale Inhalte enthielten. Der Artikel schließt mit einer Diskussion der Auswirkungen auf das Management von Crowdfundingkampagnen beim Einsetzen der Kraft dezentralisierter kollektiver Aktionen.

### Resumen

“Los amantes del arte de todo el mundo se unen para ayudar a Florencia': Técnicas para motivar a la gente en crowdfunding para el patrimonio cultural tras catástrofes“

El crowdfunding se basa en gran medida en la participación pública, y ésta está sujeta a ciertas condiciones, como la motivación para participar y la eficacia de las convocatorias. Examinando las respuestas a la inundación de Florencia de 1966, este artículo explora las técnicas que fueron utilizadas para motivar a la gente para ayudar a proteger el patrimonio de Florencia; las adoptadas por el Comité para el Rescate del Arte Italiano (CRIA), un comité

formado en EE.UU, y aquellas encontradas en los informes periodísticos publicados en EE.UU. entre 1966 y 1968. En los reportajes de prensa y en las convocatorias del CRIA aparecían siete marcos superpuestos: daños, recaudación de fondos, personas, rescate, restauración, el comité y sus acciones, y el valor de Florencia. En esencia, las técnicas adoptadas para motivar a la gente a participar en el crowdfunding posterior a la catástrofe incluían: (1) el uso de los principales medios de comunicación; (2) el uso frecuente de todos los canales de comunicación disponibles; (3) múltiples tipos de peticiones de apoyo; (4) el énfasis en el valor de Florencia; (5) el énfasis en un sentimiento compartido de propiedad; (6) un sentimiento de urgencia; y (7) la evocación del recuerdo de catástrofes pasadas. Mientras que los medios de comunicación trabajaban para informar al público, el CRIA lo hacía para alentarle a participar. Los reportajes periodísticos analizados no impulsaban el contenido emotivo para atraer la participación de la multitud, mientras que las convocatorias iniciadas por la CRIA sí contenían cierto contenido emotivo. El artículo concluye con un debate sobre las implicaciones de la gestión de campañas de crowdfunding para aprovechar el poder de la acción colectiva descentralizada.

### 摘要

“全世界艺术爱好者联合起来援助佛罗伦萨': 在灾后遗产众筹中激励群众的技巧“

众筹在很大程度上依赖于公众参与, 而公众参与又受制于某些条件, 如参与的动机和号召参与的有效性。本文研究了 1966 年佛罗伦萨洪灾的应对措施, 探讨了“抢救意大利艺术”(CRIA) (一个成立于美国, 用于保护佛罗伦萨遗产的委员会) 所采用的激励群众的技巧, 以及在 1966 年至 1968 年期间美国出版的报纸中的发现。根据新闻报道和 CRIA 的呼吁, 存在七个重叠的框架: 损失、筹款、人民、救援、恢复、委员会及其行动、佛罗伦萨的价值。从本质上讲, 激励人们参与灾后众筹所采用的技巧包括: (1) 利用主流媒体; (2) 频繁使用所有可用的沟通渠道; (3) 多种类型的支援呼吁; (4) 强调佛罗伦萨的价值; (5) 强调共有者意识; (6) 紧迫感; 和(7)唤起人们对过去灾难的记忆。新闻媒体致力于向公众提供信息, 而 CRIA 则致力于鼓励公众参与。作者分析媒体报道没有利用情感内容来吸引公众参与, 而 CRIA 发起的呼吁则包含一些情感内容。文章最后探讨了管理众筹活动, 以利用分散的集体行动力量的意义。

### Biographies

Dr Pakhee Kumar (she/her) is a Lecturer (Teaching) in Sustainable Heritage and Data Analysis at the Institute of Sustainable Heritage, University College London. She is an architect and heritage management professional with broad research interests in crowdsourcing, social media, disaster management in cultural heritage and digital heritage. She is the Deputy Programme Director of MSc Sustainable Heritage on which she teaches modules about heritage data management, management of heritage buildings and collections, and crowdsourcing. She also leads the annual field trip of MSc Sustainable Heritage.