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Open-source investigation as a genre of conflict reporting

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Abstract
This paper examines the role and scope of eyewitness images in open-source investigation, which is becoming a prominent genre of conflict reporting in its own right. Based on interviews with journalists at the Visual Investigations Unit at *The New York Times* and a textual analysis of their video reports, the paper sheds light on the paradoxical working of the genre, which simultaneously opens up and limits opportunities for eyewitness images as a platform for voice. The paper thus argues that despite the journalists' commitment to innovation, the logics of institutions, the corporate ethos of social media platforms, and the pervasive power of geopolitics continue to shape the articulation, recognition, and agency of voice.

Keywords
eyewitness images, voice, open-source investigation, verification, conflict reporting, Visual Investigations, *New York Times*, new institutionalism, precarious news labor

Introduction

This paper examines the role and scope of eyewitness images in open-source investigation, which is becoming a prominent genre of conflict reporting in its own right. Specifically, the paper focuses on the work of the Visual Investigations Unit at *The New York Times*, the first newsroom team dedicated solely to open-source investigation, whose reports are presented to the public in an online video format. Christiaan Triebert, a reporter working at this unit, defines "open-source investigation [as] reporting but using any kind of openly available source. So, think of a Facebook post or a tweet, a YouTube video, or

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just a database—anything you can find online, openly, and for free" (YouTube interview, 14 February 2020). Although a form of open-source investigation has existed before the digital era—for example, when using publicly available documents, data, or maps—the development of commercial satellites, social media, and smartphones has been crucial for its current rise as a professional practice in both journalism and human rights advocacy (Koettl et al., 2020).

According to Malachy Browne, the founder of Visual Investigations, what has changed is that "nowadays there is an abundance of documentary evidence that is visual, that you can see for yourself, that you can analyze and connect dots between the different fragments of evidence, and that allows you to reconstruct…a picture of what happened" (interview, 9 July 2019). In other words, the ubiquity of visual imagery online drives and sustains the genre to which journalists turn when they do not have on-the-ground access to report directly from the scene of an occurrence. Haley Willis, another reporter at this unit, emphasized that "our work inherently relies on visuals." To explain the centrality of images to open-source investigation, she also noted, "Several of us on the team have been trying to investigate American airstrikes in Somalia for a long time. And it's almost impossible to do because there're no visuals" (interview, 11 May 2020). Images not only constitute the core evidence, but they also dictate which stories are covered through open-source reporting and how.

This paper thus considers one specific aspect of open-source investigation: its reliance on eyewitness images from war and conflict zones. The term *eyewitness images* refers to photographs and videos shot by activists, bystanders, and others with no professional news affiliation. These images have often been praised for their assumed ability to democratize newsmaking by amplifying civic voices in institutional spaces (e.g., Allan, 2013; Kamel, 2014). This development is noticeable in global conflict reporting where the boundaries and integrity of journalism are constantly brought into question as journalists, citizens, activists, and human rights collectives partake in the production and circulation of news (e.g., Conrad, 2018; Powers, 2018; Ristovska, 2021; Witschge et al., 2016). Open-source investigation emerges at the crossroad where the information work of these various actors converges, offering a vantage point for examining how, when, and why eyewitness images, as a platform for voice, figure in Western news coverage of global conflicts.

Based on interviews with journalists at the Visual Investigations Unit at *The New York Times* and a textual analysis of their video reports, this paper sheds light on the paradoxical working of the genre, which simultaneously opens up and limits possibilities for eyewitness voices. On the one hand, rigorous verification practices grant eyewitness images the status of truth claims, creating possibilities for the inclusion of a wider range of civic voices in conflict news. On the other hand, old power formations are reappearing in new contexts, which may be narrowing the potential of those voices to achieve social recognition and agency. The paper thus argues that despite the journalists' commitment to innovation, the logics of institutions, the corporate ethos of social media platforms, and the pervasive power of geopolitics continue to shape the import and impact of eyewitness images as a platform for voice in Western news.

The paper proceeds in four parts. First, it considers the power of eyewitness images as a platform for voice, using new institutionalism as a theory to explain their paradoxical status in open-source reporting. Second, the paper discusses the selection of Visual Investigations as a case study and the resulting methodological choices. It then continues with the analysis, which underscores how the term *open source* itself, the procedural focus on verification, and the existing labor dynamics in Western journalism both enable and constrain the voice of eyewitness images. The paper concludes with a proposal to listen to diverse voices in conflict reporting so that open-source investigation can better balance its professional imperatives with the ethical urgency raised by the precarity of eyewitness image makers.

Eyewitness images as a platform for voice in new institutionalism context

In today's media environment where visuality is "one of the most dominant news values of our time" (Anden-Papadopolous and Pantti, 2011: p. 10), eyewitness images serve as an important platform for voice, which operates as much in the visual field as in the linguistic (see also Bock, 2020; Ristovska, 2021; Zelizer, 2010). Following Couldry (2015), voice exceeds sonic manifestations, designating a broader "capacity to make, and be recognized as making, narratives about our lives and the world within which we act" (p. 45). In the context of war and conflict, civilians take photographs and videos regularly to tell their personal experiences directly from the scenes of violence. In the process, these eyewitnesses claim their fundamental human right to communicate in circumstances of life and death, transforming themselves from mere victims of violence to active conflict participants. Their images serve as powerful, public moments of testimony of moral, social, and political significance.

Giving an account of one's life and its conditions is what Couldry (2010) calls *voice as a process*. This dimension is different from *voice as value*, which "involves particular attention to the conditions under which voice as a process is effective, and how broader forms of organization may subtly undermine or devalue voice as a process" (p. 2). Voice is entwined in struggles for visibility and social recognition (e.g., Honneth, 1996), and it has political agency when it is accepted as something worth listening and responding to (e.g., Chouliaraki, 2013). How news organizations render eyewitness images meaningful is thus important for understanding whether and how voice gains visibility, recognition, and agency in conflict coverage. In addition, social media platforms with their logics and infrastructures have become new gatekeepers that can also filter voices.

The Internet, long assumed to democratize information and voice, often creates new asymmetries of visibility (e.g., Hong, 2020; Noble, 2018). Online civic participation increasingly faces both the logic of surveillance capitalism (Zuboff, 2019) and the black-boxed algorithmic choices of social media platforms (Tufekci, 2017). The examples are numerous. In May 2020, more than 350,000 eyewitness videos disappeared from YouTube, including videos of aerial attacks, protests, and destruction of civilian homes in Syria. The rate of content takedowns at YouTube has increased by 20% since 2019 (Asher-Schapiro and Barkawi, 2020). In September 2020, Facebook suspended the accounts of more than 200 Indigenous activists protesting the construction of the Coastal

GasLink pipeline in Canada that would cut through the Wet'suwet'en Nation's territory (Calma, 2020). In her analysis of at-risk human rights-related content, Banchick (2020) contends that "both the actual and anticipated removal of social media content complicated and added to practitioners' work, generating extra tasks, vulnerabilities, and frustrations" for open-source investigators (p. 2). It is not surprising, then, that Malachy Browne identified social media content removal as one of the key challenges in this type of work (interview, 9 July 2019). Rather than remaining an unselective evidence locker (e.g., Koettl, 2014), social media platforms are increasingly becoming the first filtering mechanism that sorts which eyewitness voices get online presence and have a potential to appear in mainstream news media.

Social media platforms, different institutions like journalism, and various information actors, including human rights activists, have indeed become a part of an interlinked media ecology forming around visual eyewitness content (Ristovska, 2019). Produced outside of traditional news structures, but often dependent on them for verification and legitimacy, eyewitness images cut across the top-down and bottom-up currents in the mediatization of conflict (Mortensen, 2015). Journalists and human rights advocates, long assumed to constitute two distinct communities of practice whose work should be kept separate, are now collaborating around eyewitness images, and there have been noticeable cross-hiring trends (Ristovska, 2021). Paying close attention to the Syrian context, Anden-Papadopolous (2020) further notes that "the governance by platforms" and "the emergent logic of NGO-ization" in activist circles contribute to a new political economy that can both limit and support video practices. To account for these developments, institutional theories provide a useful conceptual framework for examining how journalism responds to change.

New institutionalism is one of the major approaches to the sociology of news, which suggests that institutions interact and influence behavior by both enabling and restraining it (Ryfe, 2016). This theory sees institutions as an evolving constellation which is directly shaped by other institutions and environments (Powell and DiMaggio, 1991). The rise of eyewitness images on corporate social media platforms and across journalism and human rights advocacy is creating points of convergence across institutional and civic spaces. Newsrooms are evolving as a result of this blending, adapting practices and workflows to account for the evidentiary potential of eyewitness image. In the process, they promote open-source investigation as a genre of conflict reporting.

Covering war and conflict is considered to be "the litmus test of journalism" (Allan and Zelizer, 2004: p. 4) that provides critical insights into changing professional norms and practices. WWII and the Holocaust, for example, normalized the use of photography as an essential tool for newsmaking. They were in the backdrop of the institutionalization of news photography and the ensuing professionalization of photographers as journalists (Zelizer 1995). Similarly, the Syrian war crystallized the routine reliance on eyewitness images in conflict reporting (e.g., Wardle et al., 2014), propelling the unfolding efforts to professionalize open-source investigative journalists. Global newsrooms like *The New York Times*, BBC Africa Eye, BBC Middle East, Channel 4, Al Jazeera, ProPublica, and NBC have all implemented open-source reporting in their work. Open-source investigation is enabling these newsrooms to cover a broader range of issues that may be

inaccessible through traditional reporting means while also allowing the journalists to be innovative and cooperative in their investigative approaches. One example is the collaboration between BBC Africa Eye, Amnesty International, Bellingcat—an investigative network that specializes in fact-checking and open-source analysis—and independent analysts on Twitter on *Anatomy of a Killing*, a video report that won a Peabody Award in 2018. Visual Investigations has also worked with different groups like Bellingcat and Forensic Architecture on several occasions.

The journalists who were interviewed for this paper commented on how open-source investigation utilizes eyewitness images to strengthen voices on the ground. For Haley Willis, "open source gives a lot of credibility to the people who are living through really traumatic experiences" (interview, 16 November 2020). According to Barbara Marcolini, "99 percent of the time we're trying to amplify the local sources" (interview, 19 November 2020). Christoph Koettl iterated, "by analyzing [the eyewitness video], putting it into context, verifying it, and then presenting it on a platform like *The New York Times*, you elevate that specific incident or that specific voice" (interview, 20 November 2020). The verification of eyewitness images is an important process through which voice gains visibility and legitimacy as a truthful visual testimony. The mediation of voice through eyewitness images, however, exceeds procedural questions about authenticity and proof because such images are also morally, historically, and politically significant as embodied testimonies.

Attending to the claims of conflict participants who capture and share images even when their bodies are on the line is important for acknowledging voice as value. Anden-Papadopolous (2020) argues that Syrian videographers are "complex subjects who are not only transmitting images to feed the global news industry … but struggling for political autonomy and control of the conditions of the representation" (p. 5087). Their broader claims, however, have been largely lost in the international media narratives (Della Ratta, 2018). Confined by the professional imperatives of journalism, open-source investigation may not be best suited to attend to the communicative needs of eyewitness image makers. While the genre can help diverse voices attain visibility, it has limited answers about their fuller recognition and agency.

The literature on new institutionalism is instructive because it has demonstrated that "once a set of organizations emerges as a field, a paradox arises: rational actors make their organizations increasingly similar as they try to change them" (Powell and DiMaggio, 1983: p. 147). The reliance on eyewitness images in conflict reporting creates a paradox of continuity and change in journalism. Open-source investigation has responded to calls for innovation in the echoes of the Arab Spring, which urged journalists to use eyewitness images as evidence, not just as illustrations on the side (e.g., Silverman, 2014). It has thus facilitated possibilities for incorporating diverse eyewitness voices as sources and for collaborating with other information actors. Yet open-source reporting is dependent on traditional journalistic structures for its work, which it starts to resemble. To better understand how these structural dynamics shape eyewitness images as a platform for voice, this paper turns to the case study of Visual Investigations.

Visual investigations as a case study

The Visual Investigations Unit at *The New York Times* is illustrative of the blending of journalistic, human rights, social media, and civic spaces. Its founding story is implicated in the coverage of the Syrian war. Malachy Browne wrote a strategy document on 1 April 2017 "about the potential for using all of the available visual evidence that is out there in online open sources and what that could mean for a new investigative practice…we thought of it as open-source investigation" (interview, 9 July 2019). Three days later, there was a chemical weapons attack in Syria that became the topic of the first open-source investigation conducted under the auspices of the new unit. Malachy Browne launched Visual Investigations together with an editor and an executive editor. When research for this paper started, the unit was comprised of six reporters and a fellow who conducted the investigations as well as three video and motion graphic editors who helped with the technical production of the resulting video reports. Since then, the unit has grown. At the time of writing, the unit has 10 reporters and eight video production staffers.

The core team consists of reporters with backgrounds in journalism, human rights, and citizen reporting. Malachy Browne and Barbara Marcolini previously worked at Storyful, the first social media news agency dedicated to verification. Evan Hill, Christoph Koettl, and Haley Willis were staffers at Human Rights Watch, Amnesty International, and the Human Rights Center at the University of California at Berkeley, key human rights collectives that recognized early the evidentiary value of eyewitness images. Christiaan Triebert started out with the investigative network Bellingcat. Further testament to the legitimacy of this genre of journalism is the 2020 Pulitzer Prize in international reporting that this team won for their investigations of Russia's bombing of hospitals, markets, and civilian camps in Syria. As the first newsroom unit dedicated solely to this genre of reporting, Visual Investigations is an ideal case study for analyzing the role and scope of eyewitness images as a platform for voice in Western news coverage of global wars and conflicts.

The research provided here draws from semi-structured interviews with four journalists and a textual analysis of 57 online video reports produced by this unit since its founding in 2017 (and available on the unit's YouTube channel). Specifically, the paper is based on phone, Zoom, and Google Hangouts interviews with four reporters who conduct the investigations (Browne, Koettl, Marcolini, and Willis). The interviews were based on informed consent and consisted of open-ended questions about the nature of open-source reporting, the role of eyewitness images, the importance of voice, any relevant terminology, and typical technical and ethical challenges. There were initial interviews, each approximately 40 min long. Follow up interviews were then scheduled, which lasted about 25 min. All interviews were transcribed and analyzed according to the common themes that emerged. The reporters were selected based on their availability, and they agreed to be cited with their identity disclosed. The paper is supplemented with a transcribed conversation with six reporters, which the unit hosted live on YouTube on 14 February 2020.

An average open-source investigation takes 6 weeks at this unit, though, it can range anywhere from one or 2 weeks to six or 7 months (M. Browne, interview, 9 July 2019).

The final report is published as an online video that presents the findings and documents the methodological steps of the investigation. A textual analysis of these reports thus complements the interview data. The video reports were first grouped by country and topic. They ranged from police and gun violence in the United States (20 investigations) and Hong Kong (5) to the Syrian civil war (7) and Kim Jong-un's expensive purchase of a Mercedes in North Korea (1). A total of 23 videos focused on global wars and conflicts (e.g., in Iran, Iraq, Nigeria, Syria, Ukraine, Venezuela, and Yemen), which were further analyzed for content, paying close attention to the audio and visual elements, types of images used, and any discussion of verification and sources. The research findings presented here highlight the video reports on Syria due to the centrality of the war to the rise of the genre and the founding of Visual Investigations.

The methodological approach draws from Jackson's (2013) notion of thin description because the researcher has been in conversation with this community since 2015. Two of the reporters (Koettl and Willis) have delivered guest lectures in the researcher's undergraduate classes. The researcher has presented or attended conferences with some of the reporters at a human rights symposium in Philadelphia in 2016 (Koettl) and RightsCon in Toronto in 2018 (Browne and Koettl). In addition, the open-source investigative community has published papers—as part of their broader efforts to professionalize the practice—some of which are cited here. As a result, this research is not an exhaustive account of open-source investigation as a genre of conflict reporting. It merely provides one perspective, a thin description, that seeks to be in dialogue with the different modes of theorizing that the open-source community engages on its own (e.g., Dubberley et al., 2020; Weizman, 2017). The researcher hopes to contribute to existing conversations by focusing on eyewitness images as a platform for voice. As more actors perform the eyewitness function in journalism, this paper is interested in understanding how innovative newsroom teams think about the function and value of civic voices in open-source reporting.

The role and scope of eyewitness voices in open-source investigation

The reporters working at Visual Investigations spoke about their commitment to cover diverse topics and voices, particularly from people who experience injustice, war, or conflict. For Haley Willis, "the beauty of open source is that … it puts the means of production in the hands of people who are experiencing [the events]" (interview, 11 May 2020). *How Bashar al-Assad Gassed His Own People*, a video report from June 2018, is a good example of this commitment. The investigation is based on an analysis of 67 eyewitness videos to reconstruct how at least 34 people died from the chemical attack in one building in Douma. The video report starts with a montage of images documenting destruction, fire, panic, and injured bodies. A voice-over narration accompanies the footage:

> The UN has accused the Assad regime of repeatedly committing war crimes in Syria, including a chemical attack in April on a town called Douma. It killed dozens of people and

> triggered US-led strikes inside Syria. To this day, Syrian officials and Russian allies deny the attack ever took place.

The montage is followed by news clips with Syrian and Russian officials, including Assad, speaking at UN meetings and TV interviews: "There were no dead bodies found. This is a theater. It's a scene from a Hollywood movie. The event did not take place. So, it's a farce." The video report continues with eyewitness footage of men crying in disbelief while holding bodies of dead children. The voice-over narration asserts:

> Finding out what really happened matters. Entire families were killed. And the regime went to great lengths to conceal the evidence. Our investigation is the most detailed reconstruction of the attack so far. We analyzed a trove of videos and interviewed dozens of witnesses and experts. We scoured some evidence with the investigative group Bellingcat, and we teamed up with the agency Forensic Architecture to create a virtual model of the crime scene... The evidence combined exposes Syria and Russia's lies.

The video report highlights the evidentiary assessment. It embraces a tone of transparency and a fact-finding mission, which characterize all videos produced by this unit. For Christoph Koettl, who worked on this investigation, the video is a good example of the significance of the genre because *New York Times* journalists were not able to report directly from the place of the incident. "That story would not have been possible without the open-source approach at all. So, we had to rely on videos [and] a little bit of traditional reporting like interviewing people" (interview, 15 May 2020). Those who witnessed the chemical attack turned to their cell phone cameras as an extension of their bodies to voice suffering in hopes that someone pays attention. Visual Investigations verified their videos and thus legitimized them as visual testimonies.

Addressing the human rights advocacy realm, McPherson et al. (2020) argue that the rise of open-source investigation has created a knowledge controversy, challenging the consensus about fact-finding methodologies. According to them, the danger now is that human rights investigators seem to be defaulting to familiar patterns where civilian witnesses and collaborative networks are vital to the production of evidence, but traditional institutional authorities still decide which knowledge counts, why, and how. This team of researchers thus proposes a different course of action. They see pluralism in knowledge production, where a greater variety and volume of voices can speak truth to power and be heard in the process, as an important corrective to existing power imbalances. To achieve pluralism, they suggest opening both *spaces for opportunity* and *spaces for negotiation*. The former designate where voice as a process—in Couldry's (2010) definition—unfolds, covering issues of access. The latter facilitate possibilities for meaningful participation, thus shaping voice as value. This is where terms of participation, interpretative authority, and power in knowledge production are negotiated.

In journalism, the investigation on Douma illustrates how open-source reporting can create spaces for opportunity. By assessing multiple image testimonies to tell stories of what transpires on the ground, reporters provide news access to different eyewitness voices. Reflections on the term open source, discussions about verification, and an

analysis of the existing labor dynamics in journalism, however, reveal the genre's limitations in facilitating spaces for negotiation in which the social recognition and agency of voice takes shape.

The term open source

The term open source resonates with the software movement, where it refers to code that programmers are free to take, modify, and improve in an open and collaborative manner. The reporters at Visual Investigations reflected on the use of this term to describe their work. "For me, the concept of open source is anything that's open and available for anyone to grab and use however they think it's best." (B. Marcolini, interview, 19 November 2020). Haley Willis also emphasized the openness of the methodology:

> People don't necessarily have to believe us. They can look [it up] for themselves. They have access to the exact same evidence that we do. They have access to the social media post, the YouTube video, the satellite imagery, and they can check our work if they don't want to take our word for it…Hopefully, it'll improve trust in the media which we're seeing as a major problem now (interview, 11 May 2020).

An institutional mode of thinking underlines these reflections: how to think about sources of information and how to be transparent about the investigative rigor at times of record low public trust in the media. At the same time, all interviewed reporters also talked about the limitations of the term open source, acknowledging that they sometimes rely on key sources which they cannot disclose. For example, radio recordings that Visual Investigations received from a closed source were central to the evidentiary corpus in *Russia Bombed Four Syrian Hospitals. We Have Proof*, a winner of a 2020 Pulitzer Prize.

It is not surprising, then, that Christoph Koettl stated: "I'm very happy that our team is not officially named 'open-source team.'" He provided three reasons for his position. First, open-source investigation has become "a really big buzzword over the last few years … but it's nothing new." Reporters have been using publicly available documents for a long time. Second, "we do not do 100% open-source reporting…I get satellite images that are not publicly available…Everyone with a credit card can get the same satellite image. It's just not on your fingertips as people say…and we also do very traditional reporting. We talk to experts and sources." Third, the term has connotations in the intelligence world that classifies information as human, geospatial, signal, and open source. Needless to say, newsrooms are not intelligence agencies. "I haven't done intelligence gathering a single day in my life ever. *The New York Times* is not doing intelligence gathering" (interview, 20 November 2020). The focus on rigorous reporting is what matters to the reporters at Visual Investigations, not the confines of the genre. What is interesting is how open source is increasingly embraced as journalism's defense mechanism against wavering public trust. The term begins to describe journalists' positioning vis-à-vis their publics more so than it defines a unique craft.

Ethical and political concerns add another layer of complexity to this discussion because the qualification of eyewitness images as open-source information is not an easy

one. Echoing its origin in the software movement, open source presumes principles of fair use or fair dealing, which obscure relations of production and use in the journalistic context. Eyewitness images are not simply data but embodied testimonies of people who risk their lives to inform the world about traumatic events. Anden-Papadopolous (2020), for example, interviewed 15 Syrian videographers who "fiercely resist the prevalent framing of YouTube videos as "open-source data" … bitterly lamenting how their work is being appropriated and exploited by Syrian and international subjects for their own (material) interests" (p. 5085). Issues of rights and permissions for eyewitness media remain unsettled in journalism (Wardle, 2018), accounting for ownership controversies between eyewitness image makers and institutional authorities (e.g., Della Ratta, 2018). Open source can thus conceal the precarity of digital witnessing, displacing the ethical imperatives, and indeed the embodied presence, of those who witness violence on the ground. Ironically, the less obvious roots of open source in intelligence gathering may better reveal the power imbalances shaping the use of eyewitness images as data with little possibilities for credit and compensation for the image makers.

Verification

The reporters at Visual Investigations are driven by an internal desire to support the voices of those who speak truth to power. According to Haley Willis,

> The reality is, unfortunately, if a victim to a crime explains what happened to them, they can easily be discredited. People can say 'they're too traumatized, they won't remember, or they've been paid to lie,' or the government can scare them into changing their testimony or taking their testimony back…which is unfortunate because I think, for us, as for any reporter, any lawyer, or anyone investigating these types of things, the witnesses, the victims are the reasons why we're doing the work (interview, 11 May 2020).

The prevalent understanding is that authenticated videos are much harder to discredit than verbal or written eyewitness testimonies. This is why Malachy Browne noted,

> If you can convince people of the authenticity of the footage and your analysis of it, and you're triple or quadruple corroborating every point you're making using evidence or testimony, that's very powerful…It's transparent, and I think that's really important in the current climate where trust in media is being eroded (interview, 9 July 2019).

The global rise of information disorders coupled with the declining public trust in traditional institutions like the news media is also implicated in the reporters' over-emphasis on verification as the key institutional requirement for using eyewitness images.

At times when visual forensics has captured the public imagination (Gates, 2020), verification—though important and necessary—is becoming burdened as a cure-all for assessing truth claims, promoting transparency, and engaging news audiences. However, as the reporters acknowledged, verification is just a mode of visual interpretation, not an exact science and not a magic tool. It depends as much on people as it does on

technologies. It privileges scale (the more eyewitness images from the same incident, the better it is to determine their reliability) and efficiency (doing more with less resources) to ensure the validity and integrity of news reporting. There is strength in numbers indeed, but it is important to remember that "open-source investigations don't happen in a vacuum" (H. Willis, interview, May 2020). Precarious newsworkers, activists, bystanders, and victims of violence are among the information actors who risk their lives to provide evidence to the news media. Yet their efforts are often sidelined in the discussions of verification, which tend to highlight the technical nuts and bolts in order to build public trust.

This approach to verification implicitly distinguishes between the process of witnessing—being there and experiencing the event—and the technologies of witnessing that record and transmit that event. Drawing clear lines between the eyewitness and the eyewitness record may strip eyewitness images off of their testimonial functions as existential and embodied forms of voice. To borrow from Daston and Galison (2007), removing the traces of the knower from the knowledge merely romanticizes objectivity. Open source investigation plays to news audiences' forensic imagination, rendering truth visible as a technological process despite the reporters' sophisticated approach to and understanding of verification as an interpretative practice. As a result, eyewitness images are moving to the center of journalistic practice while technologies of verification end up pushing the image makers in the background of open-source reporting. The witnesses who record images of deeply felt traumas only appear in the acknowledgments of a report, if at all. The overemphasis on verification may be addressing the symptoms of a larger problem with public trust in the media by eclipsing questions about the cultural, political, legal, occupational, and economic challenges in journalism that could better account for the underlying causes.

Labor dynamics

Verification is closely implicated in existing labor dynamics in journalism related to news hierarchies, bodily risk, content ownership, and profit. The proximity to scenes of violence is what triggers editorial interests in eyewitness images, but it also renders the image makers suspects of bias. As a former reporter in Brazil, Barbara Marcolini noted,

> I value and I understand the risks, how exhausting it is to be on the ground. I understand how hard it is to be there, especially for freelance journalists who are on the ground doing amazing work and being paid very little. I understand all of that, but also you have to be able to verify by your own means. I cannot take your word for it. You need corroboration. So that's the verification that you do (interview, 19 November 2020).

Corroboration is indeed vital for journalistic integrity. The difficulty is how to balance discussions about open source and verification with considerations of the precarious conditions under which eyewitness images are produced. Though the risks are obvious when documenting directly from the scenes of violence, even open-source investigation conducted from afar can cause physical harm through exposure.

Visual Investigations makes it a priority to protect its "sources and the people who post the content" (H. Willis, interview, 11 May 2020). Technological solutions include blurring faces and reaching to eyewitnesses via private channels like WhatsApp and Signal (C. Koettl, interview, 15 May 2020). Neglecting these priorities, however, is a possibility in the open-source community writ large. According to Malachy Browne,

> Depending on who is doing the work, there are ethical challenges as well that are not standardized across the community of people doing this…in terms of inadvertently putting sources at risk or identifying them to belligerence…I remember one Syria investigation identified the home of a key witness to a high-profile human rights abuse. That's reckless (interview, 9 July 2019).

Visual Investigations carefully thinks through such scenarios to protect its sources. It is also committed to informed consent as an ethical principle. According to Haley Willis,

> If I am using a witness as a source in a piece, I spoke to them. I interviewed them. I asked for their consent to use their name, or to keep them anonymous, to use this quote or that quote. If I'm using a video that someone posted online, the consent isn't always there for a variety of reasons. So, usually, we'll try to reach out to that person and ask…but sometimes reaching out to someone can put them in more danger … sometimes it does mean we just can't use something that we really do want to use (interview, 11 May 2020).

Even informed consent can be challenging. Studies have shown that the legal terms accompanying informed consent both in journalism and on social media platforms, such as license, exclusivity, perpetuity, and syndication, are often not understood by news audiences and internet users (Wardle, 2018). Eyewitness image makers may post content online with one intention without knowing that their livelihood and existence could end up in the hands of those who conduct open-source investigations from afar, using the material for potentially different purposes.

Open-source investigation is not immune to the unspoken power dynamics and corresponding hierarchies of labor long constitutive of Western journalism either. The coverage of the wars in Syria and Yemen speaks directly to the geopolitical parameters shaping journalism as an institution of power and privilege. These wars posed initial challenges for Western journalists who were either denied on-the-ground access or killed on assignment. As a result, major international news organizations quickly decided not to put their own staff at risk (Yazbeck, 2020). Yet coverage of these wars has continued through the rise of open-source investigation and the enduring practice of precarious newswork. Yazbeck (2020), for example, scrutinizes how Western journalism became crucially dependent on stringers in Syria and Yemen. These are local Syrian and Yemeni journalists trained and paid by international news organizations to report on stories. Stringers, however, are rarely properly credited for their work and sometimes cited only as news sources in their own stories. Together with other local reporters, stringers constituted the majority of the 137 journalists killed so far in Syria and the rising number of missing

and killed journalists in Yemen, according to the latest data from the Committee to Protect Journalists.

Yazbeck (2020) maps how stringers work at great personal risk, but Western newsrooms ultimately defer to their own full-time journalists to verify the stringers' reports and sign off as main authors while never setting foot in a war zone. She thus argues that "stringers' identities—their nationalities and global and institutional positionalities—…simultaneously preclude stringers' authority as journalists and render them suspect to the institution hiring them" (p. 41). In other words, the precarious institutional standing of stringers is based on markers of identity and belonging that have long ranked low in the institutional systems and structures of Western news media. Journalism is yet to wrestle with how and why race, ethnicity, and nationality constitute institutional grounds for silencing voices, accounting for why various newsworkers in the world are still being unfairly differentiated from presumed bona fide journalists.

Thinking about eyewitness image making alongside precarious news labor can help uncover the deeply existential questions that are entangled in conflict reporting, including open-source investigation. Less privileged actors have more access and thus take great risks to produce eyewitness images while institutional logics dictate how newsrooms manage and incorporate those materials. Albeit differently, precarious newsworkers, activists, bystanders, and victims of violence help Western news media report on otherwise inaccessible stories. Just like Western news organizations often train stringers, human rights collectives based in Western Europe and the U.S. train local activists how to capture visual evidence (Ristovska, 2016, 2021). Yet echoing Butler (2004), their lives seem less grievable to the institution whose authority to report on global conflicts increasingly depends on them.

To summarize, the reporters at Visual Investigations are driven by an internal desire to expose the truth and strengthen the voices of people who document violence on the ground. Through open-source investigation, these reporters can indeed assess and strengthen the truth-claims of eyewitness images, thus creating spaces for opportunity where eyewitnesses claim voice. This development is not a small ordeal. Visual Investigations, for example, reported on how Philadelphia City Police violated its own guidelines by using tear gas and pepper spray on a nonviolent group of protestors during Black Lives Matter marches in the city in June 2020. Hours within the release of the video report, Philadelphia mayor and police commissioner issued an apology and announced changes, crediting the open-source investigation for their decision (Tabrizy et al., 2020). The importance of such reporting cannot and should not be underestimated. It exemplifies journalism's mission to hold those in power accountable for their actions in front of the public.

At the same time, new institutionalism helps explain why open-source reporting is taking on some of the traditional features at the core of journalism's institutional identity even as it tries to change old norms and practices by being more open, transparent, and collaborative. The genre is rooted in long-established norms of knowledge production in journalism that foreclose spaces where diverse voices negotiate terms of participation and power. The ambivalence of the term open source, the primary focus on verification as a forensic sensibility, and the enduring hierarchies of work in newsrooms end up

inadvertently stripping out the person and the risks behind an eyewitness image. Open-source investigation cannot on its own repair conditions that the institution of journalism has created.

Proposal for listening

By examining the work of Visual Investigations, this paper has discussed how the guiding ethos of open-source reporting may be both a facilitator for voice and a hindrance to the social recognition and agency of that voice. The principles of open-source reporting with their corresponding verification paradigms and hierarchies of labor create possibilities for the articulation of voice through eyewitness images while failing to account for its broader value. Following McPherson et al. (2020), the paper thus proposes that journalism needs more spaces for negotiation where it listens closely to the communicative needs of diverse eyewitness voices. Attending to what eyewitness image makers are saying, how, and to whom is as important as the verification of their claims. This balancing act may provide more spaces for negotiating credit, interpretative authority, participation, and labor compensation—where appropriate—thus facilitating voice as value.

This task is critical at a time when listening is acknowledged as "the new democratic deficit" (Dobson, 2012). Implied in the Habermasian model of the public sphere, good listening has been typically presumed as long as a wide range of voices have the possibility to speak. Listening, though, is also an exercise in acknowledging vulnerability and repairing power imbalances. The sheer presence of eyewitness images in open-source reporting does not always translate to agency. Practicing listening thus has the potential to enhance the legitimacy of an eyewitness image as a platform for voice, not simply though verification but also through recognition of the precarity of the voice's embodied existence. The balancing act between speaking and listening and between assessing claims and attending to their broader meaning may be the new moral imperative in conflict reporting when image making at the risk of one's life has become a crucial mechanism for claiming voice visually and linguistically.

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Biography

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