



Normative paradoxes in 360° journalism: Contested accuracy and objectivity

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journals.sagepub.com/home/nms**Tanja Aitamurto** 

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Abstract

In visual journalism, the adoption of new technologies often leads to renegotiation of normative boundaries, and the case of 360° video is no exception. Two normative paradoxes emerge in journalists' attempts to deploy 360° video to provide emotionally engaging and factually relevant content. The first paradox is that the 360° view is considered to provide a more accurate representation of events, but the viewer's freedom to choose the field of view can lead to a less accurate picture of the story. The second paradox is that, by manipulating authentic imagery in the pursuit of more accurate and objective reporting, journalists compromise on traditional notions of accuracy and objectivity. These paradoxes push visual journalism away from the "as is" and toward the "as if," detaching visual journalism from its naturalistic claims. This leads to increasingly blurred boundaries between journalism and other communication practices such as advertising and propaganda.

Keywords

360° video, accuracy, augmented reality, journalism, journalistic norms, mixed reality, objectivity, transparency, virtual reality, visual sociology

Introduction

In visual journalism, the use of 360° video that captures an omnidirectional, spherical view of the environment—is becoming increasingly common. Newsrooms have recently begun using this medium to produce both news and feature stories (Aitamurto et al.,

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2018; Watson, 2017). Building on technological advances in visual journalism, 360° video promises new affordances to support both the informational and the emotional content of visual journalism. Because of its omnidirectional view, 360° video has the potential to present more information compared with traditional video, and its immersive features can strengthen the viewer's sense of presence. These qualities can, in turn, foster greater emotional engagement with the story. In parallel, new, sophisticated manipulation techniques allow journalists to indistinguishably add or remove material in documentary 360° video through the use of computer-generated imagery (CGI), photogrammetry, and volumetric video. Despite these benefits, these advanced manipulation methods pose challenges to visual journalism's normative boundaries and ethical code, which restricts image alteration in visual journalism, including 360° video.

The spherical view in 360° video, in combination with advanced manipulation techniques, allows constructing new layers for representing the denotative and connotative aspects of 360° imagery. Here, "denotative" refers to the factual elements and "connotative" to the symbolic elements of the journalistic imagery. Every image has both denotative and connotative aspects. According to Zelizer (2010), the claim that visual journalism shows the world "as is" reflects the denotative aspect of the imagery, whereas its ability to depict the "as if" (i.e. what could, should, or might be) reflects its connotative and symbolic capacity. Journalism's normative claims of objectivity and accuracy create continuous tension between the "as is" and the "as if" in visual journalism. Despite its promise to depict the world accurately and truthfully, visual journalism offers a curated, framed, and cropped representation of the world through a connotative interpretation of reality (Hall, 1973; Schwartz, 1999; Zelizer, 2010). However, the denotative aspects of the imagery are employed to support the truth-telling goals of journalism within the normative boundaries of visual journalism. Journalistic norms determine what is considered "proper" visual journalism, and these norms are operationalized as acceptable practices of pursuing the aspirational norms. In practice, visual journalism can never fully satisfy the aspirational norms, and the normative boundaries of visual journalism have been challenged ever since its inception (Barnhurst, 1994; Zelizer, 2010). This continuous struggle involves determining what can be considered accurate and objective in visual journalism and defining the appropriate practices in pursuit of these ideals.

The spherical view and the manipulation techniques in 360° video offer new ways to enhance both the denotative and connotative aspects of the imagery while also intensifying the tension between the "as is" and the "as if." Furthermore, technological developments in 360° video have the potential to give rise to new definitions of accuracy and objectivity in visual journalism, thereby challenging journalistic norms. Despite the proliferation of 360° video in visual journalism,¹ exactly how this new medium affects the construction of the denotative and the connotative aspects of 360° imagery is unknown. Given the purported epistemic and emotional power of 360° video as a medium, it is important to examine how journalists deploy this medium to support visual journalism's claims of objectivity and accuracy, and to study how doing so reshapes normative boundaries. It is particularly important to examine the normative boundaries of 360° journalism while it is just beginning to be more widely adopted and before its norms and practices are fully established.

To address these questions, this article draws on interviews with journalists and editors to examine the impact of 360° video on the norms that guide visual journalism. The findings demonstrate two normative paradoxes that show how practitioners negotiate normative boundaries in their pursuit of objective and accurate reporting while balancing the denotative and connotative aspects of the imagery and attempting to maximize its epistemic and emotional impact. The first paradox is that the omnidirectional view in 360° video both strengthens and weakens the perception of the accuracy of the imagery. The second paradox is that, in their quest for more accurate and objective reporting, journalists compromise the norms of accuracy and objectivity. As a result, the imagery becomes more detached from the denotative, the “as is” in the visual, and moves toward the connotative, the “as if,” thereby leaving more room for subjective interpretation. The findings show newly defined boundaries for acceptable practices for pursuing accuracy and objectivity in visual journalism.

The remainder of this article is structured as follows. The next section provides a conceptual framework, reviews the central ideas about the epistemic and emotional aspects of visual journalism as well as the construction of the denotative and connotative aspects of the imagery, and discusses the evolution and ambiguity of the normative boundaries of visual journalism. The subsequent two sections describe the data and research methods and discuss the findings. The final section concludes by discussing the implications of the two normative paradoxes for visual journalism and its boundaries.

Conceptual framework

The “as is” and the “as if” in visual journalism

The emotional and informational content of visual journalism leads to a constant interplay of the emotional and epistemic aspects of news imagery. The emotional content engages viewers, and news publishers are increasingly seeking to capture that attention online (Beckett and Deuze, 2016; Peters, 2011; Zelizer, 2010, Papacharissi, 2015). Of course, news imagery must also provide information. The knowledge-producing aspects of visual journalism, or the epistemic content, are shaped by values such as relevancy, unexpectedness, and impact (for news values, see Galtung and Ruge, 1965).

The tension between the factual and the symbolic in visual imagery presents a continuous challenge for the epistemic aspect of visual journalism. Zelizer (2010) aptly summarized the paradox arising from the claim of verisimilitude and the symbolic aspect of the imagery by arguing that while news imagery claims to show the world “as is,” it actually shows the world “as if”—through a connotative interpretation of reality. The “as if,” according to Zelizer (2010), “thus adds impulses of implication, contingency, conditionality, play, imagination, emotionality, desire, supposal, hypothesis, hope, liminality, and (im)possibility to the supposed certainty of visual representation” (p. 15).

The denotative aspects of the imagery support visual journalism’s claim that it shows the world “as is,” reflecting a factual, truthful, and “natural” image of the world, in alignment with journalism’s epistemic goals. According to Zelizer (2010), “photographs help journalists credential their coverage by drawing on photographic verisimilitude and realism to show that one was present to witness an event” (p. 15). The photorealism of

journalistic visuals establish and maintain shared knowledge, which becomes a part of society's collective memory (Zelizer, 2004). But visual journalism provides only an illusion of reality, a set of representations that construct the symbolic, connotative side of the imagery (Hall, 1973; Zelizer, 2010). The symbolic mediates values and appeals to the viewer's emotions, and as a result, images remain "inexhaustible invitations to deduction, speculation, and fantasy" (Sontag, 1977: 23).

Journalistic institutions construct the denotative and connotative aspects of imagery in ideologically shaped procedures (Hall, 1973; Hardt and Brennen, 1999; Schwartz, 1999). The ideological level of the visual is developed in what the imagery signifies, which, as Hall (1973) argued, has two aspects: the news value of the visual sign and its ideological signification. News values refer to the criteria and procedures by which imagery is produced, processed, and selected for publication (Galtung and Ruge, 1965; Hall, 1973). The ideological level of the imagery imparts a greater societal meaning to the visual on the basis of its connoted themes and interpretations, and reflects the political and moral values of both the news apparatus and the society in which it operates.

Hall (1973) defines "ideological elaboration" as "the insertion of the photo into a set of thematic interpretations which permits the sign (photo), via its connoted meanings, to serve as the index of an ideological theme" (p. 184). In this definition, the visual is linked to a set of themes and concepts, and it becomes an ideological sign. For example, at the denotative level, photographs of the torture of Abu Ghraib prisoners in Iraq bear witness to inhumane acts perpetrated by US soldiers. These images are thus linked to ideological themes of the war on terrorism, violation of human rights, the lack of transparency and oversight in government, and the power asymmetries between nations. This is how imagery comes to signify and mediate the ideological messages associated with it. The ideological and interpretive dimensions of the images are what enable them to become a news commodity. In visual journalism, ideological references are constructed in the process of producing, publishing, and interpreting the imagery and are used to amplify the ideological message of the news organizations, which typically reflects the status quo in society. By contrast, however, the denotative aspects of the imagery "guarantee and underwrite its *objectivity* (that is, they neutralize its ideological function)" (Hall 1973: 188; emphasis in original). Journalistic imagery is especially powerful in shaping the ideological interpretations of the events it captures because it claims to present visual evidence of the "real world." Visual journalism thus forms part of what Foucault (1980) characterized as the large apparatus with which society organizes its discourse and establishes its truth, including what constitutes facts and evidence.

Journalistic norms guide the construction of the denotative and the connotative aspects in visual journalism. In the Anglo-Saxon normative framework, journalists pursue the goal of accurate, objective, autonomous, and transparent reporting. Although these norms are unattainable ideals, practitioners consider that they legitimize journalism as a truth-telling discipline, differentiating it from other professional communication practices (Aitamurto, 2015; Carlson, 2009). The credibility of journalism is based on its claim to offer accurate, autonomous, objective, and transparent reporting, yet throughout the history of visual journalism, even the most celebrated images have raised questions about their accuracy and authenticity.²

These questions are justified because the normative boundaries of visual journalism are always in flux. The fluidity of the normative boundaries is reflected by the evolution of acceptable practices in photojournalism. The claimed facticity of photography gradually led to photojournalism becoming an established practice in the 1920s. Prior to that time, news events were depicted through artists' illustrations. Before the 1930s, journalists commonly and openly retouched, embellished, and manipulated photographs (Barnhurst, 1994; Schwartz, 1992, 1999). News photography aided the construction of an illusion of objectivity, an aspiration and claim that gradually increased in importance (Schudson, 1978; Zelizer, 2010). Objectivity is based on the aspirational ideal of a distinction between denotative and connotative content; this distinction is impossible and, as such, is called the "empiricist illusion, the utopia of naturalism" (Hall, 1973: 188).

The illusion of objectivity in visual journalism supports the aspirational norm of accuracy, which is supposed to ensure that the imagery depicts the events as truthfully and authentically as possible. By using its verisimilitude as evidence, visual journalism serves the illusion of objectivity, aiding the press in protecting itself against claims of bias. Documentary photography is an important part of "the strategic ritual of objectivity" (Tuchman, 1978), which assists in the construction of objectivity and accuracy in visual journalism. To support these claims of objectivity and authenticity, ethical guidelines for visual journalism state that journalists should "not manipulate images or add or alter sound in any way that can mislead viewers or misrepresent subjects" (National Press Photographers Association, 2018) and "never deliberately distort facts or context, including visual information. Clearly label illustrations and reenactments" (Society of Professional Journalists, 2014).³ Visual journalists are recommended to avoid staging and to "not intentionally contribute to, alter, or seek to alter or influence events" (National Press Photographers Association, 2018). These guidelines allow minor adjustments to news photography such as alterations in contrast and lighting, leaving some room for interpretation (Mäenpää and Seppänen, 2010).

The guidelines also contain instructions concerning transparency. Journalists are recommended to communicate ethical choices made in the production process to the public and to identify deviations from accepted practices, such as staging and manipulation. To maintain the autonomy of the journalistic process, visual journalists should resist the influence of exogenous forces, which could bias the reporting (Kovach and Rosenstiel, 2007; National Press Photographers Association, 2018; Society of Professional Journalists, 2014). However, all journalistic imagery is subject to interference from advertisers, audiences, and political authorities, among others (Christians et al., 2009). The goals of maintaining authenticity and autonomy, forgoing manipulation, and being transparent about the production process are aligned with the aim of visual journalism to differentiate itself from other visual media, such as advertising and propaganda, which operate without such aspirational norms.

Despite the normative boundaries described above, visual journalism is rife with examples of the alteration, staging, and manipulation of images (Lowrey, 2003; Schwartz, 1999). The difficulty of determining acceptable means of pursuing objectivity and accuracy reflects the ambiguity of these normative boundaries. New technologies, such as 360° video, have the potential to intensify these concerns. But how journalists harness 360° video in pursuit of their epistemic and emotional goals while attempting to uphold

traditional norms and maintain a balance between the denotative and connotative aspects of the imagery remains understudied. Therefore, in this article I address the following questions: How do journalists' perceptions of 360° video practices reshape the normative boundaries of visual journalism? How do journalists balance the ability of this new medium to create an esthetic and engaging visual experience with the normative pressure to present an accurate and objective representation within a new visual technology?

Data and methods

This article draws on interviews with journalists and editors who have produced 360° journalistic videos. The interviewees were chosen using purposive sampling (Etikan et al., 2016). A total of 26 people, 14 men and 12 women, were interviewed in 2016 and 2017. The interviewees ranged in age from 24 to 53 years and had between 3 and 20 years of journalistic experience. In all, 14 of the interviews were conducted by phone and 12 in person, with an average length of 55 minutes. The interviewees were asked about their experience with 360° video, its benefits and challenges, its impact on journalistic norms and practices, ethical considerations, and their views on modifying documentary 360° capture.

The interviewees had produced 360° video journalism published by Al Jazeera, the BBC, BuzzFeed, the Center for Investigative Reporting, the *Guardian*, *Dagens Nyheter*, KQED, the *New York Times*, PBS, *Pohjolan Sanomat*, *USA Today*, the *Washington Post*, and *Die Welt*. Some of the interviewees had presented their videos at film festivals such as Sundance, Tribeca, and Kaleidoscope. The video topics included refugee camps, homelessness, famine in Africa, art, natural catastrophes, sports, political demonstrations, and urban city planning. The videos ranged from short 1-minute clips to 10-minute videos published on the news organizations' mobile and web players, YouTube 360, and Facebook 360°. Most of the productions were 360° video capture, and three journalists had also worked on 360° videos based on CGI.

The interviews were recorded, transcribed, and analyzed following Strauss and Corbin's (1998) analytical coding system, using a theoretical journalistic norms framework. In order to build rapport and maximize informational value, the interviewees were granted anonymity; they are referred to by numbers (1–26) below. The first round of analysis employed open coding, which revealed key themes and patterns in the data that then guided further analysis. The emergent categories were accuracy, authenticity, autonomy, credibility, empathy, engagement, immersion, sense of presence, objectivity, manipulation, transparency, viewer agency, and volume and quality of information. Selective coding was applied to integrate and synthesize the subcategories into the following main categories: epistemic aspects, emotional aspects, transparency, objectivity, autonomy, accuracy, and viewer agency.

Findings

Two normative paradoxes in 360° journalism emerge from the journalists' accounts. The first paradox is that the omnidirectional view in 360° video both strengthens and weakens the constructed illusion of accuracy in the imagery. The second paradox is that, in

their quest for more accurate and objective reporting, journalists end up compromising the norms of accuracy and objectivity. By using manipulation, journalists distance themselves from the traditional normative boundaries for constructing the illusions of accuracy and objectivity. 360° journalism thus moves away from the “as is” and toward the “as if” in visual representations. The two paradoxes reflect the continuous reshaping of normative boundaries in visual journalism, now amplified with the new technological affordances of the spherical view and advanced manipulation techniques in 360° video.

The following two subsections discuss each of the two paradoxes in turn. To convey the nuances of the second paradox, the second subsection is divided into three parts, each of which discusses one aspect of the paradox.

First paradox: challenged accuracy in 360° journalism

This subsection shows how journalists perceive the omnidirectional view in 360° video as paradoxically both strengthening and weakening the notion of accuracy in the visual. The paradox is rooted in the viewer’s agency in 360° scenes and the resulting fragmented picture of the storyline.

All of the interviewed journalists believe that 360° video enhances the epistemic offerings of news imagery by enabling more accurate reporting compared with traditional video. Specifically, they believed that 360° video, through its omnidirectional “story spheres,” provides more information, leading to a more accurate and holistic representation of the topic. In this medium, viewers can control where they look within the story sphere, and with that agency they can compose a storyline of their preference within a given scene. The interviewees perceive the omnidirectional view and the viewers’ agency in choosing the field of view as increasing transparency, which contributes to a more accurate representation of the topic:

That’s a layer of transparency because you’re not only focusing on one perspective or one direction within the scene. It’s very much taking the journalist out of that storytelling process and allowing your audience to see for themselves what’s happening. (2)

While the journalists celebrate the omnidirectional view as supporting accuracy in visual journalism, they also find that the spherical view complicates the notion of accuracy. The viewer may miss important elements in the story and thus obtain only a partial picture—an individually composed take of the story, instead of “the full picture” the journalist intended to mediate. Some of the interviewees admit that increased accuracy is a contested result of 360° video. One journalist states that “people will have a very different experience depending on where they were looking. Whereas, if you think about an article, somebody’s going to read it, and the assumption is to get, generally, the same thing, or a video” (18). Paradoxically, because of the viewer’s agency and the resulting fragmented picture of the storyline, 360° video can compromise accuracy rather than strengthen it.

The journalists’ beliefs about the implications of the spherical view reflect contradictions. On one hand, they praise the omnidirectional view as offering an inherently more accurate representation of the topic, reinforcing the denotative side of the imagery and

the naturalistic claims of photojournalism. This supports the truth-telling goals of visual journalism. On the other hand, the journalists are concerned that viewers will miss important elements of the story. Based on the fields of view they choose, each viewer composes a unique narrative of the story, which can give rise to myriad connotations. The viewer's agency leads to a multitude of representations, which can support ideological themes and lead to connotations and ideological signification that the journalists did not initially intend to mediate.

The paradox of accuracy in 360° journalism signals the loss of journalists' control over the mediated representations in the spherical view. Consequently, to ensure that the desired message is conveyed, several of the interviewees report attempts to guide the viewer's gaze with various methods: spatial audio, camera placement, scene composition, movement, and animations such as arrows. Some journalists have experimented with blocking the spherical view to limit the viewer's focus. These methods effectively control the user's gaze, but they compromise the omnidirectional view and the viewer's agency, which are the novel affordances of 360° video. Efforts to control the viewer's gaze signal the journalists' attempts to regain some of the control they lose in the 360° view—the control they are used to having in older forms of visual journalism.

Second paradox: construction of accuracy and objectivity with manipulation

In a further effort to control the viewer's experience in the omnidirectional view, some journalists alter the imagery by staging scenes and manipulating footage in post-production. The journalists' approach to manipulation gives rise to the second normative paradox: They manipulate authentic footage for better accuracy, but manipulation distances the capture from the traditional notion of accuracy. The imagery thus moves away from the denotative in the imagery, the "as is," creating space for the connotative, the "as if" (what could, should, or might be), in visual journalism.

This subsection examines the continuum of normative boundaries that emerge regarding manipulation in 360° video and the journalists' justifications for using it. In this continuum, there are no clear points at which journalistic practices would become unacceptable: the same journalists disapprove of one type of manipulation, but allow another type. The first part of this subsection begins with one end of the continuum, where the journalists disapprove of advanced manipulation and protect the footage—and journalistic autonomy—from alterations introduced by exogenous forces. The second part shows the fluidity of the normative boundaries in video-capturing practices. This is a murky middle ground in the normative lines, as the journalists' approach to their own inherent presence in 360° scenes demonstrates. The third part of this subsection explores the other end of the continuum, where journalists employ image manipulation in postproduction to the extent of digitally removing people from the scene.

Staying loyal to the "as is." At one end of the continuum, journalists disapprove of altering the authentic video capture. This approach reflects allegiance to the journalistic norm of showing the authentic visual without manipulating it by adding or removing objects in postproduction. A journalist described this approach as follows: "We show the world as

it is and we tell it as truthfully as we can, and editing someone out is not as truthful as it should be. If you do that, that's not journalism; it's something else" (17).

According to this perception, visual journalism is supposed to keep the denotative aspects—the “as is”—of the imagery as close as close as possible to the authentic capture, as set forth in the ethical code for journalists (Society of Professional Journalists, 2014). By doing so, journalists attempt to maintain the illusion that visual journalism mirrors the world as it is. The traditional notion of accuracy in visual journalism is based on the verisimilitude of the imagery, and accuracy, in the journalists' ethical code and in the perception of the journalists interviewed, equals authenticity. Showing authentic, unaltered capture thus best serves the truth-telling goals of visual journalism.

Some of the interviewees mentioned instances of 360° videos that deviate unacceptably from the ideal of accuracy. In *Collisions*, a 360° documentary about Aborigines in Australia, special effects were used in a manner that made them indistinguishable from the authentic 360° footage without signifying the reconstructions. Similarly, the manipulations in *Clouds over Sidra*, a documentary produced for the United Nations about a Syrian refugee, were deemed unacceptable, as one journalist stated:

I still get quite angry about *Clouds Over Sidra* being talked about as journalism because it uses some tools of journalism to tell a story, but it has a scriptwriter write the script, it has large elements being recreated in CGI to make them look better, like the sky, and it's just one of those things, well, where do you stop? (19)

Several journalists considered manipulations in 360° journalism to be more extreme than regular adjustments in photojournalism, and they stated that advanced manipulation should not be allowed. These journalists believe that if manipulation is necessary for an unusually well-justified reason (for instance, in journalistically valuable but damaged footage that can be fixed with manipulation), the viewer should be informed that such alteration took place. This approach reflects the journalists' attempt to follow the ethical code, remain transparent about the production process, and stay accountable to their audience, as one journalist stated: “Our responsibility as journalists is to show the world as it is. That means that anything that is changed or manipulated needs to be really clearly articulated to the user” (2).

In their quest to protect the aspirational accuracy of the imagery, some of the interviewees faced demands from exogenous forces to alter authentic footage. Two journalists described situations involving pressure from engineers and companies involved in postproduction to bend journalistic norms. One journalist described a disagreement over what is acceptable manipulation:

When we discuss with production companies outside our newsroom, they say: ‘Can't we just edit him out because he interferes with the story?’ We say: ‘No, that's not ethical, and opposed to our standards.’ You have to use the same journalistic standards to do these [360°] stories, and that works really well. (17)

When journalists attempt to preserve what they consider an acceptable construction of accuracy (rejecting manipulation in postproduction), a challenge to journalistic autonomy surfaces. Some journalists' accounts reflect a fear of weakened autonomy arising

from the strong influence of technology companies; they worry that 360° journalism depends more on technology than does traditional photojournalism. According to one interviewee, “in stitching, you’re replacing pixels. What’s the difference between that and changing the sky—what difference does it make, ethically, for [engineers]? None. For [engineers], it’s a computational process” (19).

Journalists’ insistence on upholding the authenticity of the imagery reflects their effort to follow traditional practices in the pursuit of authenticity and accuracy. This effort is now being challenged by the goal of creating a seamless and engaging user experience in 360° video, which creates pressure to develop a new definition of accuracy that is aligned with technology companies’ principles.

Struggling with transparency. In the middle of the continuum, between clear disapproval and acceptance of content manipulation in postproduction, lies a range of murky practices regarding the capture of journalists’ presence in 360° video. On one hand, the interviewed journalists approved of their inherent presence in the scenes as strengthening accuracy and transparency in reporting, but on the other hand, they wanted to hide from the camera and compose scenes for a more objective depiction of the events.

Specifically, some journalists embraced the reporters’ presence in the 360° scenes as a signal of “true” authenticity and accuracy in visual journalism. In 360° video, the reporter can no longer “hide behind the camera,” as one interviewee (1) said. The interviewees argued that the journalists’ presence strengthens the accuracy, transparency, authenticity, and credibility of reporting:

You see that [the scene is] not being manipulated. You see the person in the scene, and there’s no way you could claim something would be fake if you see everything around you, which is very interesting in this era of lies and alternative facts. You actually see who’s behind the whole production process to a more accurate extent and how many people are representing underrepresented minorities, and all that kind of thing. (18)

By contrast, while praising the transparency in 360° video, the same journalists were willing to compose scenes and hide from the camera to capture what they believe to be the most authentic, accurate, and objective footage. Journalists perceived their absence from the scenes as necessary for maintaining the illusion of accuracy and objectivity, following the conventions of constructing objectivity in visual journalism. Traditionally, the journalist is absent from the footage, if the journalist does not have a specific role as a narrator or host. The desire to stay invisible pertains to journalists striving for what they define as an objective and authentic capture of the event, in which they do not have discernible influence, rather than positioning their craft as a situated interpretation or a constructed event of which they are inherently a part.

The aspiration for absence is aligned with the pursuit of objectivity, the idea that journalists neutrally and passively mirror the world rather than actively construct representations in the imagery. Their absence is, in journalists’ minds, an important part of the strategic ritual of objectivity in visual journalism, and the presence of journalists in 360° video disturbs the ritual. Consequently, the interviewed journalists were not uniformly comfortable with the more visible role the new technology proposes. Most journalists did

not want to situate themselves in the representation they were creating. As one journalist explained, “I do not have a problem with transparency, like being in the shot, but if I’m in every shot, then I’m the star. Then, it’s about me” (14).

The journalists had experimented with various ways of being absent from the shots. One common method was to leave the camera in the scene and hide. Hiding from the camera, according to the journalists’ accounts, would lead to a more authentic capture and support the imagery’s epistemic and emotional offering: “There is the opportunity for more intimacy and more authenticity, when you’re not yourself in the room or nearby” (26). Although they approved of staging, the journalists were aware that such practices do not lead to a fully authentic picture:

All you can do is you can hide behind a wall or behind a tree, but if you do that, some people might say that you are staging elements of the story ... It’s kind of fudging what’s really going on there. (1)

The 360° view confronts journalists with a contradictory situation: in their minds, their absence from the shot symbolizes objectivity, but the absence means staging, which interferes with the claim of authenticity. Distancing the imagery from the aims of authenticity and naturalism is a practice and concern that can be traced back to the early days of photojournalism (Barnhurst and Nerone, 1999). The journalists’ struggle with the new layer of transparency in 360° video reflects the difficulty of balancing traditional practices in visual journalism with new practices that suggest greater acceptance of journalists’ visibility in the scenes. Journalists try to follow the traditional practice of keeping themselves out of the scene so that they can remain reporter-observers instead of active, visible participants. Yet by composing and staging the shots, the capture presents an illusion of what could have happened rather than a depiction of the authentic situation. Thus the journalists, in part, compromise the “as is” and strengthen the “as if” in 360° journalism. Their desire to retain objectivity causes them to manipulate the scene, thereby undermining the aspirations of accuracy and objectivity.

Strengthening the “as if” with manipulation. Further along the continuum toward acceptance of content manipulation is the practice of allowing advanced 360° video manipulation, including use of CGI, without notifying the user. Manipulating 360° video by removing or changing elements, and mixing 360° video with CGI, blurs the line between journalism and fiction. The viewer may thus perceive even a pure-CGI video as an original video capture of a situation, as in the *Guardian’s* video about solitary confinement, 6×9:

Lots of people didn’t realize that 6×9 was a CGI piece, but I didn’t have a particular problem with that because I do not think that it felt particularly misleading. It was very, kind of, journalistically accurate, what that space was, I didn’t feel like it was cheating anyone. (20)

According to this emerging normative standard, it is acceptable to add and remove elements to documentary footage in postproduction and use CGI without notifying the viewer. This line deviates from the aspirational ideal of accuracy in visual journalism,

which disallows changing the elements of news or documentary photographs and video (Huang, 2001; Newton, 2001). This is made explicit in the journalists' ethical code, which instructs journalists to refrain from staging scenes, to label illustrations and reenactments clearly, and to not manipulate images in ways that can mislead viewers or misrepresent subjects (National Press Photographers Association, 2018; Society of Professional Journalists, 2014).

Nevertheless, some of the interviewees approve of even advanced manipulation. Such manipulation is justified by the journalists' belief that altered scenes may convey the truth more powerfully than the authentic capture would have. In this approach, manipulation can enhance accuracy and objectivity in visual journalism. According to one journalist, "if it's not totally changing reality, but it's adding to the story, I think that's great. Ethically, I do not see anything wrong with that" (3). Apart from the epistemic gains, the journalists justified the manipulation by invoking emotional goals: the aspiration of creating a more engaging, immersive, and "real" experience for the viewer. In the journalists' accounts, the sense of presence in 360° video automatically translates to engagement and empathy:

It creates a whole other level of empathy in the viewers. When you look at something in 360, it's like you feel like you're there. It's harder to escape or stop reading because things are interesting and engaging. (3)

To maximize engagement and to control the imagery's message, some journalists are willing to go as far as removing people from scenes in postproduction. For instance, in a video about religious disputes, the main character of the story was sitting at a table, talking to the camera, and appeared to be alone. When the footage was taken, the camera was in the middle of the table and the journalist was seated opposite the speaker, but he was removed in postproduction. The journalist justified the manipulation through the epistemic and emotional offerings of the imagery: The altered scene relayed more accurate information about the situation and created a stronger sense of presence that supported the viewer's understanding of the topic. Keeping the reporter in the scene would have made the scene less authentic and destroyed the illusion of accuracy and objectivity:

If someone were to look at Debbie, and Debbie's telling her story, and they glance over, and they see there's a computer there. 'Wait, there's a guy there. What's he doing?' Already they're not listening to Debbie. One thing we knew, we couldn't break the spell. The viewer had to be able to follow the story without any distraction. Otherwise, we'd lose them for the whole piece. It would become confusing. (21)

Paradoxically, striving for objectivity and accuracy through manipulation causes the imagery to move away from its denotative aspects, its fidelity to the factual, thereby compromising the traditional practice of pursuing accuracy through authenticity. Some journalists are aware of the ethical conundrum of the manipulation, as one interviewee admitted: "Did I take myself out of this shot? Yeah, I did. Is there an ethical problem there because it's not exactly the way things really were? Maybe, but everything that Debbie says is true" (21).

Most of the interviewed journalists acknowledged that advanced manipulation is a shift from the traditional practice of pursuing accuracy in visual journalism. Reflecting the malleability of the normative boundaries for accuracy and authenticity in visual journalism, none of the interviewed journalists could offer a clear definition of acceptable manipulation. Staging scenes and removing or masking trivial objects, such as a tripod, were generally considered acceptable, whereas removing people from the scene in post-production was not. Even the journalists who disapproved of manipulation in post-production were willing to stage scenes when capturing footage. The tension between established and emerging journalistic practices blurs the boundaries of journalism—even for journalists themselves:

The goal is to reach more people, to sort of grab people and get their attention and make them feel, and if you can use more special effects to do that then it's part of a broader goal. I do not know, yeah, maybe this is like a fiction thing. Maybe this is the realm of fiction where you start doing more historical movies or whatever that reach people in a different way, but it's not journalism. (15)

The journalists were unsure how much responsibility the viewer should, or could, bear in distinguishing the authentic capture from the modified one, as one journalist's (14) questions reflect: "Do viewers understand this? Do they understand that an animation is not a perfect representation of what was there?" Manipulation blurs the line between the real and the unreal, between the authentic and the inauthentic, thus moving the imagery away from the denotative and toward the connotative layer of the representation. The use of advanced manipulation allows one to take the construction of the "as if" to a new level, and it distances the visual from the "as is." It transforms the relationship between the denotative and the connotative to accommodate contingency, engagement, and emotion. Manipulations are based on journalists' interpretations about how the world should look, their notion of the ideal representation of the situation, and the connotations and ideological messages that the imagery is supposed to communicate.

In addition, manipulation alters the signification of the imagery on two levels. First, by manipulating the footage, journalists believe they enhance its news value because the manipulation makes the imagery more truthful, relevant, and engaging, thus supporting the epistemic and emotional goals in visual journalism. Second, the alterations intensify the visual's ideological message, solidifying its symbolic value. When manipulating content, journalists apply their ideas, preferences, and values about how the world should look, enhancing the subjectivity of the reporting. Advanced manipulation boosts the composed message of the imagery—the message that the journalistic apparatus has determined should be delivered.

Conclusion

The findings described above demonstrate that journalists are renegotiating the normative boundaries of what is considered objective and accurate in visual journalism, while trying to maximize the epistemic and emotional offerings of 360° journalism. The novel technological affordances of 360° video are harnessed to reinforce the illusions of objectivity and accuracy in visual journalism.

Two normative paradoxes emerge from the challenges journalists face when deploying the new medium in the normative framework of visual journalism. The first paradox is created by the omnidirectional view in 360° video: The spherical view both supports and challenges the perceived accuracy of visual journalism. Journalists embrace 360° video for its greater accuracy because the spherical view supposedly relays more information, supporting the denotative side of the imagery and thus the epistemic goals of visual journalism. The user can choose the field of view in the story sphere, but paradoxically, doing so can lead to a more fragmented, less accurate picture of the content compared with traditional video. The spherical view makes journalists lose control over the representations the story mediates, distancing them from the denotative aspects of the visual and leaving more space for the viewer's subjective interpretation. 360° video thus simultaneously enhances and compromises the illusion of accuracy in visual journalism.

The second paradox is that, in their pursuit of more accurate and objective reporting, journalists end up compromising the traditional normative boundaries for constructing the illusions of accuracy and objectivity. To create what they consider more accurate and objective representations, journalists are willing to manipulate video footage without signifying the alterations, thereby violating visual journalism's ethical code. The manipulated imagery, with its purported immersive qualities, is claimed to engage the user emotionally and provide a more objective and accurate experience—according to the journalists—than the original, authentic footage would. Paradoxically, manipulated capture moves away from traditional practices of constructing the illusion of objective, accurate, and transparent reporting. The representations in 360° journalism thus move away from the “as is” and toward the “as if”—what could, should, or might be. The emerging acceptable definition of “as is” is further from the traditional definition as “authentic capture,” which is supposed to be independent of journalists' intervention before or during recording or in postproduction.

These two paradoxes reveal the challenges journalists face in deploying 360° video as a novel medium while trying to adhere to the normative boundaries of visual journalism. The paradoxes contradict each other. Within the first, journalists struggle with losing control over the viewer's gaze in the 360° view. The loss of control compromises what the journalists consider an acceptable construction of accuracy in the visual. This is replaced by the viewer's uncurated perceptions of the desired message, blurring the intended denotative and connotative significations in the visual. But by contrast, within the second paradox, journalists themselves abandon their quest for authenticity as the traditional notion of the “as is.”

The tension between the two paradoxes is emblematic of the continuous normative struggles in visual journalism. Journalists seek to harness the affordances of 360° video to influence the imagery's signification on two levels: they seek to amplify both its news value and its ideological message, thus redefining the relationship between the denotative and the connotative by use of new technology. With manipulation, journalists can create a visual representation that mediates the desired ideological message. Due to the immersive nature of 360° video, the message can have a strong emotional effect on the viewer. This magnifies the impact of the imagery and speeds its transformation into a powerful ideological sign, pushing the visual toward its desired epistemic and emotional effects.

The emerging loosened boundaries of 360° journalism are reminiscent of those of visual journalism at the beginning of the twentieth century, when it was common to embellish and decorate imagery. As opposed to obvious embellishments in earlier times, in 360° video the viewer cannot distinguish the manipulated content from the original, particularly when immersed in the 360° view. As image manipulation has become easier, and distinguishing between original and altered content harder, manipulated imagery creates an easily believable representation of the world—and perhaps, symbolically, a more effective one. When producing 360° journalism, journalists are tempted to abandon traditional practices of constructing objectivity and accuracy and abdicate their responsibility to inform the audience about the production process. The emerging norms allow journalists to dramatize events and hide inconvenient elements so as to heighten the impact of the imagery, thus creating space for unlimited “as ifs” in the visual. Thus, 360° journalism intertwines deeper layers of subjectivity and artificiality in the imagery while moving away from the claim of naturalism as authenticity.

As a result of the redefinition of normative boundaries in 360° journalism, the line between journalism and other communication forms such as advertising and propaganda becomes increasingly blurred. Visual journalism tends more toward communication practices that operate without the same ethical codes. By embracing the “as if” with advanced manipulation techniques, journalists compromise the legitimacy of visual journalism’s societal role as truth-teller. Based on its supposed verisimilitude, journalistic imagery is used as evidence and woven into our collective memory as signs about current events. Distancing the imagery from what was previously considered the acceptable “as is” can contribute to the audience’s growing distrust in journalism and undermine its authority. If 360° journalism wants to avoid such implications, it ought to exhibit greater fidelity to the “as is,” even if doing so comes at the cost of engagement and immersion.

The normative struggles in 360° journalism demonstrate how new technologies can complicate our understanding of what visual journalism is, could be, and should be. The renegotiated normative boundaries in 360° journalism have given rise to open conflict about visual journalism’s norms. This conflict signals that it is time for the professional visual journalism community to collectively discuss the practices and norms of visual journalism and define appropriate ethical standards for 360° journalism.

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Notes

1. 360° journalism is based on photorealistic documentary video capture with a fixed vantage point, whereas immersive journalism employs computer-generated simulations produced on game engines. The viewer is able to move around and interact within the scene (for immersive journalism, see De la Peña et al., 2010).
2. For example, the authenticity of Robert Capa's iconic 1936 photograph of a falling soldier in the Spanish Civil War has been questioned (Griffin, 2010).
3. The ethical guidelines in countries with a free press are similar to the American ones, instructing journalists to signify illustrations (i.e. to inform viewers which images are documentary photographs and which are illustrations) and not to manipulate images (see, for example, MediaWise, 2015). In addition, several news organizations have their own, more detailed guidelines with similar instructions.

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