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PROMISES AND PERILS IN IMMERSIVE JOURNALISM

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Immersive journalism (IJ) is said to offer exciting new opportunities for storytelling by providing audiences with the experience of being present in real-world situations, experiences that are more intense and intimate than other modes of journalism such as written text or film (de la Peña et al. 2010; Aronson-Rath et al. 2015; Sirkkunen et al. 2016). A growing literature on this new form of journalism attends to an array of questions about how various kinds of equipment work, what empathy is, how participants respond, whether IJ is more effective, and more. The discourse is rife with discussion of the potential and the significance of IJ for journalists, journalism, and audiences.

The term “immersive journalism” is used broadly to refer to storytelling that uses a variety of equipment ranging from virtual reality systems with headsets and other haptic devices, to multiple flatscreen set-ups, to 360-degree video and more. In this chapter the focus is primarily on storytelling that uses virtual reality (VR) equipment, though much of the analysis is relevant to other forms of IJ.

In this chapter the discourse around IJ is critically examined with IJ viewed as an emerging technology. The chapter positions this examination as an exercise in anticipatory ethics and a form of responsible research and innovation (RRI). As is apt for an emerging technology, IJ discourse tends to emphasize the promises and perils of future development; hence, this chapter critically examines two of the major promises and their correlated perils.

Anticipatory ethics and RRI

Anticipatory *governance* refers to a movement to identify the broad social implications of emerging technologies while they are still in the early stages of development, when they can be steered away from potential negative social consequences and towards more socially beneficial designs and uses (Guston 2014). The idea is to

avoid the development of technologies that are later found to be unacceptable to the public or to have negative social effects. Examples of older technologies that might have been improved by anticipatory thinking are genetically modified food and industrial pesticides. Anticipatory *ethics* is an offshoot of anticipatory governance, focusing on the distinctively ethical implications of emerging technologies. Although anticipatory ethics has received much less attention, several scholars have provided clarifying definitions. According to Johnson (2011, 64), anticipatory ethics has two parts: “(1) engagement with the ethical implications of a technology while the technology is still in the earliest stages of development; and (2) engagement that is targeted to influence the development of the technology”. In harmony with this definition but with a somewhat different emphasis, Brey (2012) labels the approach as anticipatory technology ethics (ATE), and defines it as “the study of ethical issues at the R&D and introduction stage of technology development through anticipation of possible future devices, applications, and social consequences”.

RRI is another endeavor overlapping with anticipatory governance and ethics that puts the challenge and burden of anticipatory analysis on the researchers and developers who are involved in an emerging technology’s development. RRI calls for those who develop new knowledge and new technology to incorporate consideration of social and ethical implications directly into the development process rather than leaving the task to others in separate or later stage activities (von Schomberg 2013).

In this chapter, critical examination of the discourse around IJ and especially the promises and perils of this emerging technology serves as a strategy for anticipating social and ethical implications of IJ and putting this into the discourse that will influence IJ’s development.

IJ as an emerging technology with promises and perils

Emerging technologies are those that are believed to be currently in a nascent form of what they will come to be in the future. During the early stages of development, the design, uses, and meaning of new technologies are in flux. Science and technology studies scholars describe this early stage as a state of “interpretive flexibility” (Pinch & Bijker 1987; Orlikowski 1992). During this stage many actors with different interests negotiate, pushing and pulling in different directions about the meaning of what is being developed as well as about designs and uses. Inventors, engineers, and manufacturers work on improvements to the artifacts; those with financial interests make bets and facilitate and constrain certain directions of development; political actors encourage development with funding or express concerns, or threaten regulation; the media inform (and may misinform) the public, shaping attitudes towards what is in the making. The negotiations around new technologies are contingent and multifaceted (Pinch & Bijker 1987). In the case of IJ the actors that are currently negotiating about the design, use, and meaning include, at least, equipment manufacturers, individual entrepreneurial producers (storytellers),

potential users such as media companies, journalists and media who tell stories about IJ, academic researchers, and the public.

To say that IJ is an emerging technology is to say both that its current form is nascent and to say that it is a technology (and not just a form of journalism). Framing IJ as a technology acknowledges that artifacts (various types of equipment) are part of IJ but it does not mean that IJ is just equipment. Although it is commonplace to slip into thinking about technology as simply material objects (artifacts), all technologies are ensembles of artifacts, social relationships, social arrangements, and systems of knowledge. Development, adoption, and use of new technologies require engineering new artifacts as well as constituting (or at least reconfiguring) new social relationships, institutional arrangements, social practices, new types of knowledge, and values.

So it is with IJ. Successful development – production, distribution, and use – of immersive stories may involve expensive new equipment as well as new production processes, new forms of financing, new kinds of skills, new organizational arrangements, and new categories of audience. All of these dimensions of IJ are currently in flux and being negotiated. This is reflected in the accumulating body of literature on IJ. Ideas about what it is and its significance for journalism, now and in the future, are being discussed and debated (see the References section of this chapter). Generally, the social negotiations around emerging technologies involve questions about what the new thing is and whether and how it fits into established categories or whether it is unique or even revolutionary. These questions are being raised about IJ. Is it the next step in a long evolution of visual technologies from film to television to video? (Owen 2016). Is it a form of documentary journalism or installation art? (Rose 2018). Is it a form of propaganda? (Kool 2016). Some have even raised the question as to whether there is anything significantly new here (Kool 2016). Recognizing that IJ is an emerging technology allows us to accept that these questions don't have answers yet; the answers are being negotiated. The questions represent the state of interpretative flexibility in which answers are still in the making. Since IJ is not yet a stabilized “thing”, the questions are themselves part of the negotiation about what IJ will become.

As already indicated, much of the discourse on IJ features promises or perils, and this is not surprising since emerging technologies and promises and perils are all futuristic. Promises are declarations that something will happen or be done *in the future*. Likewise, perils are harms or losses that may happen *in the future*. Since IJ has not reached a stabilized or mature form, all we can do is anticipate its potential (and potentially disruptive) consequences.

A central feature of emerging technologies is uncertainty about what they will become. It is possible (though this is not a prediction) that IJ will not take hold in journalism even while other uses of VR become highly successful. The point is that whether or not IJ in one form or another takes hold in journalism depends on the discourse that is taking place now.

Empathetic global understanding/manipulation

While the literature on immersive journalism is rife with promises, certain promises receive more attention than others. The idea that IJ will bring audiences closer to real-world situations and thereby help them to empathize with the plights of others has become a focal point of discussion (Sanchez 2017; Shin & Biocca 2017; Rose 2018; Hassan 2019; Sundar, Kang, & Oprean 2017). The global dimension of empathy is more often implicit in the discourse but clearly evident in the subject matter of early IJ productions such as *The Displaced*, *6x9*, and *Clouds Over Sidra*. These stories bring viewers to places that are distant from the typical viewers' geography and circumstances, and the stories focus on people in dire circumstances – war, a refugee camp, traveling to immigrate. The places and topics suggest that the promise of IJ is not just to produce empathic understanding but to produce *global* empathic understanding.

In his 2015 TED talk, Chris Milk used his *Clouds Over Sidra* to explain how virtual reality could change the world. In this talk, he referred to virtual reality as “the ultimate empathy machine”. *Clouds Over Sidra* follows the life of a 12-year-old girl living in a Syrian refugee camp in Jordan. Milk explains:

When you're sitting there in her room, watching her, you're not watching it through a television screen, you're not watching it through a window; you're sitting there with her. When you look down, you're sitting on the same ground that she's sitting on. And because of that, you feel her humanity in a deeper way. You empathize with her in a deeper way.

Chris Milk, TED Talk 2015

The promise of IJ that Milk sees here is not just empathy for the sake of empathy; as he explains, “we can change minds with this machine”. He showed *Clouds Over Sidra* at the World Economic Forum in Davos, which encouraged him to create other VR stories with the idea of showing his work “to the people that can actually change the lives of the people inside of the films” (Milk 2015).

On the one hand, the promise of empathy has led to discussion and debate and raised questions about what precisely empathy is and what its role in journalism is or should be. The idea of an “empathy machine” has led to an abundance of research that both theorizes what empathy is (Hassan 2019; Sanchez 2017) and tries to empirically document the effects of IJ on viewers (Shin 2018; Sundar, Kang, & Oprean 2017; Kang et al. 2019). Much of this research asks whether the effects of IJ are comparatively more effective than traditional forms of journalism and media.

The emphasis on empathy has generated discourse on an older underlying tension in journalism about the role of emotions. In a 2010 piece co-authored with others, de la Peña, one of the pioneers in the field of IJ, avoids using “empathy” and instead emphasizes emotional involvement. She writes that “An important role of immersive journalism could be to reinstitute the audience's emotional involvement in current events” (298).

New technologies often challenge and reshape prevailing norms and values. Consider, for example, how information technology has changed the value of privacy – the concept as well as attitudes and practices (Johnson 2009). IJ seems to exacerbate the tension in journalism over the proper role of emotions and emotional engagement. On the one hand, journalists are expected to be impartial and objective and, on the other hand, as Baia & Coelho (2018) put it, “one of journalism’s basic goals is to create an affective relationship between the public and the news” (1095). Journalists are expected to motivate audiences to care about real-world situations while at the same time maintaining their impartiality and objectivity. This tension is illustrated in the explanation of fairness and impartiality in the Five Core Principles of Journalism issued by the Ethical Journalism Network (EJN).¹ In explanation of the principle of objectivity and impartiality, the document states:

Most stories have at least two sides. While there is no obligation to present every side in every piece, stories should be balanced and add context. Objectivity is not always possible, and may not always be desirable (in the face for example of brutality or inhumanity), but impartial reporting builds trust and confidence.

Five Core Principles of Journalism, EJN

The discourse around IJ seems to heighten and exacerbate this tension.

The promise of motivating audiences to care by generating empathic emotions creates one of the perils of IJ, namely turning journalism into a form of audience manipulation. That is, if IJ producers cross a line – a rather complicated, fuzzy line – in generating emotional responses, they may be accused of manipulating their audiences. This would weaken the credibility of journalists and the trust that audiences place in them.

Manipulation is generally defined as a skillful way of influencing others in an unfair manner. To be sure, journalism is often intended to influence viewers, but the use of the emotional rather than exclusively cognitive material suggests the possibility of “unfair” influence. Presenting viewers with intense visual experiences that generate highly emotional responses which may be hardwired in humans is one factor that creates the peril of IJ being perceived (and actually being) a form of manipulation.

Another element identified in IJ discourse that points to this peril is the absence of any indication of an author (Sanchez 2017; Mabrook & Singer 2019). The concealment of the author within the experience is a recurrent concern. On the one hand, the sense that one is present in a real situation seems to require that viewers not be shown any signs of the author. As Kool (2016) explains: “the erasure of the journalist is only one technique that arguably makes the viewer feel as though the event they are witness to is real and that they are a participant in it” (3). On the other hand, the intentional choice to eliminate the presence of authorship supports the interpretation of IJ as manipulation.

Concealment of authorship is what distinguishes IJ from other forms of journalism such as written text and television and film. In explaining why he thinks that virtual reality is a revolutionary step in the evolutionary progress of delivery mechanisms for journalism, Owen (2016) notes that:

While the introduction of radio, photography, video, and social media each changed how journalism was framed and how societies produced and consumed media, in each of these previous media, the master's hand was clearer than in virtual reality. With a photo or a video, the audience knows the photographer or videographer is framing the image. There is no pretense that one is seeing everything, and no illusion of actually being there.

Owen 2016, p. 107

Kool poses the question: "Is it ethical to erase the mark of the journalist who still has a large stake in the orchestration, construction, and communication of her narrative?" p. 3). Even when the story is told with recordings of real situations, the author has made many important decisions in the "orchestration, construction, and communication of her narrative".

Whether or not and to what extent viewers are unaware that their experience has been authored will be discussed further in the next section. The point here is that one of the perils identified in IJ discourse is that this new journalistic technology would become (and would be seen as) a form of audience manipulation, and this would work against journalistic values of impartiality, objectivity, and credibility.

The peril of manipulation points to another peril of IJ. If IJ has the power to generate emotional responses, empathy, and understanding as claimed by its enthusiasts, then there is nothing that ensures that IJ will always be used for good. In principle, IJ could just as well be used to create empathy and understanding of dangerous causes and heinous people. Sanchez (2017) imagines a dystopian version of IJ "where users are immersed in a world of fake news, their bodies learning to respond automatically and unconsciously with hatred and anger toward the world within and outside virtual reality" (11). So the manipulative potential of IJ creates a peril of IJ being used to present untrue situations and generate hate and anger rather than empathy.

Transparency/opacity

Transparency is generally considered a good thing, and it is an important value in journalism. One of the edicts of the Society of Professional Journalists' Code of Ethics is "Be accountable and transparent".² In this context, transparency means journalists should include information about their methods and sources. The SPJ Code specifies that journalists should "explain ethical choices and processes to audiences. Encourage a civil dialogue with the public about journalistic practices, coverage and news content". When readers can see by whom and how information is produced, they are in a better position to evaluate its credibility.

In the discourse on IJ, transparency is sometimes put forward as one of IJ's great promises. Fitzgerald (2016) makes the point unequivocally:

The reality is that done right, VR has the potential to be more transparent than traditional journalism, traditional documentary filmmaking, because you can see everything. You can't see in traditional filmmaking what's behind the filmmaker's head. [...] In VR, if it's done right, the viewer can see everything the subject can see. I think that has the potential to be pretty radically transparent.

Fitzgerald 2016

So transparency is one of the promises of IJ, though it is important to note that the promised transparency is different from the kind of transparency put forward by the SPJ.

Transparency is complicated in IJ. Bringing viewers to real-world situations and allowing them to move around in those situations is a kind of transparency often seen as analogous to looking through glass. One can see through the glass to what is behind it, i.e., to what would be hidden were the glass opaque. IJ is transparent in this sense because it allows viewers to see and experience situations directly, seemingly without mediation. Moreover, glass is not expected to distort what you see when you look through it as other mediums might. So the transparency promised in IJ discourse is to give audiences direct views of the plights of others in far-away places.

This concept of transparency is coherent but it is created, in part at least, by erasing the author from the experience and erasing the constructed nature of the experience, an element of IJ discussed in the previous section. The invisibility of the author and authorship is just the opposite of transparency; it is opacity. Ironically, while hiding authorship is essential to creating presence which is the basis for the claim of transparency, the hiding simultaneously creates opacity with respect to authorship and the constructed nature of the experience. The promise of transparency brings with it the peril of opacity.

The complexity of this discourse on transparency goes further. The concern about erasure of authorship is not quite as justified as it might seem. Rarely in the discourse on IJ is a distinction made between the audience experience *in* a story and the experience of *preparing for and entering* a story. If we focus just on the audience experience in the story, there does seem to be an absence of any signals as to authorship and the constructed nature of the experience. However, if we focus on the experience of audience members as they prepare for the experience, we get a very different picture. Participating in IJ requires cumbersome equipment. Audience members have to "suit up", putting on headsets and other haptic devices. Even before suiting up, audience members have to get access to the requisite equipment; they might do this by purchasing and using it on their own or they may go to a location created by someone else, say, an IJ producer or a media outlet. The process of getting access to and preparing for the experience and later exiting the

experience gives participants strong signals that what they experience is something constructed and made available by others. Hence, when the erasure of authorship is claimed either to contribute to the transparency of IJ experiences or to contribute to the opacity of IJ experiences, caution is in order. The extent to which audience members can or do suspend belief is unclear.

Much more attention needs to be paid to the preparation and entry experience since it is part of the overall experience of IJ. Yes, the equipment will likely get better and may become less cumbersome and easier to use, but there will always be a point when a person has to be hooked up to machines – even if it is just putting on glasses or walking into a special room.

This takes us back to acknowledging that IJ is an emerging technology. The contexts of use are still in flux. Issues of how, when, and where IJ will be available is still very uncertain. The form it will take in the future depends on the development of cheaper and more accessible equipment, but it is not just a matter of equipment. A range of decisions about the institutional arrangements, business models, financial models, distribution systems, and public understanding will all shape what IJ comes to be. Much of the current discourse tends to be technologically deterministic and, consequently, the contextual dimension of IJ use – the social practices around its use – has been somewhat neglected.

In traditional media, context signals to audiences what to expect. News reporting is expected to be accurate; social media less so; the opinion section of a newspaper is not expected to be objective; films shown at movie theaters are expected to be entertaining, though documentaries and docudramas are another matter. When Milk showed his IJ story at the World Economic Forum, it was not a surprise to the audience that the production appealed to their empathy. The World Economic Forum is a place known for trying to get people to care. The contextual arrangements that come to constitute the production and distribution of IJ and its users will influence whether and how the promises and perils of IJ are realized.

Just as the promise of empathy leads to the peril of manipulation, the promise of transparency leads to the peril of opacity. Whether or not the erasure of authorship is as serious a peril as the discourse suggests, there is another opacity peril with IJ. The fact that authorship is hidden should lead us to ask what else is hidden. Little attention has been given to the reality that IJ has the potential to facilitate surveillance, two different forms of surveillance. Because IJ experiences involve being hooked up to equipment and much of the equipment is digital, data can easily be collected on audiences. In fact, the equipment for doing this is being developed alongside IJ as researchers are figuring out how to test and quantify audience responses to IJ. Thus, there is the peril that IJ will be used in ways that make audiences subjects of study while they are engaging with IJ stories. Yes, this already happens when online readers/viewers are tracked, but being tracked in a virtual environment when your entire body is hooked up is much more intrusive.

The other kind of surveillance is already present in IJ, and that is surveillance of the subjects of IJ stories. We presume that the subjects of already-made

IJ stories such as *The Displaced* and *Clouds Over Sidra* gave their permission to be filmed, but there is potential in IJ for more expansive intrusions into the lives of IJ subjects. More footage of their lives spread across the world with the intention of improving their situation seems like a good thing, but it nevertheless involves privacy intrusion and the potential for misuse. This is another aspect of IJ that has not been given much attention. How exactly do producers interact with subjects? Will IJ lead to a greater degree of unwanted intrusions in the lives of people in dire circumstances?

Conclusion

Since IJ is still in the early stages of development and we don't know when and what stabilized form it will take, being specific about responsible IJ is somewhat premature. Nevertheless, drawing on the analysis of current discourse just presented and engaging in anticipatory ethics and responsible innovation suggests several areas that need to be monitored and shaped during this early stage. The analysis of touted promises and their correlated perils suggests that the impact of the invisibility of authorship needs to be monitored. Kool's provocative question, "is it ethical to erase the mark of the journalist [...]?", seems to suggest, perhaps, that signs of authorship should be inserted into stories in such a way that participants are reminded of the constructed nature of the IJ story (Kool 2016). However, the analysis here indicates that consideration of the impact of the invisibility of authorship should go beyond the participants' experience in an IJ story and include the preparation and entry phase of an IJ story experience. Indeed, evaluation of the impact should include effects of the broader context in which IJ stories are provided, e.g. institutional arrangements and social practices and what these context features signal to users.

Second, the perils of IJ are threats to the values of journalism. Thus, as IJ evolves, attention should stay focused on maintaining journalistic values such as credibility, transparency in methods, accuracy, and independence. This need not be a conservative activity, that is, it does not have to mean that journalism stays as it always has been. Values are realized in different ways in different modes of journalism. As with any new mode of journalism, it is important to engage with the new possibilities created while at the same time ensuring that the new forms stay true to essential values, even if they are reconfigured. What should be avoided is undermining essential values such as trust and accuracy. Whether or not IJ will undermine or enhance journalistic values is yet to be seen because IJ is still in the making.

Notes

- 1 The EJN principles are found at: <https://ethicaljournalismnetwork.org/who-we-are/5-principles-of-journalism>
- 2 The SPJ Code is available at: www.spj.org/ethicscode.asp

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